2022 Weedon Island Preserve Management Plan Update

Draft Plan Approved by:
Pinellas County Board of County Commissioners,
February 22, 2022

Prepared by
Pinellas County Parks and Conservation Resources

LAND MANAGEMENT PLAN COMPLIANCE CHECKLIST

→ Required for State-owned conservation lands over 160 acres ←

Instructions for managers:
Complete each item and fill in the applicable correlating page numbers and/or appendix where the item can be found within the land management plan (LMP). If an item does not apply to the subject property, please describe that fact on a correlating page number of the LMP. Do not mark an "N/A" for any items below.

For more information, please visit the stewardship portion of the Division of State Lands' website at: http://www.dep.state.fl.us/lands/stewardship.htm.

Section A: Acquisition Information Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
1.	The common name of the property.	18-2.018 & 18-2.021	i, 1, 5
2.	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	i, 1
3.	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	i, 1, 5, 6, Appendix 1
4.	The legal description and acreage of the property.	18-2.018 & 18-2.021	i, Appendix 1
5.	A map showing the approximate location and boundaries of the property, and the location of any structures or improvements to the property.	18-2.018 & 18-2.021	2 (Fig.1), 3 (Fig.2) 12 (Fig.6), 56 (Fig.22)
6.	An **assessment** as to whether the property, or any portion, should be declared surplus. *Provide Information regarding **assessment and analysis** in the plan, and provide **corresponding map**.*	18-2.021	ii
7.	Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. *Please clearly indicate parcels on a map.*	18-2.021	ii
8.	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	6
9.	A statement of the purpose for which the lands were acquired, the projected use or uses as defined in 253.034 and the statutory authority for such use or uses.	259.032(10)	6, 8
10.	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	8, 9 (Fig.5)

Section B: Use Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
11.	The designated single use or multiple use management for the property, including use by other managing entities.	18-2.018 & 18-2.021	i, 6, 8, 10
12.	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	6
13.	A description of alternative or multiple uses of the property considered by the lessee and a statement detailing why such uses were not adopted.	18-2.018	54
14.	A description of the management responsibilities of each entity involved in the property's management and how such responsibilities will be coordinated.	18-2.018	5 - 14
15.	Include a provision that requires that the managing agency consult with the Division of Historical Resources, Department of State before taking actions that may adversely affect archeological or historical resources.	18-2.021	51
16.	Analysis/description of other managing agencies and private land managers, if any, which could facilitate the restoration or management of the land.	18-2.021	i, 1, 6, 8, 32, 34

17.	A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	259.032(10)	i, 1, 6, 8, Section 4 (53-59)
18.	A finding regarding whether each planned use complies with the 1981 State Lands Management Plan, particularly whether such uses represent "balanced public utilization," specific agency statutory authority and any other legislative or executive directives that constrain the use of such property.	18-2.021	6, 8, 10
19.	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	Appendix 24
20.	An assessment of the impact of planned uses on the renewable and non-renewable resources of the property, including soil and water resources, and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to compensate/mitigate damage caused by such uses, including a description of how the manager plans to control and prevent soil erosion and soil or water contamination.	18-2.018 & 18-2.021	8, 10, 11, Appendix 8
21.	*For managed areas larger than 1,000 acres, an analysis of the multiple-use potential of the property which shall include the potential of the property to generate revenues to enhance the management of the property provided that no lease, easement, or license for such revenue-generating use shall be entered into if the granting of such lease, easement or license would adversely affect the tax exemption of the interest on any revenue bonds issued to fund the acquisition of the affected lands from gross income for federal income tax purposes, pursuant to Internal Revenue Service regulations.	18-2.021 & 253.036	v, 57, 64, Table 8, 65, Table 9
22.	If the lead managing agency determines that timber resource management is not in conflict with the primary management objectives of the managed area, a component or section, prepared by a qualified professional forester, that assesses the feasibility of managing timber resources pursuant to section 253.036, F.S.	18-021	41
23.	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	i, 5-14

*The following taken from 253.034(10) is not a land management plan requirement; however, it should be considered when developing a land management plan: The following additional uses of conservation lands acquired pursuant to the Florida Forever program and other state-funded conservation land purchase programs shall be authorized, upon a finding by the Board of Trustees, if they meet the criteria specified in paragraphs (a)-(e): water resource development projects, water supply development projects, storm-water management projects, linear facilities and sustainable agriculture and forestry. Such additional uses are authorized where: (a) Not inconsistent with the management plan for such lands; (b) Compatible with the natural ecosystem and resource values of such lands; (c) The proposed use is appropriately located on such lands and where due consideration is given to the use of other available lands; (d) The using entity reasonably compensates the titleholder for such use based upon an appropriate measure of value; and (e) The use is consistent with the public interest.

Section C: Public Involvement Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
24.	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any.	18-2.021	ii, 1, 13
25.	The management prospectus required pursuant to paragraph (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	259.032(10)	1, Appendix 3
26.	LMPs and LMP updates for parcels over 160 acres shall be developed with input from an advisory group who must conduct at least one public hearing within the county in which the parcel or project is located. *Include the advisory group members and their affiliations, as well as the date and location of the advisory group meeting.*	259.032(10)	ii, 1, 13
27.	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	Appendix 3
28.	During plan development, at least one public hearing shall be held in each affected county. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. *Include a copy of each County's advertisements and announcements (meeting minutes will suffice to indicate an announcement) in the management plan.*	253.034(5) & 259.032(10)	Appendix 3

29.	The manager shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. *Include manager's replies to the team's findings and recommendations.*	259.036	8, Appendix 5
30.	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	8, Appendix 5
31.	If manager is not in agreement with the management review team's findings and recommendations in finalizing the required 10-year update of its management plan, the managing agency should explain why they disagree with the findings or recommendations.	259.036	Appendix 5

Section D: Natural Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
32.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding soil types. *Use brief descriptions and include USDA maps when available.*	18-2.021	15, 17 (Fig.8), 18, 19
33.	Insert FNAI based natural community maps when available.	ARC consensus	22 (Fig.10)
34.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding outstanding native landscapes containing relatively unaltered flora, fauna and geological conditions.	18-2.021	15-25, 22 (Fig.10), Appendix 12
35.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding unique natural features and/or resources including but not limited to virgin timber stands, scenic vistas, natural rivers and streams, coral reefs, natural springs, caverns and large sinkholes.	18-2.018 & 18-2.021	19, 20
36.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	20, 22 (Fig.10), Appendix 12
37.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding mineral resources, such as oil, gas and phosphate, etc.	18-2.018 & 18-2.021	19
38.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding fish and wildlife, both game and non-game, and their habitat.	18-2.018 & 18-2.021	26, 27, 42, 43 (Fig.16), Appendix 12
39.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding State and Federally listed endangered or threatened species and their habitat.	18-2.021	22 (Fig.10), 27, 28, Table 2, Appendix 12
40.	The identification or resources on the property that are listed in the Natural Areas Inventory. *Include letter from FNAI or consultant where appropriate.*	18-2.021	20, 22 (Fig.10) 23-26, Appendix 12
41.	Specific description of how the managing agency plans to identify, locate, protect and preserve or otherwise use fragile, nonrenewable natural and cultural resources.	259.032(10)	iii – v, 8, 10, 32, 34, 36, 38, 39, 40 (Fig.15), 41, 42, 44, 45, 47, 48 -52 (Fig.20)
42.	Habitat Restoration and Improvement	259.032(10) & 253.034(5) ↓	
42-A.	Describe management needs, problems and a desired outcome and the key management activities necessary to achieve the enhancement, protection and preservation of restored habitats and enhance the natural, historical and archeological resources and their values for which the lands were acquired.		i, 32 – 50
42-B.	Provide a detailed description of both short (2-year planning period) and long-term (10-year planning period) management goals, and a priority schedule based on the purposes for which the lands were acquired and include a timeline for completion.		iii – vi, 34, 36, 38-39,41-42, 44-45, 47-48, 50-51, 57-59
42-C.	The associated measurable objectives to achieve the goals.		iii – vi, 32 – 51
42-D.	The related activities that are to be performed to meet the land management objectives and their associated measures. *Include fire management plans - they can be in plan body or an appendix.*		iii – vi, 32 – 51

42-E.	A detailed expense and manpower budget in order to provide a management tool that facilitates development of performance measures, including recommendations for cost-effective methods of accomplishing those activities.		v, 11, 50, 51, 64, 65 Table 9
43.	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. *See footnote.*	253.034(5)	i, 41, Appendix 17
44.	Sustainable Forest Management, including implementation of prescribed fire management	18-2.021, 253.034(5) & 259.032(10) ↓	
44-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		ii, 34, 35 (Fig.13),36 Table 3, 38
44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		iii, iv, 34, 36, 38
44-C.	Measurable objectives (see requirement for #42-C).		iii, iv, 34, 36, 38
44-D.	Related activities (see requirement for #42-D).		iii, iv, 34, 35 (Figs.13) 36 Table 3, 38
44-E.	Budgets (see requirement for #42-E).		64, 65, Table 9
45.	Imperiled species, habitat maintenance, enhancement, restoration or population restoration	259.032(10) & 253.034(5) ↓	
45-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		ii, 32 – 51
45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		iii – v, 32 – 51
45-C.	Measurable objectives (see requirement for #42-C).		iii – v, 32 – 51
45-D.	Related activities (see requirement for #42-D).		iii – v, 32 – 51
45-E.	Budgets (see requirement for #42-E).		64, 65, Table 9
46.	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. *See footnote.*	253.034(5)	ii, 27, 29, 32, 36, Figure 14, 38, Figure 15, 41,
47.	Place the Arthropod Control Plan in an appendix. If one does not exist, provide a statement as to what arrangement exists between the local mosquito control district and the management unit.	BOT requirement via lease language	11, Appendix 9
48.	Exotic and invasive species maintenance and control	259.032(10) & 253.034(5) ↓	
48-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		ii, iii, iv, 29, 32, 36, Figure 14, 38, 41,
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		iii, iv, 32, 33 (Fig.12) 33, 36, 37 (Fig.14), 38, Figure 15, 41,
48-C.	Measurable objectives (see requirement for #42-C).		iii, iv, 29, 32, 36, Figure 14, 38, Figure 15, 41,
48-D.	Related activities (see requirement for #42-D).		iii, iv, 29, 32, 36, Figure 14, 38, 41,
48-E.	Budgets (see requirement for #42-E).		64, 65, Table 9

Section E: Water Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
49.	A statement as to whether the property is within and/or adjacent to an aquatic preserve or a designated area of critical state concern or an area under study for such designation. *If yes, provide a list of the appropriate managing agencies that have been notified of the proposed plan.*	18-2.018 & 18-2.021	8, 9 (Fig.5)
50.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding water resources, including water classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Water under Rule 62-302.700, F.A.C.	18-2.021	8, 9 (Fig.5)
51.	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding swamps, marshes and other wetlands.	18-2.021	20, 21 (Fig.9), 22 (Fig.10), 23 – 26,

52.	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. *See footnote.*	253.034(5)	i, ii, 19, 20
53.	Hydrological Preservation and Restoration	259.032(10) & 253.034(5) ↓	
53-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		ii, 19, 20, 32, 33 (Fig.12), 34
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		iii, 32, 34
53-C.	Measurable objectives (see requirement for #42-C).		iii, 32, 34
53-D.	Related activities (see requirement for #42-D).		iii, 32, 34
53-E.	Budgets (see requirement for #42-E).		64, 65, Table 9

Section F: Historical, Archeological and Cultural Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
54.	**Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding archeological and historical resources. *Include maps of all cultural resources except Native American sites, unless such sites are major points of interest that are open to public visitation.*	18-2.018, 18-2.021 & per DHR's request	29, 30, 31 (Fig.11)
55.	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034(5)	i, ii, 1, 5, 29, 48 - 50
56.	A description of actions the agency plans to take to locate and identify unknown resources such as surveys of unknown archeological and historical resources.	18-2.021	i, v, 48 - 50
57.	Cultural and Historical Resources	259.032(10) & 253.034(5) ↓	
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		ii, iv, v, 48 – 50
57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		iv, v, 48 – 50
57-C.	Measurable objectives (see requirement for #42-C).		iv, v, 48 – 50
57-D.	Related activities (see requirement for #42-D).		iv, v, 48 – 50
57-E.	Budgets (see requirement for #42-E).		64, 65, Table 9

**While maps of Native American sites should not be included in the body of the management plan, the DSL urges each managing agency to provide such information to the Division of Historical Resources for inclusion in their proprietary database. This information should be available for access to new managers to assist them in developing, implementing and coordinating their management activities.

Section G: Facilities (Infrastructure, Access, Recreation)

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
58.	***Quantitative data description of the land regarding an inventory of infrastructure and associated acreage. *See footnote.*	253.034(5)	i, ii, 5, 11, 12 (Fig.6), 53, 54 (Fig.21), 55,56 (Fig.22), 57, 60 – 62
59.	Capital Facilities and Infrastructure	259.032(10) & 253.034(5) ↓	
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		ii, 53 – 59, 60 – 62
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		ii, v, vi, 53 – 59, 60 – 62

59-C.	Measurable objectives (see requirement for #42-C).		ii, v, vi, 53 – 59, 60 – 62
59-D.	Related activities (see requirement for #42-D).		ii, v, vi, 53 – 59, 60 – 62
59-E.	Budgets (see requirement for #42-E).		64, 65, Table 9
60.	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034(5)	ii, 1, 11, 12 (Fig.6), 53, 54 (Fig.21), 55, 56, (Fig.22), 60 – 62
61.	Public Access and Recreational Opportunities	259.032(10) & 253.034(5) ↓	
61-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		ii, 53 – 59, 60 – 62
61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		ii, v, vi, 53 – 59, 60 – 62
61-C.	Measurable objectives (see requirement for #42-C).		ii, v, vi, 53 – 59, 60 – 62
61-D.	Related activities (see requirement for #42-D).		ii, v, vi, 53 – 59, 60 – 62
61-E.	Budgets (see requirement for #42-E).		64, 65, Table 9

Section H: Other/ Managing Agency Tools

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
62.	Place this LMP Compliance Checklist at the front of the plan.	ARC and managing agency consensus	Following Cover Page
63.	Place the Executive Summary at the front of the LMP. Include a physical description of the land.	ARC and 253.034(5)	i
64.	If this LMP is a 10-year update, note the accomplishments since the drafting of the last LMP set forth in an organized (categories or bullets) format.	ARC consensus	ii
65.	Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management.	259.032(10)	i, ii
66.	Summary budget for the scheduled land management activities of the LMP including any potential fees anticipated from public or private entities for projects to offset adverse impacts to imperiled species or such habitat, which fees shall be used to restore, manage, enhance, repopulate, or acquire imperiled species habitat for lands that have or are anticipated to have imperiled species or such habitat onsite. The summary budget shall be prepared in such a manner that it facilitates computing an aggregate of land management costs for all state-managed lands using the categories described in s. 259.037(3) which are resource management, administration, support, capital improvements, recreation visitor services, law enforcement activities.	253.034(5)	64, 65, Table 9
67.	Cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired, include recommendations for cost-effective methods in accomplishing those activities.	259.032(10)	64, 65, Table 9
68.	A statement of gross income generated, net income and expenses.	18-2.018	64, Table 8

*** = The referenced inventories shall be of such detail that objective measures and benchmarks can be established for each tract of land and monitored during the lifetime of the plan. All quantitative data collected shall be aggregated, standardized, collected, and presented in an electronic format to allow for uniform management reporting and analysis. The information collected by the DEP pursuant to s. 253.0325(2) shall be available to the land manager and his or her assignee.

Weedon Island Preserve Management Plan
Executive Summary
State of Florida Form

Lead Agency: Pinellas County (Florida) Department of Parks and Conservation Resources, Resource and Asset Management

Common Name of Property: Weedon Island Preserve

Location: Pinellas County, Florida

Acreage Breakdown:

Land Cover Classification	*Acres (ac.)*
Mangrove Swamp	2193.2
Estuary	364.5
Seagrass	214.0
Scrubby Flatwoods	94.6
Xeric Hammock	93.5
Salt Marsh	69.5
Maritime Hammock	61.7
Developed	51.3
Impoundment	14.9
Coastal Berm	10.4
Saltern	9.8
Shell Mound	5.5
Marine Unconsolidated Substrate	4.9
Freshwater Pond	4.1
Mollusk Reef	1.9
Ruderal	1.5
TOTAL	*3195.3*

Leases: No. 3985 Board of Trustees of the Internal Improvement Trust of Florida (1190.9 ac.), No. 3376 Board of Trustees of the Internal Improvement Trust of Florida (1425.6 ac.)

Use: Single use for conservation and protection of natural resources and for resource-based public outdoor activities and education that are compatible with the conservation and protection of this public land

Management Responsibilities: Pinellas County Parks and Conservation Resources; law enforcement by Pinellas County Sheriff's Office, facility management of the Weedon Island Preserve Cultural and Natural History Center by Pinellas County Department of Administrative Services

Designated Use: Preserve

Sublease(s): None

Contract(s): Duke Energy

Encumbrances: None

Type of Acquisition: Fee Simple for County-owned properties

Unique Features: Weedon Island Preserve is a dominant natural feature covering five mi. along the western shoreline of Tampa Bay. This Preserve provides for over 3000 ac. of natural and cultural resources while also supporting compatible public use.

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The three-story Weedon Island Preserve Cultural and Natural History Center built in 2002, was designed with the help of Native Americans and keeps with their traditions. For example, the orientation is along the cardinal points of the compass (north, south, east, and west) with the entrance facing east. The Weedon Island Preserve Cultural and Natural History Center supports educational programming and volunteerism. The University of Florida Institute of Food and Agricultural Sciences education program a interprets the natural, cultural and archaeological history of the Preserve through interpretive tours and hikes, education programs, exhibits and public outreach activities, presentations and workshops, and other events.

Archaeological/Historical: The islands, adjacent shoreline and uplands that comprise the Preserve are dotted with an impressive array of cultural features, including artifacts, which illustrate the land's significant role in virtually all historical cultures that define Florida's anthropological history. Some of these cultural features include a Native American burial mound and shell middens. Historic sites on Weedon Island are prevalent with remains of buildings remains and imprints from past activities such as an airport runway and tower. Early settlers once occupied several of the islands, and pilings from buildings constructed during the 1920's, are intact.

Management Needs: Restoration needed to improve hydrology in mosquito ditched mangrove swamps. Continued control of exotic species and completion of prescribed burns needed to support resource management. Boundary posting in the northern Preserve needed to support enforcement of rules.

Acquisition Needs/Acreage: Pinellas County is interested in acquiring in-holdings that are in private ownership should they become available.

Surplus Lands/Acreage: Assessing the maps, communities and cultural resources, there is no opportunity to surplus any portion of the Preserve.

Public Involvement: Public comments were received in conjunction with the Weedon Island Preserve Advisory Group meeting, Pinellas County Department of Parks and Conservation Resources Advisory Board meeting, and Pinellas County Board of County Commissioners meeting.

Noted Accomplishments:

- Restoration of 94 ac. of mosquito ditches, exotic vegetation removal and installation of 11,000 native plants in the northern portion of the Preserve.
- Restored the prehistoric dugout canoe excavated in the northern portion of the Preserve.
- Completed the exhibit in the Weedon Island Preserve Cultural and Natural History Center featuring the prehistoric canoe.
- Staff additions – An Environmental Specialist I position was added to support land management of the Preserve and other PCR properties. Two Rangers were added to provide coverage of the Preserve seven days per week.

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GOALS AND OBJECTIVES FOR WEEDON ISLAND PRESERVE		
SECTION 3. RESOURCE MANAGEMENT		
		Page
A. Habitat Restoration and Improvement **Objective:** Provide resource management to restore and improve the natural communities of Weedon Island Preserve.		
Restoration Projects	**Goal A1:** Monitor and evaluate effectiveness of the Salt Marsh Restoration Pilot Project by post-construction vegetation transects and photo points. **(Short-term)** **Goal A2:** Continue to implement restoration projects identified in the Feasibility study to improve hydrology of the mosquito ditches and remove exotic vegetation. **Goal A3:** Provide outreach to the public regarding ongoing restoration projects at the Preserve. **(Long-term)**	**34**
Prescribed Fire	**Goal A4:** Increase the frequency of burning in the Preserve to restore the natural communities. **(Short-term)** **Goal A5:** Coordinate with the Florida Forest Service Regional Forest Area Supervisor for assistance when necessary.	**36**
Exotic Vegetation and Nuisance Wildlife Control	**Goal A6:** Continue chemical treatment in established exotic control maintenance areas to keep invasive exotic vegetation from re-infestation. **Goal A7:** Continue to identify and treat new areas of infestation as observed. **Goal A8:** Continue trapping and removal efforts of nuisance wildlife from the Preserve.	**38**
Mechanical Thinning	**Goal A9:** Evaluate and conduct mechanical thinning of natural communities as necessary. **(Long-term)**	**38**
Reestablish Native Species	**Goal A10:** Complete restoration projects with reestablishment of vegetation through natural recruitment or by replanting as necessary. **(Long-term)**	**38**
B. Natural Communities **Objective:** Minimize impacts to protect and maintain natural communities.		
	Goal B1: Continue to maintain and minimize impacts to the natural areas by providing public access via trails and boardwalks by protecting established aquatic use zones.	**39**
C. Imperiled Species Protection **Objective:** Minimize impacts to protect those imperiled species utilizing the Weedon Island Preserve.		

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Gopher Tortoise	**Goal C1:** Continue to minimize loss of gopher tortoises through protection and education.	**39**
Roseate Spoonbill	**Goal C2:** Continue to provide protection and education regarding the Roseate Spoonbill.	**39**
Manatee Protection	**Goal C3:** Annually, minimize impacts to manatees and other aquatic species through posting and enforcement of established aquatic use zones.	**39**
Florida Goldenaster	**Goal C4:** Continue to protect and manage the Florida goldenaster site through exotic vegetation control and prescribed fire.	**41**
D. Forest Management **Objective:** Utilize forest management techniques, specifically prescribed fire, to maintain natural communities at Weedon Island Preserve.		
	Goal D1: PCR will increase the frequency of prescribed fire in the scrubby flatwoods communities and utilize mechanical reduction where necessary. **(Short-term)**	**41**
E. Monitoring **Objective:** Conduct surveys and support the work of others to monitor the natural resources of Weedon Island Preserve.		
Species Inventories	**Goal E1:** As needed, update lists of species utilizing the Preserve.	**42**
Fisheries Independent Monitoring	**Goal E2:** Annually support monitoring of fisheries by FWRI fisheries and review data summary report.	**44**
Water Quality	**Goal E3:** Annually support monitoring of water quality by Pinellas County's Department of Public Works Environmental Management Division and review data summary report.	**45**
Seagrasses	**Goal E4**: Continue to support analyses of seagrass distribution by Pinellas County's Department of Public Works Environmental Management Division and review data summary report.	**47**
F. Research **Objective:** Coordinate and support scientific studies conducted at the Preserve by researchers from partnering agencies and other institutions, and use information provided to support management decisions.		
Site Use Applications	**Goal F1:** As needed, review Site Use applications submitted by researchers interested in conducting studies at the Preserve.	**48**

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G. Cultural Management **Objective:** In collaboration with AWIARE, map locations of mound sites and other significant features and integrate this information into existing archaeological databases.		
	Goal G1: Continue to support educational programs that promote the important cultural resources throughout the Preserve. **Goal G2:** Continue to support research opportunities that identify and protect archaeological sites at the Preserve. **Goal G3:** Maintain strong partnerships with AWIARE and other agencies and organizations to provide sound stewardship of cultural resources. **(Long-term)**	**50**
H. Security **Objective:** Enforce rules and regulations as detailed in Pinellas County Code of Ordinances Chapter 90 to protect the natural and cultural resources supported by the Preserve.		
	Goal H1: As funding allows, increase the number of patrols completed by rangers to provide coverage from opening to closing of the Preserve seven days per week. **Goal H2:** As funding allows, contract PCSO for law enforcement officers dedicated to patrolling Weedon Island Preserve and other environmental lands.	**51**
SECTION 4. PUBLIC RECREATION		
A. Public Access **Objective:** Provide 363 days of public access for resource-based outdoor recreation which is compatible with the conservation and protection of the natural and cultural resources.		
Public Recreation Facilities	**Goal A1:** Patrol the Preserve from 7:00 a.m. to the posted closing time for visitor services. **Goal A2:** Continue to offer kayak, canoe and paddle board rentals through a contracted vendor. **Goal A3:** Investigate the feasibility of upgrading the floating dock to meet American Disabilities Act (ADA) requirements.	**57**
Maintenance	**Goal A4:** Conduct routine inspections of boardwalks, hiking trails, observation tower and, fishing pier daily. **Goal A5:** Conduct inspections of the Paddling Trail each month.	**58**
Carrying Capacity	**Goal A6:** Continue to provide 363 days of public access from 7:00 a.m. to posted closing time.	**59**

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	Goal A7: Enforce the carrying capacity of the Preserve to protect the natural and cultural resources.	
SECTION 5. OUTREACH AND EDUCATION		
A. Objective: Provide education and outreach programs describing the cultural and natural resources of coastal ecosystems and the benefits of preserving and enhancing these resources.		
Weedon Island Preserve Cultural and Natural History Center	**Goal A1:** The County Extension UF/IFAS will continue to provide outreach and educational programs addressing the cultural and natural resources of the Preserve. **Goal A2:** Continue to provide programs through virtual programming and social media to expand audience within and outside of Pinellas County. **Goal A3:** Continue to evaluate funding opportunities to increase the staffing and hours of operation of the WIPCNHC.	**62**
Weedon Preserve Visitors Guide	**Goal B1:** As needed, update Weedon Island Preserve brochure and make available online; as resources allow, provide hardcopy brochures for distribution to visitors at County offices.	**63**

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LIST OF ABBREVIATIONS

AWIARE	Alliance for Weedon Island Archaeological Research and Education
BCE	Before Common Era
TIITF	Board of Trustees of the Internal Improvement Trust of Florida
CIP	Capital Improvement Program
ELD	Department of Environmental Management's Environmental Lands Program
FWRI	Fish and Wildlife Research Institute
FIM	Fisheries Independent Monitoring
FAC	Florida Administrative Code
DEP	Florida Department of Environmental Protection
FWC	Florida Fish and Wildlife Conservation Commission
FISC	Florida Invasive Species Council
FNAI	Florida Natural Areas Inventory
FPAN	Florida Public Archaeology Network
F.S.	Florida Statutes
FYCCN	Florida Youth Conservation Centers Network
FOWI	Friends of Weedon Island
MSL	mean sea level
BCC	Pinellas County Board of County Commissioners
PCR	Pinellas County Department of Parks and Conservation Resources
PCSO	Pinellas County Sheriff's Office
SWFWMD	Southwest Florida Water Management District
CARL	State's Conservation and Recreational Lands Program
TBEP	Tampa Bay Estuary Program
USFWS	United States Fish and Wildlife Service
UF/IFAS	University of Florida Institute of Food and Agricultural Sciences
WIDO	Walk In, Dig Out
WIPAG	Weedon Island Preserve Advisory Group
WIPCNHC	Weedon Island Preserve Cultural and Natural History Center

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INTRODUCTION

Weedon Island Preserve is a 3195-ac. preserve that extends along Tampa Bay in central Pinellas County (Figure 1). It is the second largest preserve in Pinellas County and a dominant natural feature along the western shoreline of Tampa Bay (Figure 2). The Preserve extends in a northerly direction approximately five mi. to the north of the Howard Frankland Bridge. The island, adjacent shoreline and uplands that comprise the Preserve are dotted with an impressive array of cultural features, which illustrate the land's significant role in the historical cultures that define Florida's anthropological history. Some of these cultural features include a Native American burial mound and shell middens.

All of the Preserve is located within Pinellas County, the State's most densely populated county. Its northern boundary is from Gandy Blvd. to just south of the Clearwater/St. Petersburg International Airport. The southern boundary is from Gandy Blvd. to Bayou Grande. The eastern shoreline of the Preserve is in Tampa Bay.

The Preserve is managed by the Pinellas County Board of County Commissioners (BCC) through Pinellas County Department of Parks and Conservation Resources (PCR). Pinellas County entered into two lease agreements with the Board of Trustees of the Florida Internal Improvement Trust Fund (FIITF) of the State of Florida. It is most efficient to manage all adjacent preserved lands comprehensively. Therefore, this management plan recognizes Weedon Island Preserve as consisting of lands leased by the State, Lease No. 3985 and No. 3376 (Appendix 1), parcels owned by Pinellas County, and parcels licensed by agreement with Duke Energy (Appendix 2) to provide for the management of the natural and cultural resources (Figure 3).

The southern part of the Preserve, at approximately 1678 ac., is comprised of land owned by the State (Lease No. 3985), the County, and Duke Energy. This portion of the Preserve offers recreational opportunities compatible with the conservation of the natural and cultural resources. The northern part of the Preserve, at approximately 1517 ac., is comprised of land owned by the State (Lease No. 3376) and the County. This portion of the Preserve is predominantly mangrove forest that has been altered with a network of mosquito ditches.

The initial Weedon Island Preserve Management Plan was written by the Florida Department of Environmental Protection (DEP), Division of Recreation and Parks and was approved in March 1990. The first update was written by the Pinellas County Park Department and was approved in February 1993. The second update was written by the Pinellas County Department of Environmental Management, Environmental Lands Division and was approved in April 2002. The third update was written by PCR's Natural and Historical Resource Management program and was approved in June 2012. As part of the current update, the Weedon Island Preserve Advisory Group (WIPAG) was established in accordance with 259.032(8)(b), Florida Statutes (F.S.) to provide final public input for the Plan. The Plan was made available to the WIPAG and the public 30 days prior to the public hearing. Appendix 3 lists all participants and provides minutes from the public hearing. This update to the Plan serves as the basic statement of policy and direction in the management of the Weedon Island Preserve by PCR.

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Figure 1. Location of Weedon Island Preserve, Pinellas County, Florida



Figure 2. Weedon Island Preserve Boundary Map

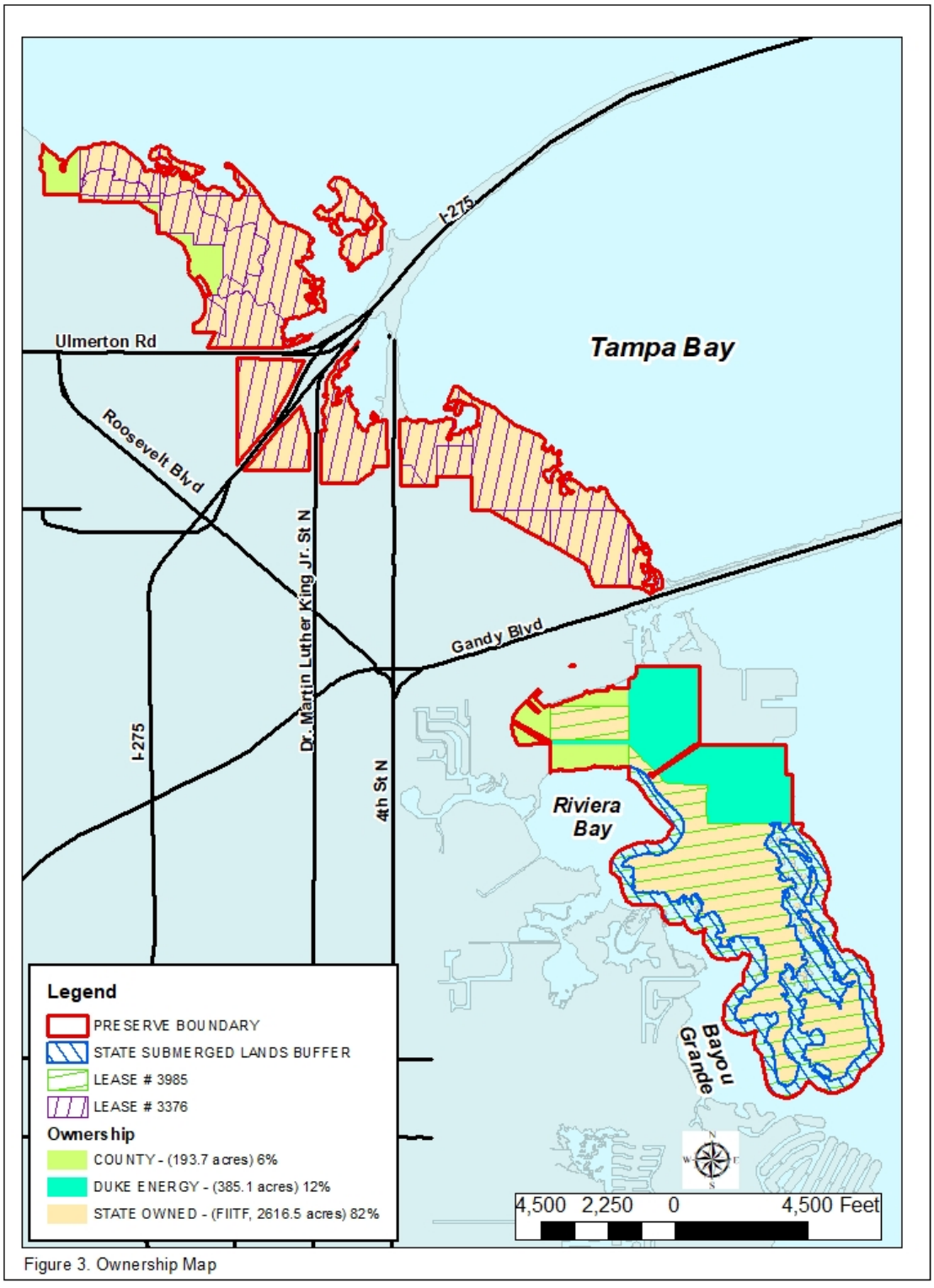


Figure 3. Ownership Map

SECTION 1. GENERAL INFORMATION

Weedon Island Preserve was established originally as a State Preserve in 1974 and was the first purchase under the Environmentally Endangered Lands Act. The Florida Park Service opened the Preserve to the public in December 1980. Weedon Island Preserve State Lease No. 3985 was purchased through the State's Conservation and Recreational Lands Program (CARL) in 1984. In 1991, using funds from its Environmental Lands program, Pinellas County purchased an additional 47 ac. along Riviera Bay. Management of the State-owned parcels was designated to the BCC through Lease No. 3985 in October 1993 and Lease No. 3376 in September 1995 (Appendix 1).

A. HISTORY

Weedon Island's rich cultural history dates back to the Middle Archaic Period, 5,000-3,000 BCE. The prehistoric culture and recent history are documented in *The Weedon Island Story* (Pinellas County, 2005).

Duke Energy, formerly Progress Energy Florida, entered into four agreements with the BCC (Appendix 2). Details of this partnership are provided below in OWNERSHIP.

In October 2001, the DEP office of Greenways and Trails entered into an agreement, Sublease 43.6, with the BCC for an additional 43.6 ac. (Appendix 1). In May 2010 this was transferred to be included in State Lease #3985 to simplify management of the leases.

The Weedon Island Preserve Cultural and Natural History Center (WIPCNHC) opened to the public in December 2002. The WIPCNHC was built to educate visitors on the significance of the Preserve and the importance of preserving Florida's important natural and cultural resources. The interactive exhibit gallery opened in October 2007.

B. OWNERSHIP

The Preserve is owned by the FIITF (2616.5 ac. or 82%), Duke Energy (385.1 ac. or 12%), and Pinellas County (193.7 ac. or 6%). Most of the land within the Preserve is in public ownership (Figure 3). The State-owned areas of the Preserve are managed by the County under lease agreements. The public use areas are under State Lease # 3376, which includes the submerged lands extending 400 ft. from the Mean High Water Line.

Duke Energy owns approximately 385.1 ac. within the Preserve. The County and Duke Energy have four license agreements for the privilege of access, management, and security of said parcels (Appendix 2). In the 1994 agreement, Duke Energy provided staff for the entry station constructed and maintained by the County for security of the Preserve. Duke Energy no longer provides staff for the entry station but monitors access remotely. The 1999 agreement granted the county access to Duke Energy property for the protection and management of natural and cultural resources. In 2001, Duke Energy granted the County access for the sole purpose of installing and maintaining pilings and signs regulating boating activities on Duke Energy property. Under the terms of the 2002 agreement, the County installed a boat lift at the Duke

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Energy intake channel and dock to provide space for a Pinellas County Sheriff's Office (PCSO) boat. Of the Duke Energy-owned areas managed by the County under a license agreement, 21.7 ac. are accessible to the public and the remaining 319.5 ac. are restricted from public access. Properties along San Martin Blvd. and adjacent to the Preserve will continue to be evaluated for acquisition as they become available.

C. EASEMENTS

A lease agreement with Duke Energy and the DEP outlined access agreements and management responsibilities (Appendix 2). This agreement, titled the "Weedon Island Use Agreement and License among the Florida Department of Natural Resources, Pinellas County, Florida and the Florida Power Corporation," identifies each party's access and management responsibility.

A natural gas pipeline easement was granted to Florida Gas Transmission Company by Pinellas County in November 2015. (Appendix 4). This agreement identifies the location of the easement and the management responsibilities of both parties.

D. ADJACENT LAND USE

Duke Energy operates a power plant and owns a considerable portion of land that is managed as Preserve. The adjacent land uses are predominantly classified as developed single-family residential as well as commercial (Figure 4). None of the adjacent land uses conflict with the planned use of the Preserve.

E. POLICY COMPLIANCE

This plan serves as a fundamental statement of policy and direction for the management of The Preserve. It identifies the objectives, criteria, and standards that guide each aspect of the management of the Preserve's natural and cultural resources and sets forth specific management actions that will be implemented to meet management goals as defined throughout the Plan. Approval of the Plan by Pinellas County and the State of Florida does not supersede any prevailing statutes, rules, regulations, and ordinances of appropriate local, state or federal agencies.

F. STATE POLICIES

No legislative or executive directives constrain the use of this property other than the official lease agreements with the State of Florida (Appendix 1). The lease agreements require, in part, that the properties be managed "… only for the conservation and protection of natural and historical resources and for resource-based public outdoor recreation which is compatible with the conservation and protection of these public lands." In addition to the lease requirements, the Preserve is subject to appropriate state and federal laws as well as the policies of the TIITF regarding state-owned lands. The Plan shall meet requirements of Section 253.034, F.S., and Chapter 18-2, Florida Administrative Code (FAC) and is intended to be consistent with the State Lands Management Plan. In accordance with Section 253.034, F.S., this Plan will be reviewed

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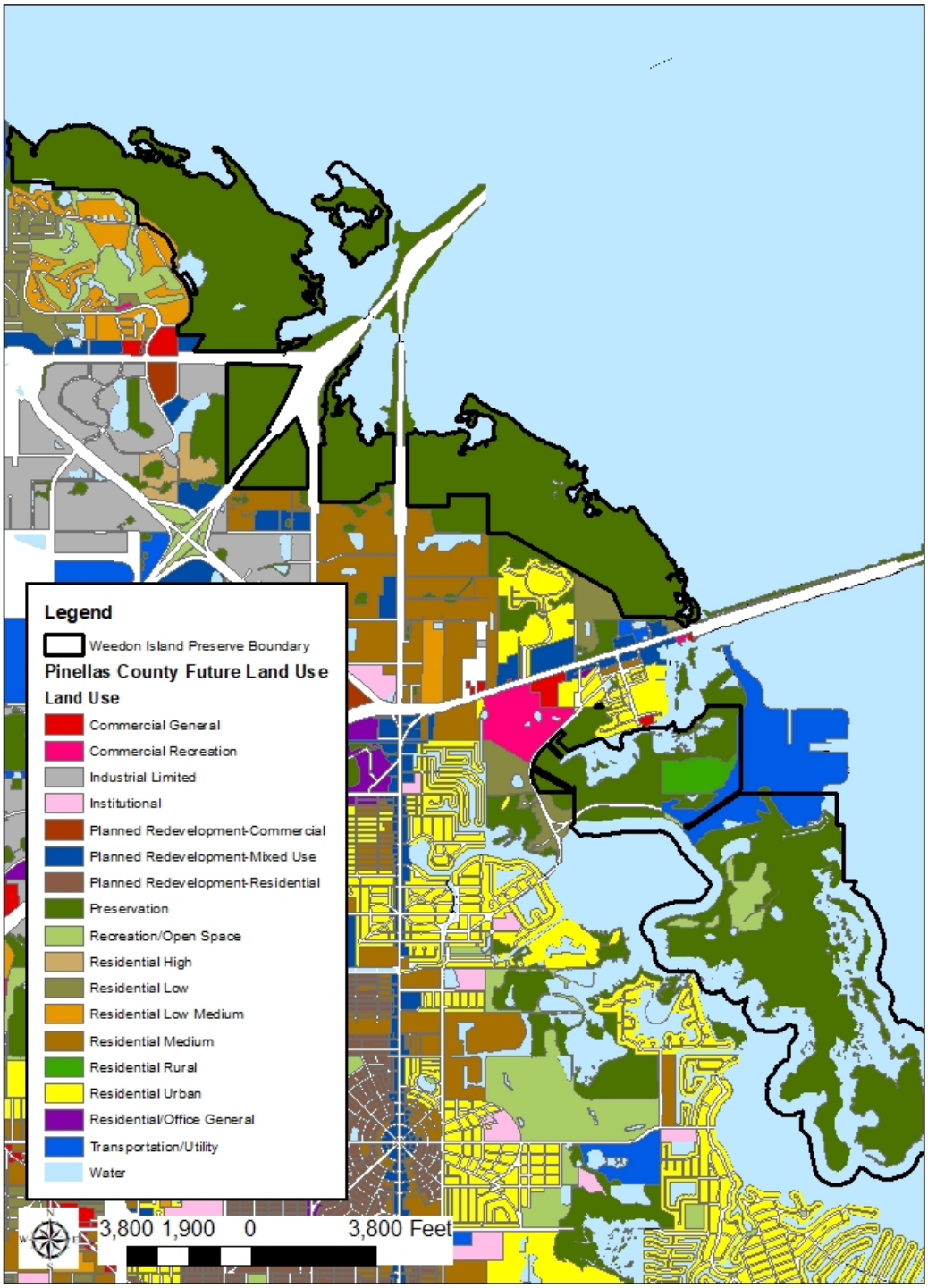


Figure 4. Future Land Use Map

and updated again in 10 yrs. Should this plan require significant changes prior to 2032, the WIPAG will be convened and to provide guidance and comments on proposed changes.

In accordance with Chapter 259.036, F.S. a land management review team selected by DEP evaluated the 2012 Management Plan and the management of the Preserve in 2016 and in 2020. The team evaluated the extent to which current management actions are sufficient, whether the land is being managed for the purpose for which it was acquired, and whether actual management practices, including public access, are in compliance with the Plan. The evaluations and Land Manager's responses are included in Appendix 5.

The submerged portions of the Preserve lie in the Pinellas County Aquatic Preserves (Figure 5). All permanent water bodies within the Preserve have been designated as "Outstanding Florida Waters" pursuant to Chapter 62-302, FAC. Administered by the DEP, this program was created by Section 403.061 F.S., to address water bodies that are "worthy of special protection because of their natural attributes."

G. COUNTY POLICIES

Code of Ordinances Chapter 90

Pinellas County Code of Ordinances Chapter 90 provides rules and regulations that control the public's use and for the protection of the resources of Pinellas County parks, preserves and management Areas (Appendix 6). It includes detailed information concerning: the Parks and Conservation Resources Advisory Board; vessels and live-aboard; protection of property, facilities, flora and fauna; permits; enforcement and penalties; and the identification of county-owned environmental lands subject to Charter restrictions.

Pinellas County's designated environmental lands, including County-owned property within the Preserve, are protected under the Pinellas County Charter, Article II, Section 2.08 (Appendix 6). Under this Charter the County may not remove the environmental lands designation or sell, convey, or transfer any fee simple interest, lease or license for a period longer than 10 years unless authorized by a majority vote of the electorate of Pinellas County in a referendum held at a general or special election called by the BCC. This ordinance, enforced by PCR and PCSO, was most recently updated in August, 2016.

Board of County Commissioners' Strategic Plan

The BCC Strategic Plan was adopted in March 2015 (Appendix 7). This document describes the BCC direction on five goals. The goal of "Practice Superior Environmental Stewardship" and associated strategies to achieve this goal indicate unequivocally that the County remains committed to the protection of natural resources and preserves.

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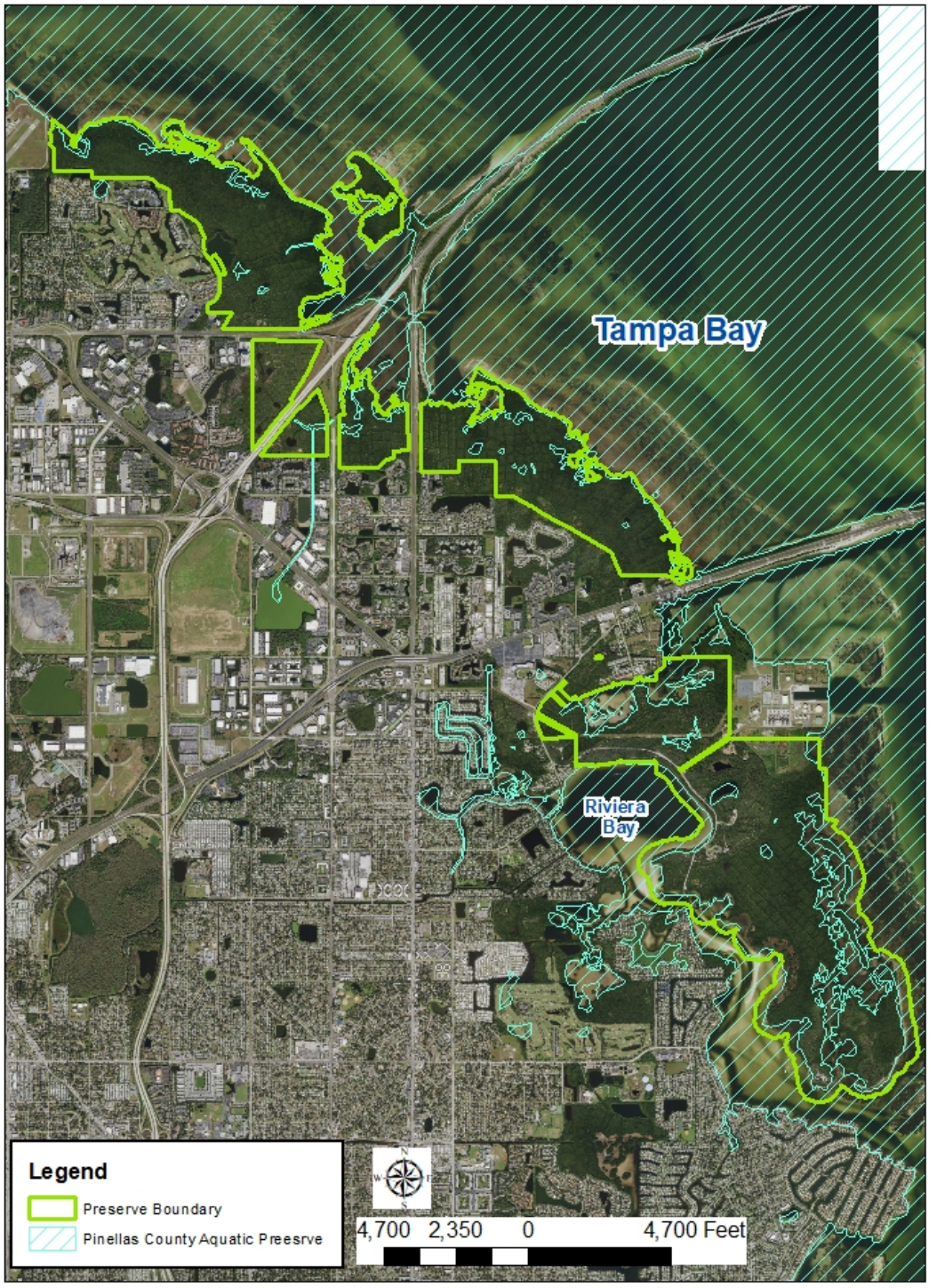


Figure 5. Significant Resources Near Weedon Island Preserve Map

Pinellas County Comprehensive Plan

The implementation of this Plan will assist with fulfilling the goals, objectives, and policies of the 2008 Pinellas County Comprehensive Plan and is in compliance with this document (Appendix 8). As detailed below, the relevant elements of the Comprehensive Plan are the Natural Resource Conservation & Management Element; Recreation, Open Space & Culture Element; Coastal Management Element; Capital Improvement Element; and the Future Land Use & Quality Communities Element.

Goal 2 of the Natural Resource Conservation & Management Element states, "Pinellas County will conserve protect, restore and appropriately manage its natural systems and living resources ensure the highest environmental quality possible." This element provides the assurance the County will protect, enhance and conserve all resources of the property. All work within the Preserve will require erosion control methods and monitored at all times in accordance with all state and local codes.

Goal 3 of the Natural Resource Conservation & Management Element states, "Pinellas County's environmental lands and resource-based parks are the hallmark of this County's environmental commitment, and these lands are to be protected and managed in perpetuity for their contribution to the biodiversity and biological sustainability of the region, as a means of providing respite from urban life and because they instill future generations with a sense of appreciation for Florida's natural heritage." This element further affirms the County's commitment to providing educational, and recreational opportunities that enhance appreciation for, and encourage the stewardship of, natural systems and their dependent living resources.

The goals, objectives and policies of the Recreation, Open Space & Culture Element focus on the need to conserve, protect, and appropriately manage natural and cultural resources and continue the acquisition of open space and environmentally sensitive areas. Goal 5 states "…to promote the arts, culture, and historic and archaeological resources within Pinellas County, and their preservation, through public and private investment and by raising awareness of existing facilities and programs." The objectives and policies further recognize the need to identify, inventory and provide protection of archaeological sites in the County.

Protection and management of coastal and marine resources, including boater education, seagrass protection, and effective marine speed zones, are among the goals, objectives, and policies of the Coastal Management Element.

The Capital Improvements Element states, "Pinellas County shall undertake actions necessary to provide adequate, needed public facilities in a manner which protects investments in existing facilities, maximizes the use of existing facilities and promotes orderly growth." This includes projects identified to protect the natural and cultural resources in the County.

Goal 1 of the Future Land Use & Quality Communities Element states, "The pattern of the land use in Pinellas County shall provide a variety of urban environments to meet the needs of a diverse population and the local economy, conserve and limit demands on natural and economic resources to ensure sustainable built and natural environments, be in overall public interest, and

effectively serve the community and environmental needs of the population." Goal 3 of this Element states "Pinellas County shall promote a balanced relationship between the natural environment and development."

Arthropod Management Plan

Mosquito control throughout the County is the responsibility of the Department of Public Works, Mosquito Control and Vegetation Management Unit program. The Weedon Island Preserve Arthropod Management Plan is included in Appendix 9.

H. NON-RECREATION INFRASTRUCTURE

Non-recreational infrastructure within the Preserve is primarily located in the maintenance area (Figure 6). Structures include a research station, three bay-workshop (which includes two offices and a restroom), and a pole barn for storage of boats, canoes, kayaks and other equipment.

I. STAFFING

From January 1997 through September 2010, the Preserve was managed by the Department of Environmental Management's Environmental Lands Division (ELD). Pinellas County budget reductions from 2008 through 2010 resulted in a reduction of ELD staff. On October 1, 2010, management responsibilities were transferred to PCR and a subset of ELD staff was incorporated within this newly-formed department. This resulted in a number of staffing changes. From October 2010 to September 2012, with the exception of those assigned to WIPCNHC, staff no longer had offices located at the Preserve. Staff servicing the Preserve, from October 2010 through August 2021 rotated among the Preserve and three regional parks located in the south part of the County.

The Parks South District Operations Group 5 is responsible for the public use components of the Preserve. In September 2021, PCR added two rangers to the Preserve. One ranger is scheduled Sunday through Wednesday and the other is scheduled Wednesday through Saturday. Both work from 6:30 am to 3:00 pm. Staff responsibilities include maintenance, safety and security of the trails, boardwalks, and facilities. This includes regular trash removal and shelter cleaning. The staff currently spends approximately 320 hours per month working in the Preserve.

The Resource and Asset Management program of PCR is responsible for resource management of the Preserve. The Land Manager is responsible for resource management of the Preserve as well as all other PCR properties in the south half of Pinellas County. In February 2018, PCR added an Environmental Specialist I position to support land management of the Preserve and other PCR properties. Staff time for ecological monitoring, species inventories, restoration project management, prescribed fire, GIS support and coordination with outside researchers in the Preserve is approximately 90 hours per month. Exotic and nuisance flora and fauna work in the Preserve accounts for approximately 50 hours per month of staff time.

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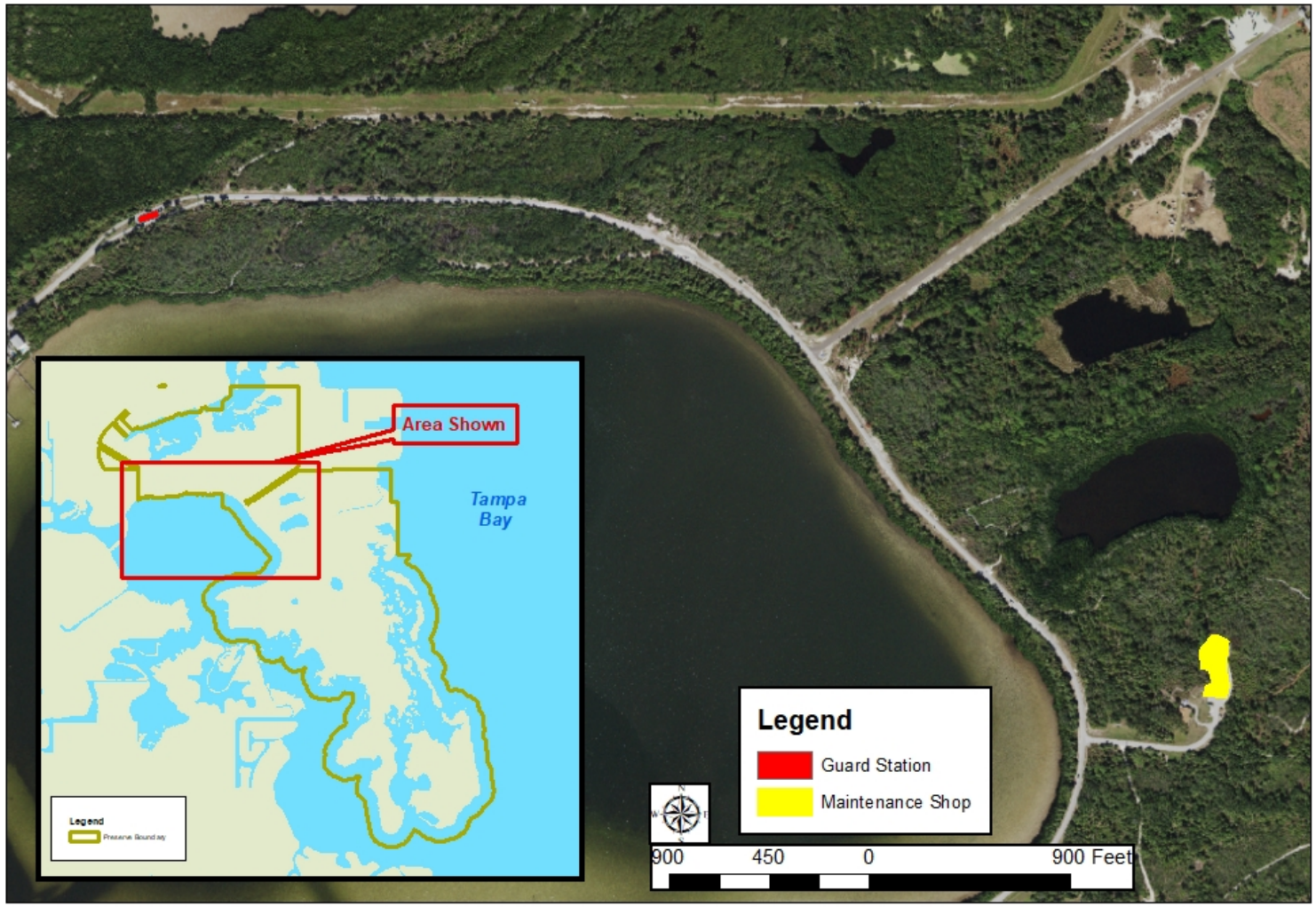


Figure 6. Non-Recreational Infrastructure Map

Mowing and fire break maintenance is completed by staff of the Parks South District Operations Horticulture Group. Crews mow approximately every 21 days during peak growing season. Staff currently spends approximately 15 hours per month on mowing and fire break maintenance.

The County Extension staff supports various educational programs at WIPCNHC, including permanent exhibit, nature walks, and education activities with school groups, public workshops, and environmental presentations. A classroom laboratory provides additional opportunities to groups. The WIPCNHC is staffed with one full-time and three part-time employees. Additional information is provided in SECTION 5. OUTREACH AND EDUCATION.

J. VOLUNTEER SUPPORT SERVICES

A large team of volunteers assist staff with a wide variety of Preserve tasks. At WIPCNHC, volunteers often are visitors' first contact. Volunteers answer questions, perform general office work, lead guided hikes, and provide interpretation and general support. Trail maintenance, exotic vegetation maintenance, trash removal, and landscaping are some of the tasks volunteers complete in support of land management and general preserve work. Monitoring projects supported by volunteers include butterfly and bird counts, floristic surveys and archaeological surveys and mapping. Volunteers have an important role in supporting the management of the Preserve now, and in the future, due to financial limitations. Volunteers have provided 54,461 hours of support to the Preserve since 2012 (Table 1). Volunteer hours were greatly diminished in 2020 and 2021, as Pinellas County decided for the safety of the volunteers and staff that WIPCNHC would be closed to the public during the COVID-19 pandemic.

Table 1. Volunteer hours From 2012 – 2021. (July 1st – June 30th of indicated year.)

2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
5855	5566	6014	6570	5420	6607	6391	6518	2670	2850

PCR works to increase volunteer activity and support to WIPCNHC through increased numbers and volunteer hours. Staff is committed to growing the volunteers' knowledge and expertise through training and seminars. Volunteers are encouraged to attend various educational opportunities presented at the Preserve. PCR also works with area universities to attract interns. Volunteer groups, especially those who have a sustained interest in the environment are, encouraged for special events and clean ups.

Additionally, a Lead Volunteer program is used to designate volunteers able to mentor volunteers under their area of expertise. The Lead Volunteers must be certified to offer training to other volunteers on any equipment needed for a particular task.

K. COLLABORATION

The Preserve is managed by Pinellas County in accordance with this Plan. The County emphasized involvement of numerous stakeholder groups when drafting the 2022 Plan. WIPAG members were selected to represent various agency partners and a number of user groups to

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review the draft Plan. A stakeholder meeting was held January 14, 2022, to introduce the draft Plan to the public and gather comments from WIPAG members and the public (Appendix 3).

Extensive partnerships have been established with researchers from other agencies, universities and volunteers. Site use permits are required for scientific research and other activities that require access to non-public areas in the Preserve. Research partners bring expertise and resources that allow for detailed investigations beyond the scope of local government. This is described in more detail in SECTION 3. NATURAL AND CULTURAL RESOURCE MANAGEMENT.

Pinellas County receives support from two Friends groups at Weedon Island Preserve.

Friends of Weedon Island

The Friends of Weedon Island, Inc. (FOWI), a 501(c)(3) nonprofit corporation, supports efforts to advance environmental preservation and education at the Preserve (Appendix 10). Their mission is to promote the public's understanding of maintaining the Preserve as an important ecological and cultural resource. Members are volunteers who provide ongoing support by raising funds, participating in volunteer efforts, providing scholarships for summer camps, supporting special projects, and hosting and publicizing events. More information can be obtained at http://www.fowi.org.

Alliance for Weedon Island Archaeological Research and Education

The Alliance for Weedon Island Archaeological Research and Education (AWIARE) entered into a formal agreement with the County in July 2010 for support of archaeological and interdisciplinary scientific research on the Preserve and related public education programs (Appendix 11). AWIARE, a 501(c)(3) nonprofit organization has as its goals and purposes to provide opportunities for public involvement in archaeological and environmental research projects, and to promote and facilitate long-term archaeological research at the Preserve and the adjacent Gulf Coast region. More information can be obtained at http://www.awiare.org.

On May 10, 2011, AWIARE signed a license agreement with the County for the establishment and use of an archaeological field station and housing space, and other improvements to the former residence located at 1500 Weedon Drive N.E., St. Petersburg, FL 33702 (Appendix 11). This research field station provides a base for AWIARE's projects and operations. In response to the 2016 Land Management Review, AWAIRE developed an Emergency Hurricane Preparedness Plan on the protection of the cultural resources, which is include in Appendix 11.

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SECTION 2. NATURAL AND CULTURAL RESOURCES

Weedon Island is no longer an island as it is connected to the mainland by a land bridge north of Riviera Bay. The Preserve supports diverse natural communities, from scrubby flatwoods to seagrasses. These diverse communities provide habitat for an abundance of both upland and coastal wildlife species. There are no known unique natural features such as virgin timber, natural rivers or streams or coral reefs located in the Preserve. The future land use map in the Pinellas County Comprehensive Plan identifies Weedon Island as a preservation area that is to remain essentially in a natural state (Figure 4). The Florida Natural Areas Inventory (FNAI) report (Appendix 12) includes listed species documented in the Preserve or with the potential to occur in the Preserve.

A. TOPOGRAPHY

The Preserve ranges in elevation from in elevation from 12 ft. below mean sea level (MSL) to 26 ft. above MSL (Figure 7). Located in the Gulf Coastal Lagoons of the Gulf Coastal Lowlands, the Preserve is relatively flat. American Indian mound sites are located on and contribute to the higher elevations. Slopes of 0-5% are common. There are a few exceptions along the northwest shoreline of Rivera Bay which exhibit slopes of 5 – 12% (Vanatta, Jr. et. al., 1972).

B. SOILS

Soil data were obtained from the 2006 Soil Survey of Pinellas County, Florida (United States Department of Agriculture, 2006), and then grouped into three categories: xeric, mesic, and hydric (Figure 8). The most common soils are hydric and support mangrove swamps that dominate the Preserve.

Xeric Soils

Astatula soils and Urban land, 0 to 5 percent slopes are excessively drained and nearly level to gently sloping. The water table is usually below 60 in. throughout the year. The surface layer is about 3 in. of dark-gray fine sand. The subsurface layers are yellowish-brown and yellow sand approximately 80 in. deep. This soil type supports longleaf pine. At the Preserve, xeric and maritime hammock communities are supported by Astatula fine sands.

Paola and St. Lucie soils and Urban land 0 to 5 percent slopes are excessively drained, fine sandy soil formed from thick beds of marine sand and is nearly level to gently sloping. The water table is below 60 in. throughout the year. The surface layer is about 3 in. gray fine sand. A 19-in. layer of loose white sand sits beneath the top layer. Below is a one-inch discontinuous layer of brown weakly cemented fine sand. Twenty-eight inches of yellow fine sand with dark reddish round pebbles and root channels coated with dark brown fine sand and filled with fine white sand sits beneath the third layer. The fourth layer consists of very pale brown loose fine sand that extends

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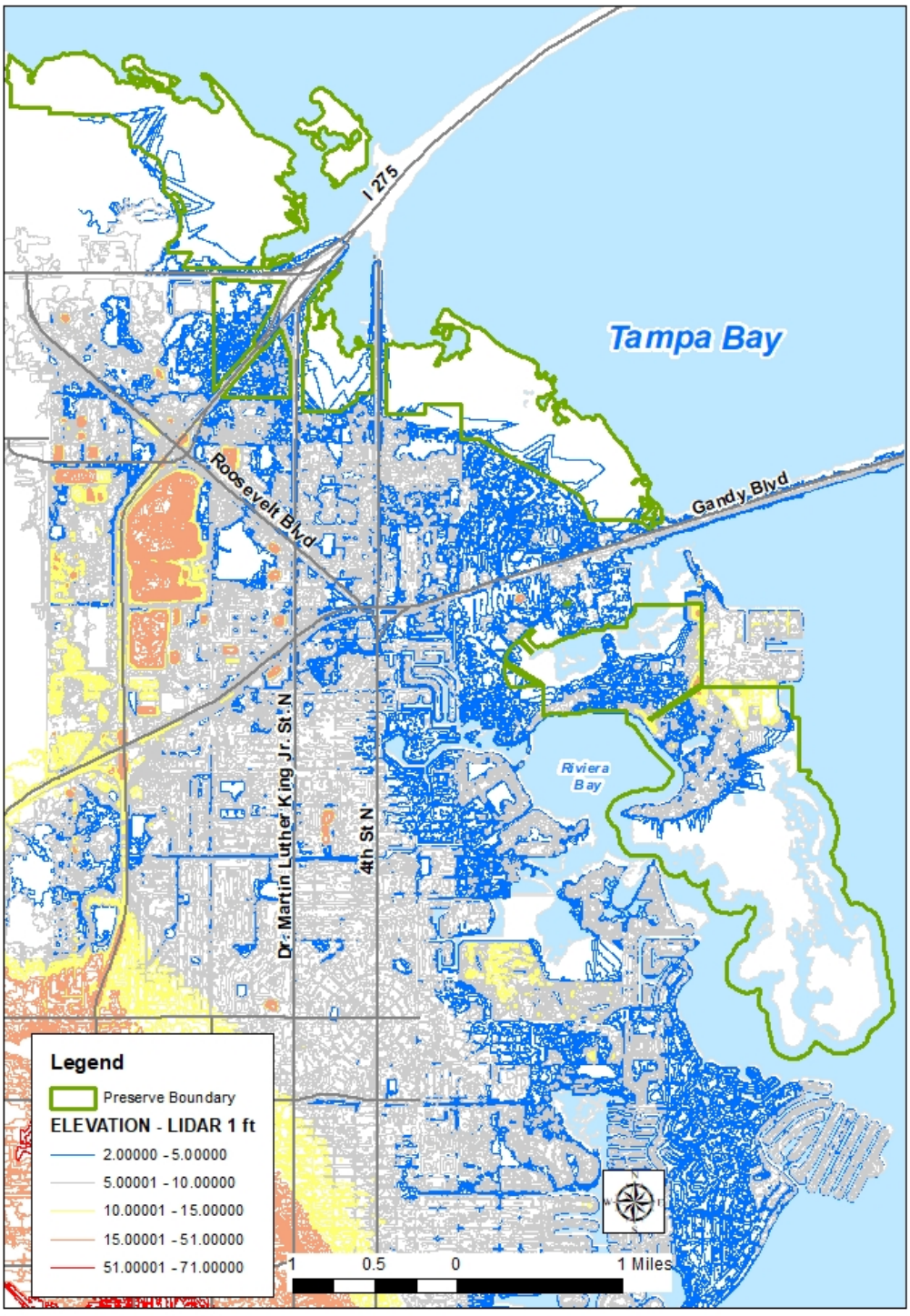


Figure 7. Topographical Map

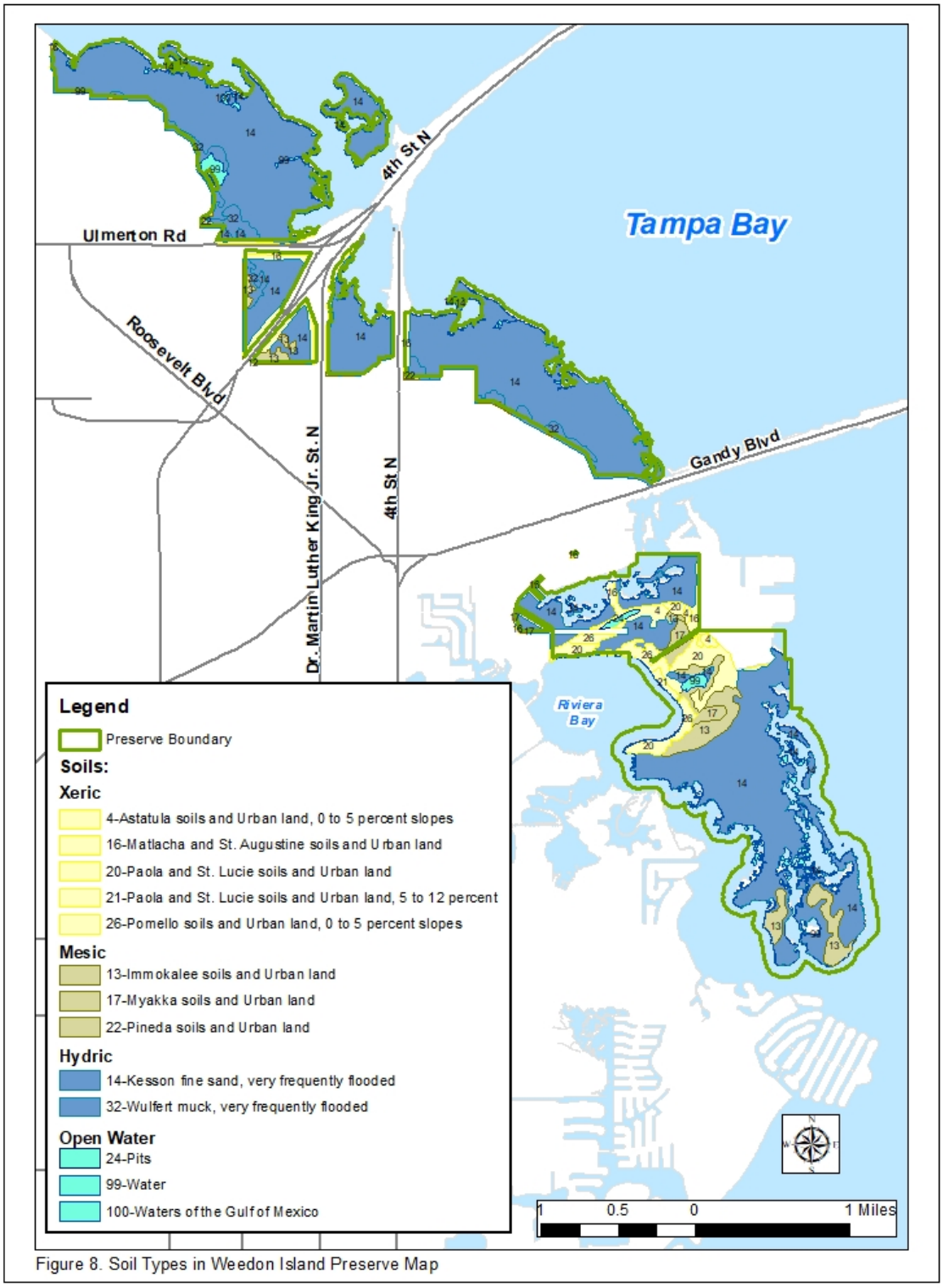


Figure 8. Soil Types in Weedon Island Preserve Map

to a depth of 80 in. On site, habitats found on this soil type include xeric and maritime hammocks, pine/scrubby flatwoods, coastal berm, and developed areas.

Paola and St. Lucie soils and Urban land 5 to 12 percent slopes are excessively drained, acidic sandy soils. The surface layer consists of about 3 in. of gray fine sand. Beneath this sits 55 in. of white loose fine sand. The third layer extends to a depth of 80 in. and consists of yellow loose fine sand. At the Preserve, a xeric hammock and coastal berm are found on this type of soil.

Pomello soils and Urban land 0 to 5 percent slopes are moderately well drained, acidic, sandy soils. The slope is nearly level to gently sloping. The water table is usually at a depth of 30 to 42 in. during wet periods. Fine sands are layered from the surface layer to a depth of up to 80 in. At the Preserve, xeric hammocks with a small area of pine/scrubby flatwoods are found on this soil type.

Mesic Soils

Immokalee soils and Urban land are very poorly drained and have a high density of fine sand that allows this soil to have a moderately rapid to rapid permeability. The high water table averages approximately 12 in. below the surface from June through November. Ross and Googe Islands are dominated by this soil type. The landform on this type of soil is flatwoods. Other habitats within this soil type are maritime hammock, pine/scrubby flatwoods, small areas of salt marsh, and ruderal areas.

Pineda soils and Urban land are poorly drained sandy marine sediments over loamy marine sediments. Small patches of this soil are found on the west edge of the northern area of the Preserve, which support wetland forested mixed communities.

Matlacha and St. Augustine soils and Urban land are somewhat poorly drained material derived from dredge and fill projects. The majority of this soil type is found along roadsides. On the south side of Snug Harbor, the dredge materials now support a hammock community.

Myakka soils and Urban land are poorly drained, acidic sandy soil and nearly level. The water table is usually at a depth between 6 to 30 in. from June through November. Fine sands are layered from the surface layer to a depth of up to 80 in. On site these areas support pine/scrubby flatwoods, xeric and maritime hammocks, and a small-developed area.

Hydric Soils

Kesson fine sand, very frequently flooded, is very poorly drained with a surface layer of black fine sand and shell fragments. The sub surface layers consist of light brownish gray fine sand, and shell fragments low in organic matter. This soil type supports growth of salt marsh and mangrove swamp communities. The majority of this soil supports mangrove swamps with some small areas of salt marsh in the Preserve. Most of the mangrove swamps are crisscrossed with mosquito ditches.

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Myakka Fine Sand (tidal) is very poorly drained, acidic sandy soil and nearly level. The water table is usually near the surface and inundated at times due to tidal action. The surface is usually about 4 in. of black fine sand. This surface covers a 12-in. layer of loose gray fine sand. This layer is black on top, dark reddish brown in the middle and dark yellowish brown on the bottom. The next layer extends to a depth of about 84 in. and is comprised of lighter colored fine sand. This soil supports salt marsh communities. Within the Preserve, this soil is found only along the western edges of the norther area of the Preserve. The communities growing there are salt marshes and swamps.

Pits are areas where soils have been excavated for use of fill materials. The only area in the Preserve that fits this description is located just north of the Duke Energy transmission line.

Wulfert muck, very frequently flooded is very poorly drained and has a high density of muck covering fine sand that allows for rapid permeability. The high water table inundates the surface throughout the year. This soil type supports salt marshes in the Preserve.

C. GEOLOGY

The Preserve consists of two zones, an upper zone of unconsolidated deposits and a lower zone of consolidated rock. The upper zone, commonly referred to as the surficial deposits, consists chiefly of beds and lenses of fine sand, gravel, sandy clay and clay, ranging in total thickness from <10 ft. to as much as 200 ft. The geologic units comprising the surficial deposits are the Hawthorne formation of Miocene age and the overlying differentiated deposits of the Holocene age. The consolidate rocks consist mostly of beds of hard and soft limestone ranging in texture from densely crystalline to granular; gypsum and dolomite are commonly interbedded with limestone in the deeper zones. These rocks extend vertically to a depth of 10,000 ft. or more (Florida parks Service, 1990).

D. MINERALS

There are no known mineral resources within the Preserve.

E. HYDROLOGIC CONDITIONS

There are three hydrological influences on the Preserve, namely semi-diurnal tides, the surficial aquifer and the Floridan aquifer. Tidal waters and the Floridan aquifer flow are the predominant forces. The presence of the surficial aquifer is limited because of the peninsular geological features discussed above.

Mosquito ditching in the 1950's resulted in a loss of wetland area and altered the local hydrology in the Preserve. Tidal waters flood and ebb from and to Old Tampa Bay through Papy's Bayou and Riviera Bay; therefore, water quality of Tampa Bay is of great significance to the Preserve. Tidal height is greatest during severe weather associated with hurricanes and tropical storms. Since 1842, 26 hurricanes and 37 tropical storms have passed within 50 mi. of St. Petersburg. Florida.

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The Floridan aquifer flows west and south from Hillsborough and Pasco Counties, south through Pinellas County then under Weedon Island. The aquifer is located at a depth of approximately 20 ft. and extends to a depth of approximately 80 ft. Being located at the discharge area of the aquifer, any pollutants and/or reductions of volume would be evident and influence the Preserve. Very little of the surface water is retained long enough to percolate through the confining layers and thus to recharge the Floridan aquifer.

The surficial aquifer can be found at depths of five ft. or less throughout the Preserve. Since Weedon Island is located at the southern end of a narrow peninsula, the surficial aquifer is recharged primarily by rainfall. Due to shallow soils, the surficial aquifer is depleted quickly by drainage, plant evapotranspiration and evaporation.

Low elevations and shallow soils make Weedon Island subject to frequent flooding, with higher elevations (>4 ft. MSL) subject to flooding following tropical storms and hurricanes. The lower elevations frequently flood following thunderstorms during the rainy season. These frequent floods drain off quickly from most areas of the uplands.

Dredge and fill developments of the land to the south, west and north of the Preserve have increased the tidal flow into and out of Riviera Bay. This has, in turn increased the shifting of sands along Papy's Bayou. The abundance of grass beds, salt marsh and mangrove swamp have minimized the detrimental effects of tidal flow; however, additional increases of flow, stormwater drainage and/or contamination with pollutants could alter natural communities. Relatively recent suburban development has claimed the uplands west of Weedon Island. This development is subject to local and state permits that require avoidance, minimization and migration of all wetland and, consequently, surface flow and stormwater impacts.

F. WATER RESOURCES

The Department of Public Works, Environmental Management Division staff monitor water quality and seagrasses within the Preserve. Water quality sites are located in Old Tampa Bay, Papy's Bayou, Riviera Bay and Snug Harbor. Results of these data are discussed in E. MONITORING of SECTION 3. NATURAL AND CULTURAL RESOURCE MANGEMENT.

There are two freshwater resources in the Preserve, a natural spring and a lake, both of which are located on Duke Energy property (Figure 9). There have been no known studies conducted on either of these freshwater resources.

G. PLANT COMMUNITIES AND COVER TYPES

The natural communities that comprise the Preserve are predominantly estuarine, mangrove forest, and seagrass (Figure 10). The north part of the Preserve is entirely comprised of intertidal zones of seagrass and mangrove islands. The larger islands within the Preserve complex, Googe Island and Ross Island, contain 19 and 30 ac. of uplands, respectively. These upland areas are comprised of scrubby flatwoods and xeric hammock. There are no known beaches or dunes at the Preserve.

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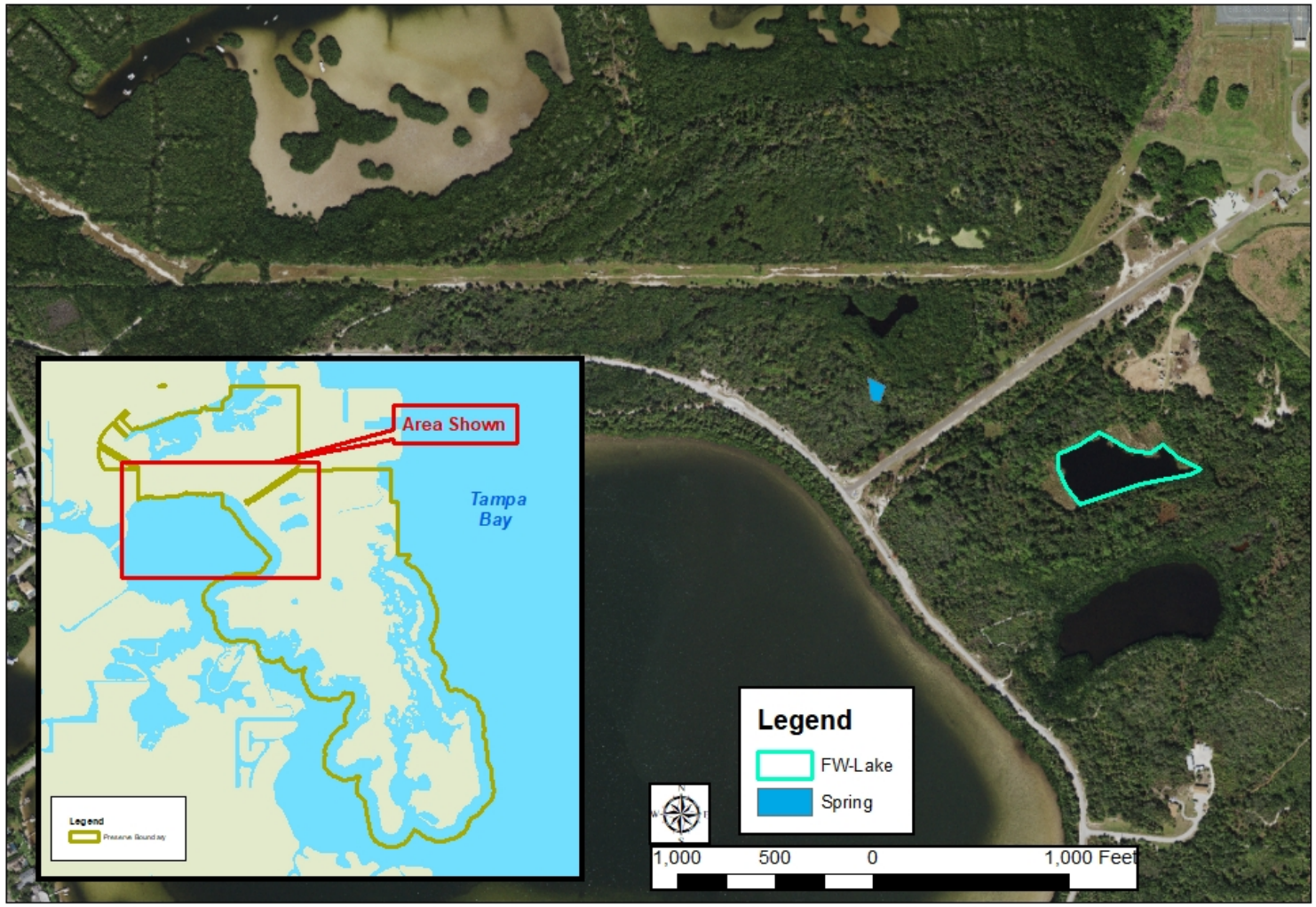


Figure 9. Freshwater Resources Map

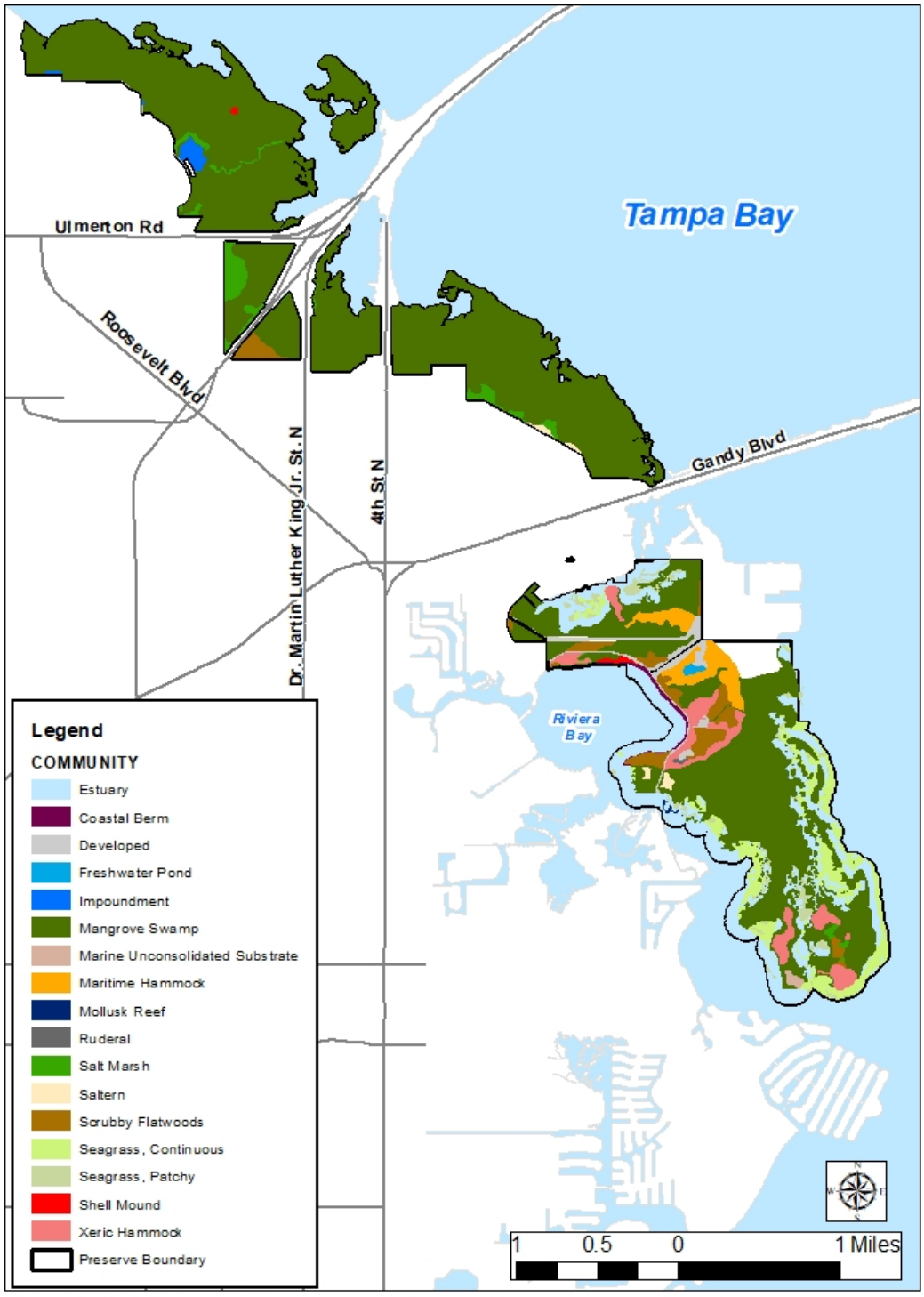


Figure 10. FNAI Communities in Weedon Island Preserve Map

All communities were classified using the system described by FNAI, (2010). Listed below are the general descriptions of natural communities found in the Preserve (Pinellas County, 2010). To date, there have been 289 plant species identified in the Preserve (Appendix 12).

Xeric Hammock (93.5 ac)

This community is an advanced successional stage of scrub or sandhill. The soils found in these areas (Astatula fine sand, Paola fine sand, Pomello fine sand, and St. Lucie fine sand) suggest that both sandhill and scrub could be supported. However, since fire has been excluded for many years, the areas are now dominated by xeric hammocks. Xeric areas where fire exclusion is approaching 30 years begin to take on hammock-like conditions. Hammock canopies are dense and thus reduce understory growth. Consequently, fuel loads are gradually reduced, and fire is less likely to occur. These areas are predominantly associated with some of the Preserve's shell middens and burial mounds. The canopy plants include live oak (*Quercus virginiana*), sand live oak (*Quercus geminate*), and cabbage palm (*Sabal palmetto*). Understories differ somewhat in each of the xeric hammocks found on the Preserve, but common plants include saw palmetto (*Serenoa repens*), beautyberry (*Callicarpa americana*), and hog plum (*Ximenia americana*).

Maritime Hammock (69.5 ac.)

This community occurs on old coastal dunes that have been stabilized long enough for the growth of a forest. The generally mesic conditions of well-developed and maritime hammock communities inhibit natural fire. Fire introduction may alter the appearance. This community includes the final stage of succession in coastal areas. The flora in this community includes cabbage palm, red bay (*Persea borbonia*), laurel oak (*Quercus laurifolia*), live oak, marlberry (*Ardisia escallonioides*), and snowberry (*Chiococca alba*).

Shell Mound (5.5 ac.)

This anthropogenic community is composed mainly of shells discarded by generations of Native Americans. As the name suggests, shell and shell fragments are found mixed within the soil. Shell mounds are predominantly restricted to the hammocks, both maritime (north of Duke Energy access road) and xeric (Ross Island). There is one exception, a narrow, exposed shell midden located along the north shore of Riviera Bay. This area is comprised of a relatively impenetrable layer of shell and sand, scattered cabbage palm, sand live oak, muscadine (*Vitis rotundifolia*), and smooth rattlebox (*Crotalaria pallid* var. *obovate*). Most of the shell middens on the Preserve are closely associated with hammock communities and therefore contain similar vegetative qualities. The common flora in this community is red bay, laurel oak, red cedar (*Juniperus virginiana*), hog plum, gray nicker (*Guilandina bonduc*), coinvine (*Dalbergia ecastaphyllum*), and smooth rattlebox.

Scrubby Flatwoods (94.6 ac.)

This community has an open canopy of widely-spaced pine trees with low, shrubby understory dominated by scrub oaks and saw palmetto. These areas dominate the uplands, particularly adjacent to the maintenance area and along the upland trail. This community can be difficult to distinguish in the field as a result of alterations to fire frequency and drainage. The mesic pine

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flatwoods that occur onsite are approaching a more dry, xeric condition – characteristics indicative of scrubby flatwoods. Topographically, these areas occur on high ridges in the pine flatwoods. A natural fire regime for scrubby flatwoods is 5 to 15 yr. Dominant flora found is laurel oak, live oak, sand live oak, cabbage palm, red bay, longleaf pine (*Pinus palustris*), slash pine (*Pinus elliotti*), saltbush (*Baccharis halimifolia*), rusty staggerbush (*Lyonia ferruginea*), pinewoods fingergrass (*Eustachys petraea*), and switch grass (*Panicum virgatum*).

Marine Unconsolidated Substrate (4.9 ac.)

The southern tip of Googe Island supports this community type. This beach area is characterized as relatively open areas of subtidal, intertidal and supratidal zones which lack dense vegetation. The most common flora found in this community is cabbage palm, capillary hairsedge (*Bulbostylis ciliatifolia*), swamp flatsedge (*Cyperus ligularis*), coastalplain honeycombhead (*Balduina angustifolia*), and partridge pea (*Chamaecrista fasciculate*).

Coastal Berm (10.4 ac.)

This community is found on the west side of Weedon Island boarding Riviera Bay. Coastal berms are ridges formed from storm deposited sand, shells and debris. Typical vegetation includes cabbage palms, seagrape (*Coccoloba uvifera*), live oak, and marsh elder. The berm grades into a narrow band of mangrove swamp. Cabbage palm gray nicker, coinvine, seashore dropseed (*Sporobolus virginicus*), and spotted beebalm (*Monarda punctata*) are commonly found on the Weedon Island coastal berm.

Mangrove Swamp (2193.2 ac.)

This community dominates the Preserve, comprising over 60% by area. This community is characterized by dense mangrove forests. These areas contain extensive areas of dredged mosquito ditches. The vegetation contains red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*), buttonwood (*Conocarpus erectus*), saltbush, and marsh elder (*Iva frutescens*).

Salt Marsh (61.7 ac.)

This tidal community is largely herbaceous in the portion of the coastal zone protected from large waves by the gentle sloping topography of the shoreline as found in Tampa Bay. The salt marsh is found on Ross Island, the mainland of the Preserve, and along the northern portions of the Preserve. The typical flora found in this community is black needle rush (*Juncus roemerianus*), smooth cord grass (*Spartina alterniflora*), saltwort (*Batis maritima*), herb-o-grace (*Bacopa monnieri*), and shoreline seapurslane (*Sesuvium portulacastrum*).

Saltern (Salt Flat; 9.8 ac.)

There are three small patches of this community nestled in the mangrove swamps. Salterns develop at an elevation just high enough to receive fewer tidal inundations than adjacent seaward zones. Long periods between flooding prevent dilution and favor water loss by percolation and

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evaporation. The flatness across tidelands is formed by the daily ebb flow of tides, which act as a leveling agent. Erosion of adjacent uplands during storm tides contributes sand to the bordering saltern area. The common flora in this community include dwarfed black mangrove, saltwart, shoreline seapurslane, perennial glasswort (*Salicornia ambigua*), and seaside heliotrope (*Heliotropium curassavicum*).

Seagrass (214.0 ac.)

This community occurs in subtidal zones in clear coastal waters where wave energy is moderate. Seagrass beds most frequently occur on unconsolidated substrate of marl, muck, or sand. The other factors that affect the establishment and growth of seagrass beds include water temperature, salinity, tidal activity, and available light. Species documented in the Preserve include turtle grass (*Thalassia testudinum*), shoal grass (*Halodule wrightii*), manatee grass (*Syringodium filiforme*), and widgeon grass (*Ruppia maritina*).

Mollusk Reef (1.9 ac.)

Marine and estuarine mollusk reefs are faunal-based natural communities typically characterized as expansive concentrations of sessile mollusks occurring in intertidal and subtidal zones to a depth of several ft. In Florida, the most developed mollusk reefs are generally restricted to estuarine areas. In the Preserve, these are located just south of the fishing pier.

H. ALTERED AND UNCLASSIFIED LANDCOVER TYPES

Estuary (364.5 ac)

Weedon Island Preserve is located in the Old Tampa Bay portion of Tampa Bay. The 400 sq. mi. estuary is a diverse ecosystem that supports a variety of flora and fauna.

Developed (51.3 ac.)

The developed areas are comprised of roads, parking areas, buildings, and maintained lawns as part of recreational, business, or residential area. Vegetation in this community includes Bahiagrass (*Paspalum notatum*), live oak, cabbage palm and longleaf pine.

Impoundment (14.9 ac.)

The impoundment, located in the northern Preserve, is a borrow pit dug in 1975. Soils were taken and used for fill in local development projects, creating the impoundment with a maximum depth of 33 ft.. The water in the impoundment is brackish with a salinity of 2.0 ppt.

Ruderal (1.5 ac.)

One small area on Weedon Island contains this highly disturbed community type that is not recognized by FNAI. Vegetation such as Bahiagrass, lantana (*Lantana camara*), muscadine, and sensitive plant (*Mimosa strigillosa*) dominate.

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Freshwater Pond (4.1 ac.)

One freshwater pond is located within the Preserve on Duke Energy property. The vegetation includes Carolina willow (*Salix caroliniana*) and cat-tails (*Typha spp.*).

I. WILDLIFE

The Preserve supports diverse wildlife species: documented species include 176 birds, 43 butterflies, 27 reptiles, 15 mammals, 8 amphibians, and 126 fishes. The species lists (Appendix 12) represent a compilation of results from surveys that County staff and volunteers have conducted since 2000.

Birds

The Preserve provides critical habitat required by resident and migratory birds to feed, rest and reproduce. Mangrove swamps, salt marsh, salterns, marine unconsolidated substrate and seagrass beds are important feeding areas for wading birds. Scrubby flatwoods, maritime hammock, xeric hammock and coastal berm provide resting and nesting areas for many species listed in Appendix 12.

Mammals

The Preserve supports a variety of small mammals. The most common are the northern raccoon (*Procyon lotor*), evening bat (*Nycticeius humeralis*), eastern gray squirrel (*Sciurus carolinensis*) and the nine-banded armadillo (*Dasypus novemcinctus*). Coyotes (*Canis latrans*) have been living in the Preserve for the past decade. Coyotes are known predators of bird and tortoise eggs.

The protection of seagrasses is important to the sustainability of a wide variety of marine mammal species in the Preserve. The west Indian manatee (*Trichechus manatus*) and the bottlenose dolphin (*Tursiops truncatus*) utilize the expansive seagrass beds.

Fishes

The Fisheries Independent Monitoring (FIM) program at Florida Fish and Wildlife Conservation Commission's (FWC) Fish and Wildlife Research Institute (FWRI) has sampled both juvenile and adult fishes for over two decades. From 2012 through 2020, 126 species were identified within the Preserve (Appendix 12). The protection of seagrasses is important to the sustainability of both juvenile and adult fishes found in the Preserve. The summary of these data is discussed in more detail in E. MONITORING of SECTION 3. NATURAL AND CULTURAL RESOURCE MANAGEMENT.

Reptiles

Several species of reptiles have been documented through surveys at the Preserve (Appendix 12). The most common species seen are the Cuban brown anole (*Anolis sagrei sagrei*), gopher

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tortoise (*Gopherus polyphemus*), southern black racer (*Coluber constrictor priapus*) and eastern diamondback rattlesnake (*Crotalus adamanteus*).

Amphibians

The amphibian species found in the Preserve include two toads and six frogs. The most common are the eastern narrow-mouthed toad (*Gastrophryne carolinensis*) and the greenhouse frog (*Eleutherodactylus planirostris*).

Butterflies

County staff and volunteers have observed 43 species of butterflies through spring and fall surveys in the Preserve. None of these is listed as a species of conservation concern.

Three formal surveys and studies that included documentation of wildlife have been conducted over the past 10 yrs. and recorded on the wildlife species lists (Appendix 12). In addition to these studies, the FWRI has sampled both juvenile and adult fishes for over a decade. These studies are discussed in more detail in F. RESEARCH of SECTION 3. NATURAL AND CULTURAL RESOURCE MANAGEMENT.

J. LISTED SPECIES

Imperiled species are those that are listed by FNAI, United States Fish and Wildlife Service (USFWS, FWC), and the Florida Department of Agriculture and Consumer Services as endangered and threatened or of special concern. Several imperiled floral and faunal species have been documented in the Preserve (Appendix 12) and are presented in Table 2.

K. EXOTIC SPECIES

Exotic species are non-indigenous species introduced into an area either purposefully or accidentally. Exotic flora in natural areas can have detrimental effects to the native flora and fauna (Burks and Langland, 2008). The Florida Invasive Species Council (FISC), a non-regulatory organization of professional botanists and other, compiles lists of invasive exotic plants (Appendix 13). Category I species are defined by FISC as species that are invading and disrupting native plant communities. Category II species are defined by FISC as species that have shown invasive properties and the potential to disrupt native plant communities.

The plant list identifies 50 exotic species, 14 of which are Category I and 10 of which are Category II species. The mosquito-ditched areas in the Preserve have the highest densities of invasive exotics. Propagules of exotic flora are widely dispersed through a variety of mechanisms, including by wind, birds consuming fruit and seeds, and inflow of surface water.

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Table 2. Listed Species Recorded in the Preserve					
Scientific Name	**Common Name**	**FNAI State Rank[1]**	**Federal Rank[2]**	**State Status[3]**	**Global Rank[4]**
Plants					
Chrysopsis floridana	Florida goldenaster	S3	E, PDL	E	G2
Birds					
Platalea ajaja	Roseate Spoonbill	S2		ST	G5
Reptiles					
Crotalus adamanteus	Eastern Diamondback Rattlesnake	S3			G3
Drymarchon couperi	Eastern Indigo Snake	S2	T	FT	G3
Gopherus polyphemus	Gopher Tortoise	S3	C	ST	G3

1- FNAI State Element Rank
Florida Natural Areas Inventory - http://www.fnai.org/trackinglist.cfm (July 2021)
S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 = Imperiled in Florida because of rarity (6 to 30 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 = Apparently secure in Florida (may be rare in parts of range).

2-Federal Legal Status
United States Fish and Wildlife Service, http://www.fws.gov/endangered
C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
E, PDL = Species currently listed endangered but has been proposed for delisting
T = Threatened: species likely to become Endangered within the \foreseeable future throughout all or a significant portion of its range.
N = Not a listed species.

3-State Rank
Florida Fish and Wildlife Conservation Commission
E=Endangered
ST – State population listed as Threatened by the FFWCC.
FT= Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service

4 – FNAI Global Element Rank
G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G5 = Demonstrably secure globally.

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Brazilian pepper (*Schinus terebinthifolia*), Australian pine (*Casuarina equisetifolia*), Guinea grass (*Panicum maximum*), cogon grass (*Imperata cylindrica*), lantana, and rosary pea (*Abrus precatorius*) are the most prevalent exotic floral species that have been observed in the Preserve.

Exotic fauna in natural areas can prey on or displace native species or negatively impact native plants and natural plant communities. Exotic faunal species that have been documented on the Preserve include greenhouse frog (*Eleutherodactylus planirostris*), Cuban treefrog (*Osteopilus septentrionalis*), Cuban brown anole (*Anolis sagrei*), Indo-Pacific gecko (*Hemidactylus garnotii*), Argentine black and white tegu (*Salvator merianae*), and European starling (*Sturnus vulgaris*).

L. CULTURAL RESOURCES

Weedon Island has a cluster of shell middens and sand mounds, including a burial mound partially excavated by a team from the Smithsonian Institution in 1923-24. Fewkes published a report on the findings entitled "Preliminary Archaeological Explorations at Weedon Island, Florida," in 1924. Fewkes surveyed the mound sites and produced an accurate map of the sites in the publication. The report noted several types of mounds at Weedon Island, namely middens, domiciliary mounds, and the sand burial mound. Recent research has confirmed the locations of some of these mounds (Weisman et al., 2008).

Shell middens overlay most of two major relic sand dune ridges located at the southern part of the Preserve. The geomorphology of these mound sites elevates in ranges from 6 to 26 ft. above MSL, and form two semi-circular radii on the island. Other midden sites are located on Googe and Ross Islands. The aboriginal shell deposits are comprised mostly of shell, with some bone, lithic, and pottery sherd artifacts in a layered stratigraphy.

Domiciliary mounds comprised of sand, shell and some middens were reported by Fewkes, who noted that they probably were used for house structures.

The sand burial mound viewed by Fewkes was approximately 4 ft. in height and circular. Although Fewkes thought the mound a natural "eminence" used by the Indians, it most likely was artificially constructed. According to the report, there were three layers of internment and about one-third of the mound was excavated.

Recent human impacts in the past 100 yrs. to the sites have affected the prehistoric mounds resulting in a loss of archaeological site integrity. Much of the land was impacted by the harvest of pine trees, construction of runway airfields, citrus groves, various roads, houses, and businesses. More serious modifications include the dredging of mosquito ditches, installation of a gas and oil pipeline corridor, construction of the power plant, and construction of Weedon Drive. In addition to these impacts, the sites have been affected directly by intensive looting, especially in the cemetery area. The impacts to soils and sediments have contributed to the invasion of pioneer plants and invasive exotics resulting in increased bioturbation and further cultural feature degradation (Weisman et al., 2008)

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Historic sites on Weedon Island are prevalent with many buildings remains and imprints from past activities such as an airport runway and towers (Figure 11). Early settlers once occupied several of the islands, and pilings from the buildings constructed during the 1920's are still intact. Weedon Island's varied history is captured in *The Weedon Island Story* (Pinellas County, 2005).

The northern area of the Preserve is a low-lying mangrove swamp area with shell mounds providing the only significant topographic variation. One significant shell mound with a maximum elevation of 3.3 ft. follows the contours of the coast of Old Tampa Bay. Another major shell mound with human remains rises to the height of 8.2 ft. and is located west of the shoreline and is surrounded by mangrove swamp. Both of these shell mound/middens have been impacted by heavy looting and consequently have been degraded. Despite the extensive looting activity, looter holes do not extend beyond three ft., allowing a substantial amount of midden to remain intact.

Adjacent to these sites, a prehistoric pine dugout canoe was discovered and eventually excavated in 2011. The dugout was over 40 ft. long and radiocarbon dated to 2 Sigma calibrated results of Cal A D 690 to 1010. The canoe is 39.9 ft. from bow to broken stern and is longer than any other dugout found in Florida. It is also the only one directly associated with a saltwater environment. The canoe is on display in the WIPCNHC.

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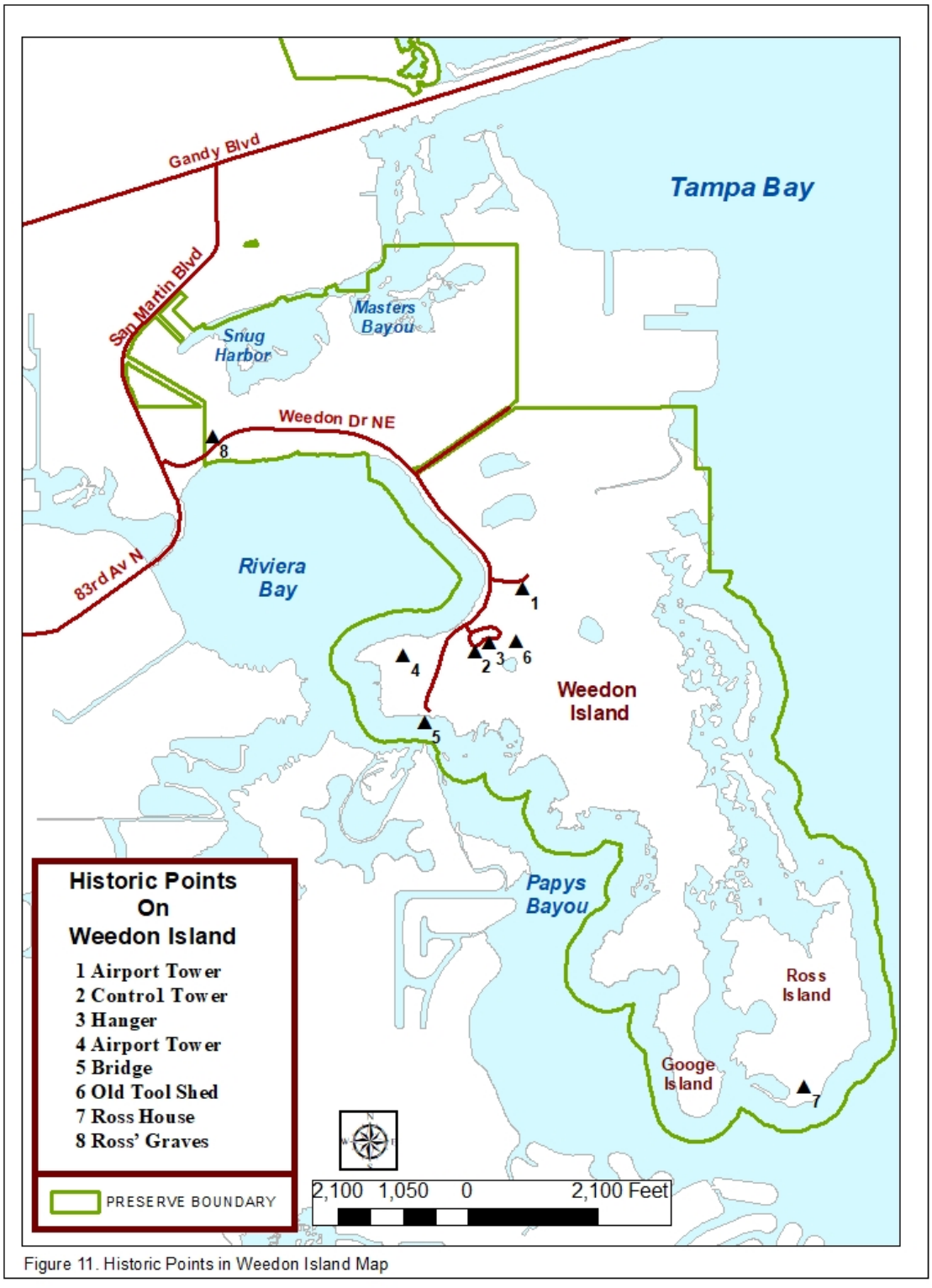


Figure 11. Historic Points in Weedon Island Map

SECTION 3: NATURAL AND CULTURAL RESOURCE MANAGEMENT

Resource management is focused on the natural community or ecosystem level, a holistic approach that provides benefits beyond those afforded by single-species management. Based on available staff, the long-range goal is to maintain the current activities and level of service, including those restoration projects identified in the existing Capital Improvement Program (CIP).

A. HABITAT RESTORATION AND IMPROVEMENT

Ecological restoration in the Preserve provides protection and enhancement of the natural communities. Restoration includes re-introduction of fire, establishment of regular burn regimes, mechanical vegetation reduction, and exotic vegetation control to improve and maintain natural habitats. A series of projects to restore hydrology by selectively filling the man-made mosquito ditches have been completed. Future planned hydrologic restoration projects are included in the existing CIP. Private contractors are hired to complete restoration projects as this is beyond the capability of County staff and equipment.

Developed by the Pinellas County Public Works Department, the Sea Level Rise Tool for Capital Planning provides a framework for evaluating sea-level rise within the capital improvement program process, as well as in maintenance projects. It provides a vulnerability and risk assessment for various assets by using the latest climate science and then supports creating adaptation measures to improve the assets' resiliency to impacts from sea-level rise and. In accordance with County Administrative Directive 2-12, PCR will use and adopt mitigation and/or adaption measures for CIP's that meet any of the following criteria: total cost over one million dollars, located in the flood vulnerability zone, or creates or impacts critical infrastructure.

Objective: Provide resource management to restore and improve the natural communities of Weedon Island Preserve.

<u>Restoration Projects</u>

Feather Sound Tidal Wetland Restoration Project

A cooperative effort of the Tampa Bay Estuary Program (TBEP), Southwest Florida Water Management District (SWFWMD), Tampa Bay Watch, FWC-FWRI, and Pinellas County, this project addressed poor seagrass recovery in Tampa Bay and was completed in 2016 (Figure 12.). This project restored a number of mosquito ditches to saltern, re-routed a number of mosquito ditches to reduce nutrient loading to Tampa Bay in the Feather Sound area, removed exotic vegetation and installed native vegetation, resulting in restoration and enhancement of 96.4 ac. (Appendix 14). Approximately 99 spoil mounds were removed, 12 ditch blocks were added to redirect flow, and a partially filled pond was excavated and graded to improve surrounding habitat. A contractor installed over 9,000 native plants and volunteers planted over 11,000 native plants.



Figure 12. Restoration Projects Map

Weedon Island Preserve Salt Marsh Restoration Project

The Weedon Island Salt Marsh Restoration Project is a cooperatively-funded initiative with SWFWMD and the County to evaluate, design, and construct future projects to enhance/remove the mosquito ditches in the Preserve. Faller, Davis & Associates was hired to conduct a feasibility study for the natural systems and restoration projects within 1,100 ac. of the Preserve. The Weedon Island Tidal Wetland Restoration Feasibility Study (Appendix 15) was completed in September 2018. The first phase identified potential projects for habitat restoration focused on spoil mound removal, nuisance species removal and hydrologic improvements in the mosquito ditches. A variety of techniques were evaluated to identify the most effective approaches for all three restoration focus areas. The technique of "Walk In, Dig Out" (WIDO) was determined to be the most effective restoration approach for most of the Preserve. A 42-ac. pilot project (Figure 12) was proposed to evaluate the WIDO technique.

This restoration project is currently in Phase Two, Design and Permitting and was completed in January 2022. Phase Three, Construction will begin in mid-2022 and should be completed by September, 2023. Public will be provided information through workshops and social media to update the public on details this and future projects within the Preserve.

Goal A1: Monitor and evaluate effectiveness of the Salt Marsh Restoration Pilot Project by post-construction vegetation transects and photo points. (Short-term)
Goal A2: Continue to implement restoration projects identified in the Feasibility study to improve hydrology of the mosquito ditches and remove exotic vegetation.
Goal A3: Provide outreach to the public regarding ongoing restoration projects at the Preserve. (Long-term)

Prescribed Fire

Fire is extremely important in the maintenance of upland Florida ecosystems. These natural communities have evolved to depend on fire. Each type of community type burns at a specific frequency due to characteristics of various plant species and hydrologic conditions. Higher and drier communities with light, herbaceous fuels generally burn more frequently than do hydric areas with larger, heavier fuels.

The challenge of prescribed fire in the Preserve is addressing the smoke management concerns. Pinellas County is densely populated, and prescribed fire must not impact major roads, schools, and local residents. Smoke management is critical when planning any prescribed fire in the Preserve.

The objectives of the burn program at the Preserve are to re-introduce fire and maintain a fire-frequency regime typical for the fire-adapted communities. These objectives are accomplished through partitioning the Preserve into burn units and implementing burns as appropriate for each unit.

The Preserve has 19 burn units labeled W-1 throughW-7 (Figure 13). Units are delineated using existing roads, firebreaks and ecotones between communities. Firebreaks are maintained by PCR staff by disking periodically each year. Prescribed burns conducted in the Preserve are permitted through the Department of Agriculture and Consumer Services, Florida Forest Service

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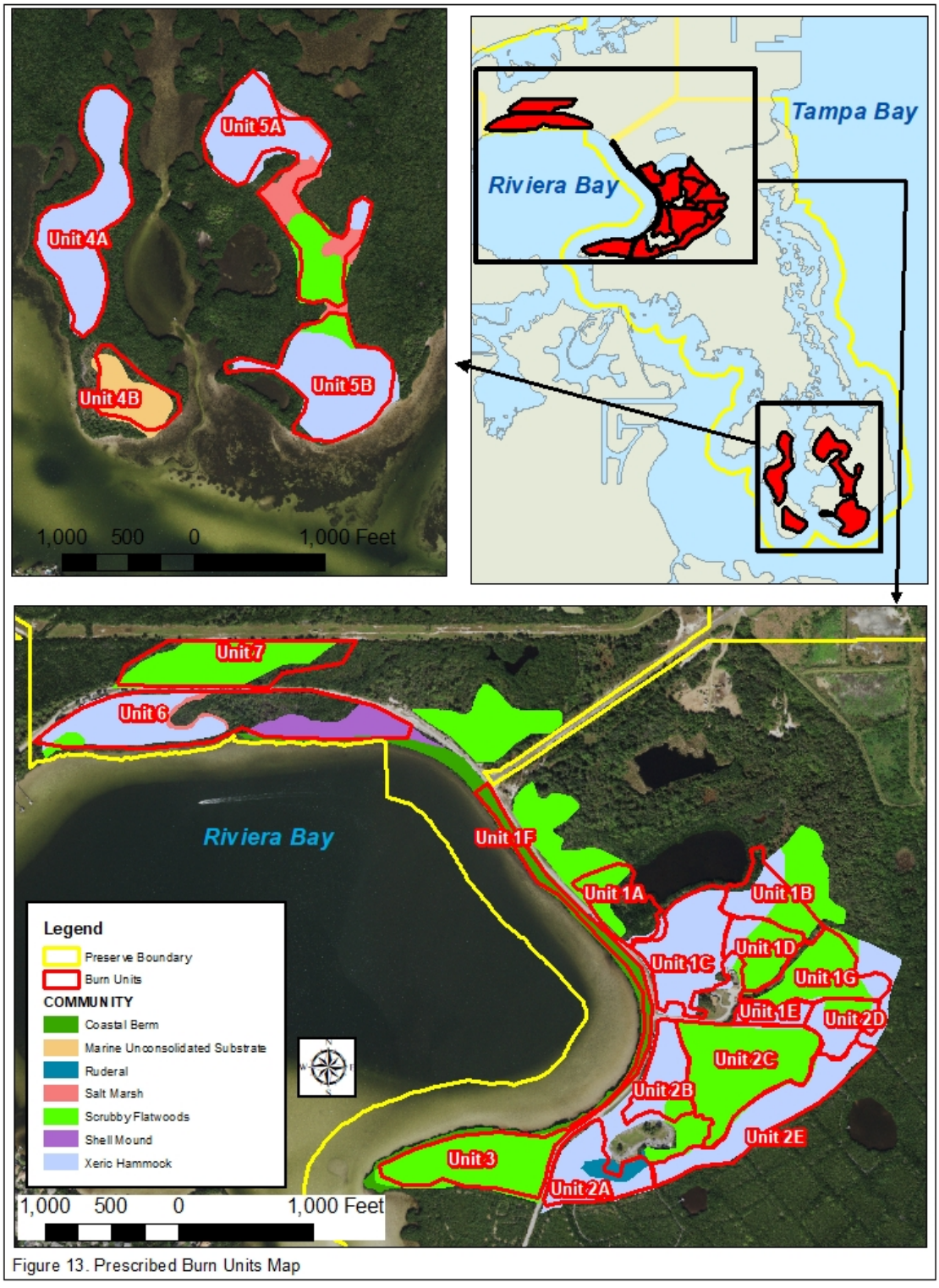


Figure 13. Prescribed Burn Units Map

(FFS). Since 2012, one of the 19 burn units has been burned (10 ac.) (Table 3). In 2017, a wildfire in Unit 4B burned over 9 ac. PCSO investigated and found the individuals responsible for starting the wildfire.

To support the prescribed burn program, PCR is equipped with three 300-gallon slide-on units, small Honda pumps for drafting out of surface water, drip torches, backpack sprayers, and miscellaneous hand tools.

Goal A4: Increase the frequency of burning in the Preserve to restore the natural communities. (Short-term)

Goal A5: Coordinate with the Florida Forest Service Regional Forest Area Supervisor for assistance when necessary.

Table 3. Weedon Island Preserve Proposed Burn Schedule 2022-2032

Unit Name	Unit Acreage	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Unit 1A	5											
Unit 1B	5											
Unit 1C	10											
Unit 1D	5											
Unit 1E	2											
Unit 1F	4											
Unit 1G	7											
Unit 2A	7											
Unit 2B	4											
Unit 2C	14											
Unit 2D	4											
Unit 2E	8											
Unit 3	10											
Unit 4A	15											
Unit 4B	6											
Unit 5A	18											
Unit 5B	14											
Unit 6	20											
Unit 7	11											
Total Acreage	**169**											

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Exotic Vegetation and Nuisance Wildlife Control

Exotic vegetation removal is an important and continuing process at the Preserve. The highest priority is placed on control of FISC, Category I and II species (Appendix 13). Exotic vegetation treatment is conducted by PCR staff and volunteers. Annually, approximately 300 ac. are chemically treated for re-growth of invasive exotic vegetation (Figure 14). Species of highest infestations were Australian-pine, Brazilian pepper, punktree (*Melaleuca quinquenervia*), rosary pea, and lantana.

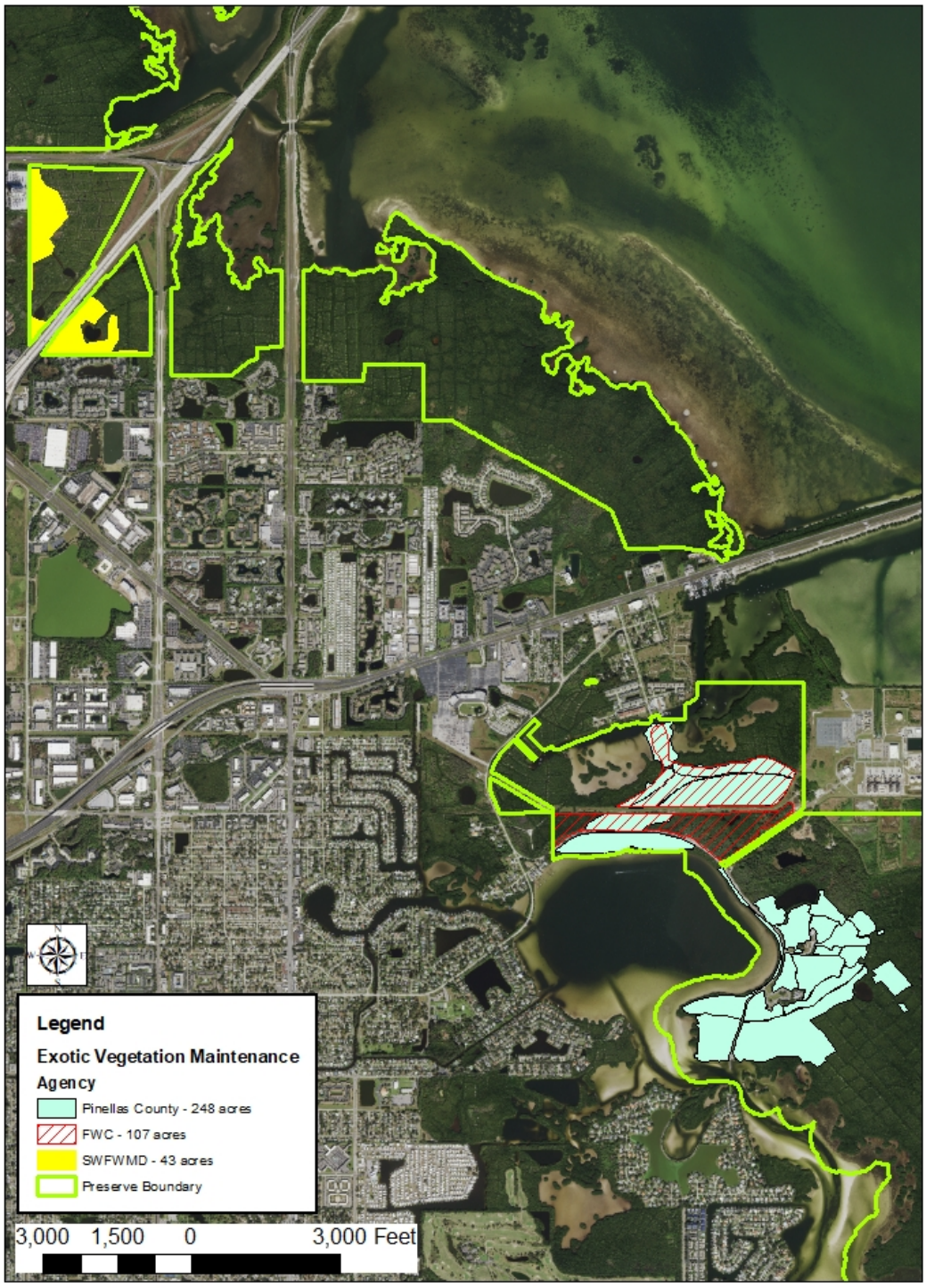


Figure 14. Exotic Vegetation Maintenance Map

In 2015, the FWC's Upland Exotic Plant Management Program funded exotic control on 107 ac. in the preserve. Mechanical removal was completed on seven ac. and chemical treatment on the remaining 100 ac. These 107 ac. are now included in the exotic maintenance program.

Since 2017, SWFWMD treats approximately 43 ac. quarterly at two locations on the Preserve (Figure 14). Both SWFWMD locations (highlighted in yellow on the upper left of the map) are Florida Department of Transportation mitigation restoration projects.

Occasionally domestic cats, non-native rabbits (pets), chickens and roosters have been abandoned in the Preserve. Staff coordinates trapping and removal efforts of these abandoned wildlife.

The first reported sighting of tegus in the Preserve was 2019. Staff coordinated trapping and removal of one tegu. In 2019, volunteers also captured and removed a small tegu in the maintenance area. Another sighting was reported in 2021. Trapping efforts were not successful. Staff will continue to monitor the presence of exotic and nuisance animals and will coordinate trapping and removal efforts.

Goal A6: Continue chemical treatment in established exotic control maintenance areas to keep invasive exotic vegetation from re-infestation.
Goal A7: Continue to identify and treat new areas of infestation as observed.
Goal A8: Continue trapping and removal efforts of nuisance wildlife.

Mechanical Thinning

Mechanical thinning, a standard land management technique, reduces fuel loads and ladder fuels found in overgrown natural areas, helping to reduce the risk of catastrophic wildfire. This technique has been used in the past at the Preserve in areas of fire exclusion for fuel reduction and in areas that did not burn effectively, especially in xeric hammocks.

Goal A9: Evaluate and conduct mechanical thinning of natural communities as necessary. (Short-term)

Reestablish Native Species

Restoration projects that have a re-vegetation component will require that only species documented in the Preserve be planted. Native species were planted in the salt marsh areas for the Feather Sound Tidal Restoration Project. Mangrove swamp areas are sufficient seed sources for mangroves, therefore allowing natural recruitment to be used as an alternative to replanting.

Goal A10: Complete restoration projects with reestablishment of vegetation through natural recruitment or by replanting as necessary. (Long-term)

B. NATURAL COMMUNITIES

The Preserve supports seven FNAI natural communities. To allow the public to appreciate these natural areas, the County offers recreational opportunities compatible with the conservation and protection of the natural and cultural resources.

Objective: Minimize impacts to protect and maintain natural communities.

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In areas such as xeric hammock, shell mound, scrubby flatwoods, coastal berm and maritime hammock, public access in the natural areas is restricted to trails and boardwalks to protect the natural areas.

Areas such as seagrass, salt marsh, marine unconsolidated substrate and mollusk reef are all open to the public. The County's aquatic use zones within the Preserve's boundary provides protection of these natural communities (Figure 15).

Goal B1: Continue to maintain and minimize impacts to the natural areas by providing public access via boardwalks and trails by protecting established aquatic use zones.

C. IMPERILED SPECIES PROTECTION

Protection and management of imperiled species will follow the guidelines of Florida's Wildlife Legacy Initiative: Florida's State Wildlife Action Plan (Florida Fish and Wildlife Conservation Commission, 2019). Exotic and nuisance wildlife are threats to the native wildlife. Threats include consuming eggs of ground-nesting birds and gopher tortoises and smaller wildlife. **Objective: Minimize impacts to protect those imperiled species utilizing the Weedon Island Preserve.**

Gopher Tortoise

The gopher tortoise is listed as a threatened species by FWC. Under state law, both the tortoise and its burrow are protected. Signage has been installed along the trails to educate visitors on this protected species. The gopher tortoise is often a topic in the classroom at the WIPCNHC to both adults and children. The addition of rangers provides on-site protection.

Goal C1: Minimize loss of gopher tortoises through protection and education.

Roseate Spoonbill

The Roseate Spoonbill (*Platalea ajaja*) is listed as a threatened species by FWC. The spoonbill is frequently seen feeding in the mosquito ditches throughout the Preserve and along the shallow shoreline in the mudflats. There are no known nesting areas in the Preserve.

Goal C2: Continue to provide protection and education regarding the Roseate Spoonbill.

Manatee

Manatees are often seen in the waters of the Preserve. The 214 ac. of seagrasses provide feeding areas in the shallow waters of the Preserve. The slow moving manatees often cannot avoid speeding watercraft. Collisions with vessel hulls or propellers can inflict serious or mortal wounds. While not currently considered an imperiled species, PCR provides manatee protection through the Preserve's aquatic use zones (Figure 15). Boaters are required to use caution and slower speeds in the Preserve. PCR will continue to protect manatees and their habitat through the aquatic use zones.

Goal C3: Annually, minimize impacts to manatees and other aquatic species through posting and enforcement of established aquatic use zones.

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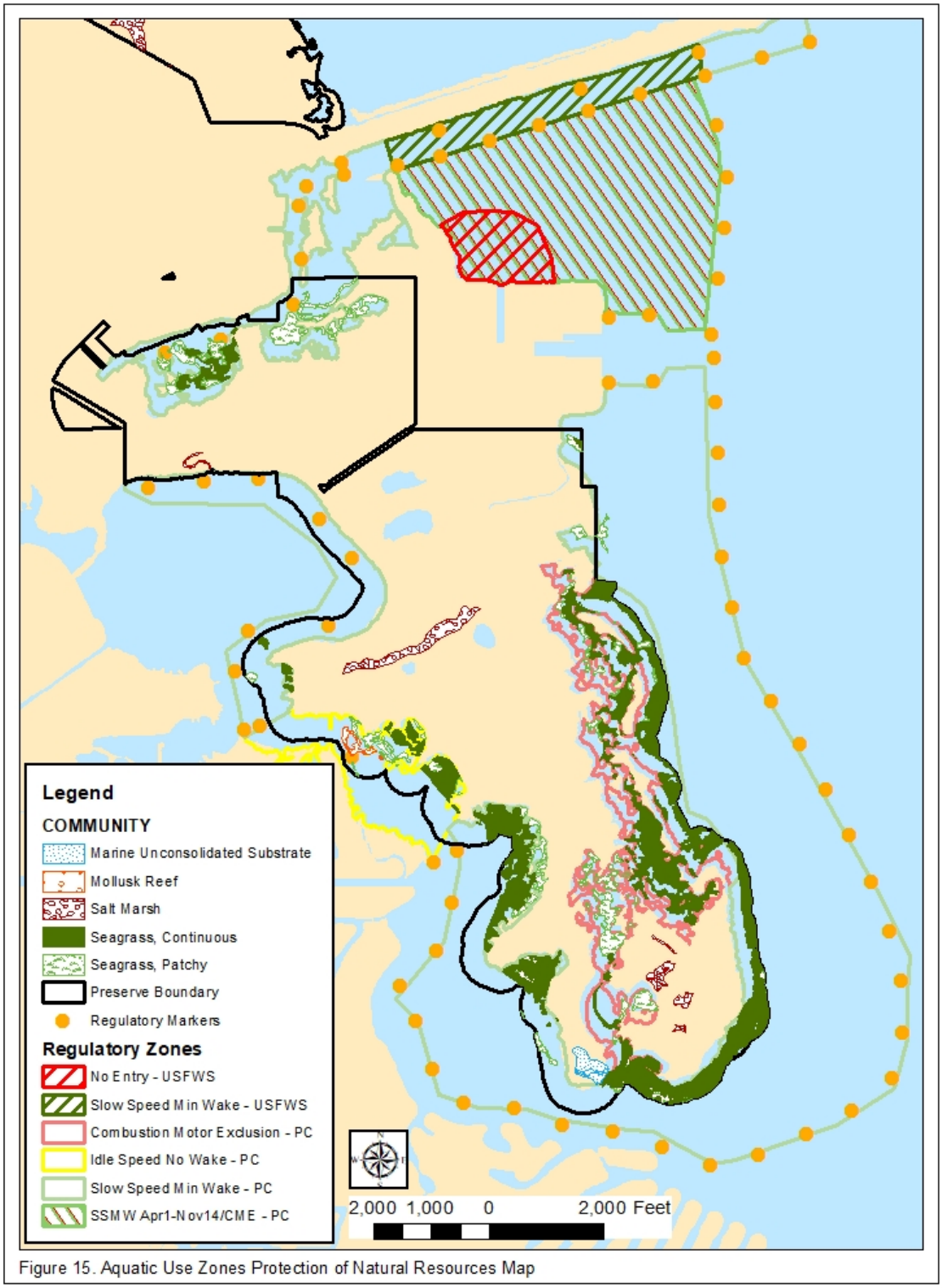


Figure 15. Aquatic Use Zones Protection of Natural Resources Map

Florida Goldenaster

The Florida goldenaster was planted in the Preserve in 2010, as a joint project between Bok Tower Gardens, USFWS, and the County. Management and protection of this endangered species includes exotic species control, prescribed fire and seed dispersal in similar soils and habitat.

The Bok Tower Gardens continues to monitor the area initially planted in 2010. A recent report was provided by Costner and Ward (Appendix 16).

Goal C4: Continue to protect and manage the Florida goldenaster site through exotic vegetation control and prescribed fire.

D. FOREST MANAGEMENT

There is no timbering activity within the Preserve. A timber assessment of the Preserve was completed by the FFS in 2017 (Appendix 17). The assessment concluded "it is not feasible to manage the timber resources through commercial timber harvesting" in the Preserve.

Objective: Utilize forest management techniques, specifically prescribed fire, to maintain natural communities at Weedon Island Preserve.

The timber assessment recommended PCR increase the frequency of prescribed fire in the scrubby flatwoods communities. In addition, in units where prescribed fire did not meet the desired outcome, PCR will mechanically further reduce vegetation in the unit. The combined methods will help facilitate a more complete prescribed fire in the future.

Goal D1: PCR will increase the frequency of prescribed fire in the scrubby flatwoods communities and utilize mechanical reduction where necessary. (Short-term)

E. MONITORING

A number of monitoring programs are conducted in the Preserve, typically completed with County staff, other agencies and volunteers. These monitoring programs provide PCR valuable expertise and resources that PCR staff can't provide. PCR utilizes the data collected to make informed decisions regarding management of the Preserve.

Objective: Conduct surveys and support the work of others to monitor the natural resources of Weedon Island Preserve.

Species Inventories

County staff, FWC, FWRI, consultants, and volunteers have recorded detailed flora and fauna inventories in the Preserve. The most comprehensive inventories were completed between 2002 and 2005. These lists are kept up-to-date as Preserve staff identifies new species (Appendix 12). Currently, there are 289 verified floral species, of which 242 are native to the area, and 395 verified faunal species. Each list clearly indicates species that are imperiled and species that are exotic. Imperiled species, as well as all flora and fauna, are protected in the Preserve under Pinellas County Code of Ordinances Chapter 90.

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PCR staff will continue to identify new species as observed and update species lists. Taxon-specific inventories may also be conducted with volunteers and experienced partnering agencies and organizations. If additional resources become available, it would be beneficial to conduct regular biological monitoring surveys; this approach would provide additional insight into patterns of abundance as well as long-term trends regarding the presence/absence of species.

Goal E1: As needed, update lists of species utilizing the Preserve.

Fisheries Independent Monitoring

The FIM program at FWRI has conducted monthly stratified-random sampling in Tampa Bay since 1996. Sampling sites are randomly selected from all areas where a specific gear type can be set. The FIM program uses a multi-gear sampling approach which collects many different species of fish and selected macro-invertebrates and a wide size range of animals. Most of the animals collected by the FIM program have been caught in the 21-m center bag seine (offshore and shoreline sets) samples. These animals tend to be species that attain small maximum sizes (<100 mm) or juvenile stages of larger-sized adult animals. Otter trawls collect animals that are similar in size to those collected by the 21-m seines. The 183-m haul seine tends to collect larger juvenile, subadult, and adult animals than any of the other gear types. In each sample, all fish and recreationally/commercially important invertebrates (including Pink Shrimp, Blue Crabs, Stone Crabs, and scallops) are identified to the lowest practical taxonomic level, enumerated, and a random subsample of each species is measured.

In addition to stratified-random sampling, a grant-funded project was conducted around Weedon Island Preserve during 2007–2014. A 9.1-m seine was used to sample Grassy Creek and some of the associated outflows. All samples were processed following the same standardized protocols used in the FIM stratified-random sampling efforts.

Consistent with the report provided for sampling that occurred in 2000–2010, the study area for this document was defined as all one sq. nautical mi. grids that contained a portion of the Weedon Island Preserve (Figure 16). This summary includes monthly stratified-random sampling data collected during 2012–2020 and data from the Grassy Creek grant funded study collected during 2012–2014.

Five hundred and ninety-nine samples were collected around the Preserve from 2012 to 2020 (Appendix 12). One hundred and twenty-six species and species groups, for which identification to species is not practical (*Brevoortia* spp., small *Eucinostomus* spp., *Menidia* spp., Oreochromis/Sarotherodon species, etc.), were collected in the study area. Several of these species are of direct recreational and/or commercial importance, including *Callinectes sapidus* (Blue Crabs), *Centropomus undecimalis* (Common Snook), *Cynoscion nebulosus* (Spotted Seatrout), *Farfantepenaeus duorarum* (Pink Shrimp), *Lutjanus griseus* (Gray Snapper), *Mycteroperca microlepis* (Gag), and *Sciaenops ocellatus* (Red Drum).

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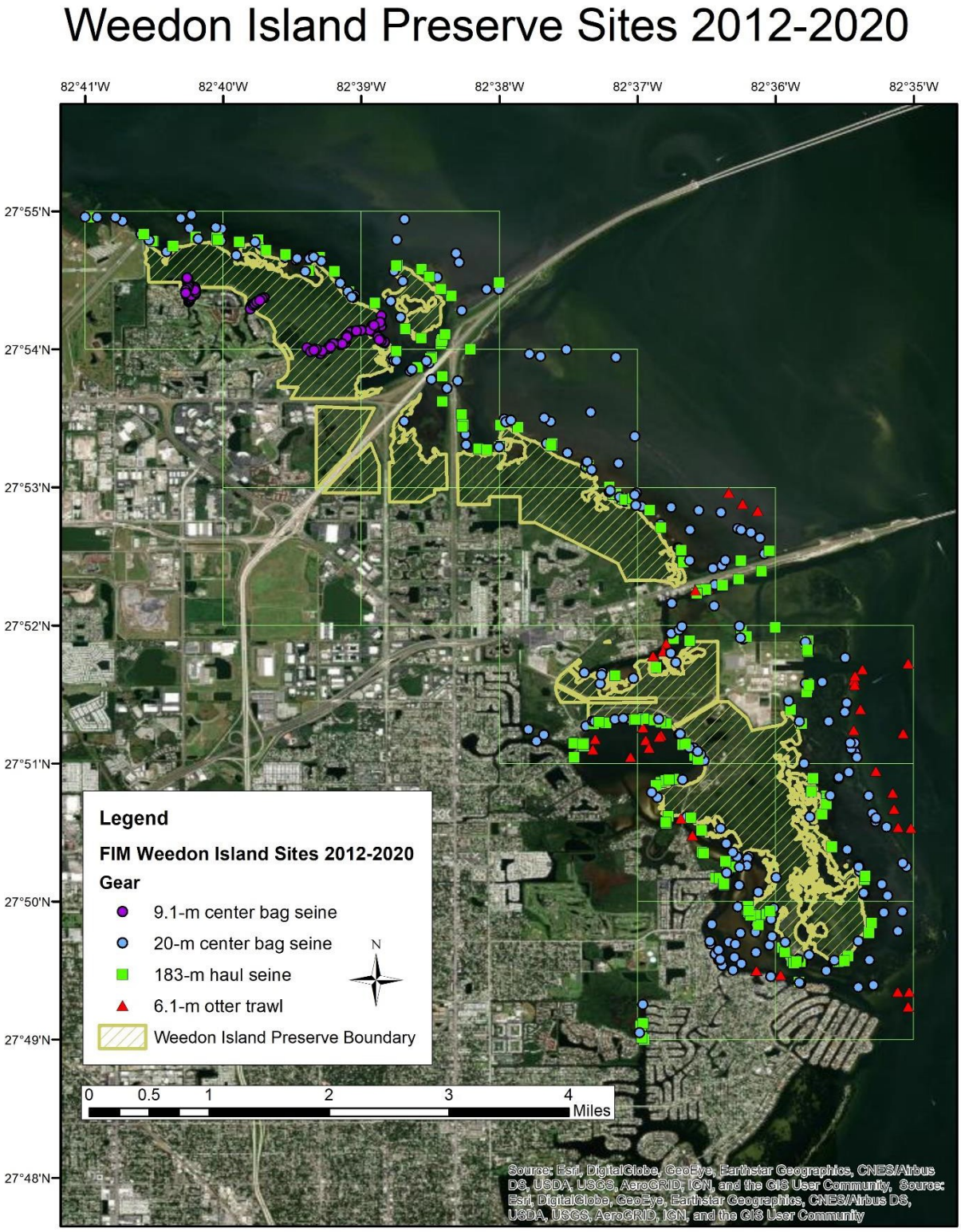


Figure 16. FWRI Fisheries Sampling Sites From 2012-2020.

The most abundant fish species collected were *Anchoa mitchilli* (Bay Anchovy; n = 31,095 individuals), *Lagodon rhomboides* (Pinfish; n = 18,035), and *Lucania parva* (Rainwater Killifish; n = 16,780). Many of the numerically abundant species (e.g., *Anchoa mitchilli*, *Lagodon rhomboides*, and *Lucania parva*) are part of the forage base upon which the recreationally/commercially important species feed. The most abundant species of direct commercial and recreational importance were *Archosargus probatocephalus* (Sheepshead; n = 809), *Elops saurus* (Ladyfish; n = 800), and *Centropomus undecimalis* (Common Snook; n =796). Twelve species were observed in 2012–2020 that were not encountered in 2000–2012 including, but not limited to: *Lophogobius cyprinoides* (Crested Goby), *Diapterus auratus* (Irish Pompano), *Elacatinus macrodon* (Tiger Goby), *Carcharhinus leucas* (Bull Shark), and *Cichlasoma urophthalmus* (Mayan Cichlid). The most abundant invertebrates collected were *Palaemonetes pugio* (Daggerblade Grass Shrimp; 2,497), *Farfantepenaeus duorarum* (Pink Shrimp; n = 688) and *Palaemonetes intermedius* (Brackish Grass Shrimp; n=405).

Goal E2: Annually support monitoring of fisheries by FWRI fisheries and review data summary report.

Water Quality

Since 2003, the Pinellas County Public Works Division of Environmental Management has collected water quality data in the waters surrounding the Preserve. This includes Riviera Bay and portions of Tampa Bay, as shown in the map below. As part of the monitoring program design, the waters are divided into geographic areas, also known as "sampling strata." The strata adjacent to the Preserve are RB (Riviera Bay), E3, E4, and E5 (Figure 17). The City of St. Petersburg monitors the waters south of E5.

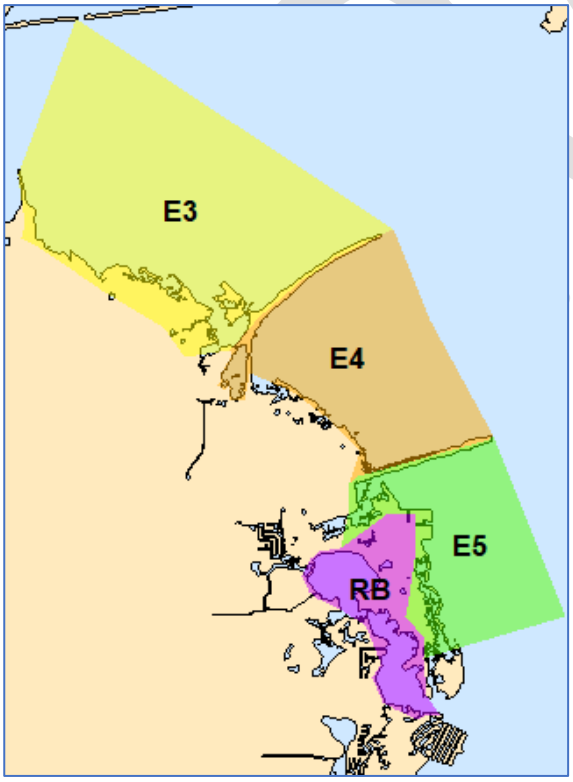


Figure 17. Pinellas County Water Quality Sampling Locations Map.

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Sampling occurs eight times per yr., with four dry season (October through early June) sampling periods and four wet season (June through September) sampling periods. Four sites are selected randomly each monitoring period within each of the strata for a total of 32 samples per stratum per yr.

For all sites, *in-situ* physical parameters are measured using Hydrolab or YSI DSS multiprobe units, including temperature, pH, dissolved oxygen, conductivity, salinity, and depth. Surface readings are taken at a depth of 0.2 m from the surface. If the total water column depth is >0.5 m but <1.0 m, data are recorded at the surface and 0.2 m from the bottom. For depths greater than 1.0 m, data are also recorded at mid-depth.

Water samples are collected via bottle immersion ("grabs") at 0.2 m from the surface and are analyzed by the Pinellas County Utilities Department Laboratory. Parameters assessed include chlorophyll-a, total phosphorus (TP), total nitrogen (TN), nitrate-nitrite, total Kjeldahl nitrogen (TKN), ammonia, orthophosphate (OP), total suspended solids (TSS), transmissivity, and turbidity. A Secchi disk is used to measure water clarity to the nearest tenth of a meter.

The waters adjacent to the Preserve have exhibited improving long-term trends in several water quality parameters, as shown in Table 4. Decreasing TSS, increasing transmissivity, and increasing Secchi readings all indicate improved water clarity. Decreasing TP is a sign of lessening nutrient pollution. Additionally, all of the strata adjacent to Weedon are passing the water quality criteria for TN, TP, dissolved oxygen, and chlorophyll-a set by the DEP.

Goal E3: Annually support monitoring of water quality by Pinellas County's Department of Public Works Environmental Management Division and review data summary report.

Stratum	TN	TP	DO (%Sat)	Chl-a	TSS	Transmiss.	Secchi	Turbidity
E3	No Trend	No Trend	No Trend	No Trend	Decreasing	Increasing	Increasing	No Trend
E4	No Trend	No Trend	No Trend	No Trend	Decreasing	Increasing	No Trend	No Trend
E5	No Trend	No Trend	No Trend	No Trend	Decreasing	Increasing	Increasing	No Trend
RB	No Trend	Decreasing	No Trend	No Trend	Decreasing	Increasing	No Trend	No Trend

Table 4. Long-term Water Quality Parameter Trends 2003-2019

Seagrasses

Pinellas County partners with the TBEP and the Environmental Protection Commission of Hillsborough County (EPCHC) to monitor seagrass in the area. Three fixed transects (S1T16, S1T14, and S1T9) adjacent to the Preserve are assessed every year, as shown in Figure 18.

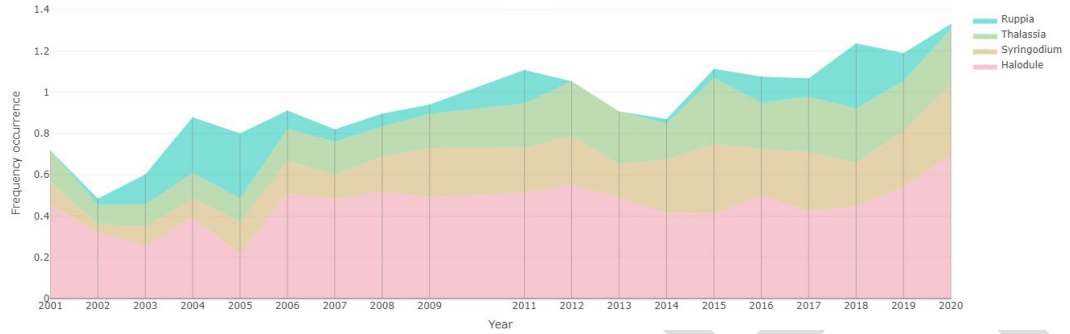
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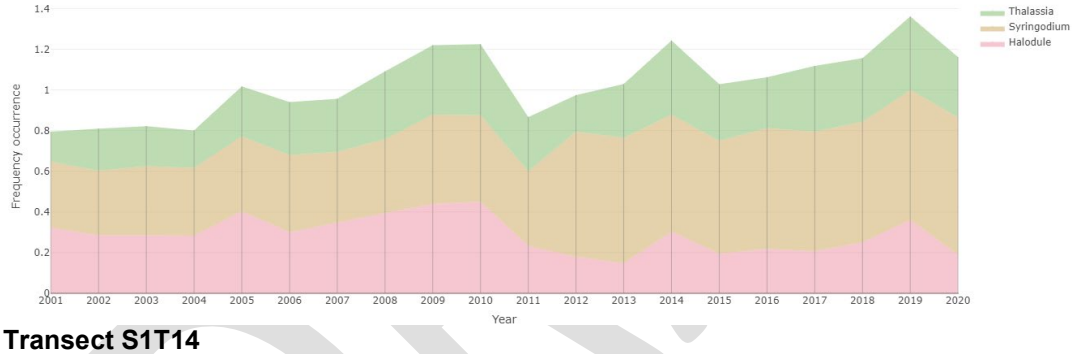
Figure 18. Seagrass Sampling Locations Map

Seagrass has increased in general in Tampa Bay over the past 20 years. The graphs in Figure 19, produced by TBEP and are available online, show the abundances of each species of seagrass observed at each of the three fixed transects adjacent to the Preserve annually since 2001. There have been declines in seagrass at many sites in the most recent two years, and this is seen at two of the three sites shown in Figure 19.

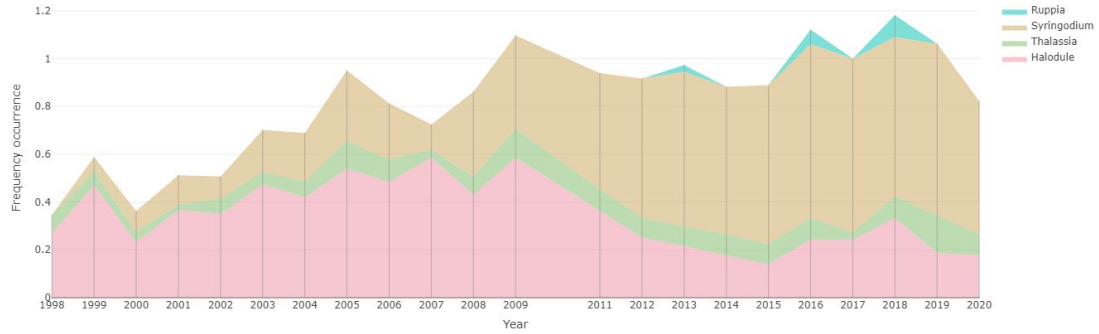
Goal E4: Continue to support continued collection and analyses of seagrass distribution by Pinellas County's Department of Public Works Environmental Management Division and Tampa Bay agency partners and review data summary report.



Transect S1T16



Transect S1T14



Transect S1T9

Figure 19. Annual Abundance of Seagrass Graphs

F. RESEARCH

Research projects support informed management decisions. Such studies will be encouraged and supported to the fullest extent possible through partnerships with scientists from external agencies and institutions. Research partners provide expertise and resources that allow for detailed investigations beyond the scope of local government. Authorized research projects conducted to date have investigated a wide variety of topics. Given the solid foundation provided by ecological and hydrological studies conducted to date, numerous opportunities exist for future research at the Preserve.

Objective: Coordinate and support scientific studies conducted at the Preserve by researchers from partnering agencies and other institutions, and use information provided to support management decisions.

Site Use Applications

Site use permits (Appendix 18) are required for scientific research and other activities that require access to non-public use areas in the Preserve. Since 2012, 55 research projects have been conducted in partnership with a variety of agencies and institutions to study natural and cultural resources. Opportunities exist for additional research at the Preserve, and basic and applied studies will be encouraged through partnering with scientists from external agencies and institutions.

Goal F1: As needed, review Site Use applications submitted by researchers interested in conducting studies at the Preserve.

G. CULTURAL RESOURCE MANAGEMENT

Since 2012, numerous archaeological surveys and related studies have been conducted at the Preserve. These were coordinated through AWIARE and the Bureau of Archaeological Research, Division of Historical Resources (DHR) when required. A number of surveys were initiated by the University of South Florida (USF), University of Florida (UF) and a number of visiting students from other universities. The Research Station located at the Preserve provides housing for researchers as administered by AWIARE.

Objective: In collaboration with AWIARE, map locations of mound sites and other significant features and integrate this information into existing archaeological databases.

Between 2013 and 2020, seven cultural resource management surveys were conducted in or near the boundaries of the Weedon Island site, 8PI1, in compliance with Chapter 267, F.S. These included surveys and monitoring of a proposed natural gas pipeline relocation project and remediation of an environmental cleanup area. The surveys were conducted by a private consulting firm, SEARCH. The consulting firm's proposed scopes of work were reviewed by AWIARE to ensure that no intact cultural resources would be adversely impacted by these projects.

Since 2012 the Preserve has been the focus of a long-term, multi-institutional research program conducted through the auspices of AWIARE, a non-profit organization that facilitates research at the Preserve and provides assistance to the County in managing its cultural resources. This

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program has included on-going field schools and research by USF, excavation by the University of Michigan, and research by AWIARE.

Most research projects are being conducted on property owned by Duke Energy and managed by the County. Projects that include state-owned land and those required to comply with Chapter 267, FS have been coordinated with the DHR when required. Archaeological Research (1A-32) permits were issued for graduate student research on the Weedon Island site (8PI1) and Ross Island (8PI56, 8PI11491). Funding for research has come from various sources, including a grants program for graduate students administered by AWIARE and underwritten by the Levett Foundation and FOWI.

Archaeological research at the Preserve has focused on better defining the physical layout of the Weedon Island site, developing a radiocarbon chronology for the site, and intensively investigating domestic areas. Associated research on the paleoenvironment of Tampa Bay also is underway to provide baseline data for studying climate change and sea-level rise. These data provide an environmental context for Indigenous cultural development on the Preserve as well as baseline data for understanding and potentially mitigating adverse effects on sites due to coastal erosion and storm surge events.

A number of the cultural resource management and research projects have been conducted on the Preserve between 2012 and 2022. Artifacts resulting from these projects, excepting those recovered from state land, are curated at the AWIARE Research Station at the Preserve. AWIARE has an Emergency Hurricane Preparedness Plan that outlines the steps that will be taken to protect the documents, equipment and cultural resource collections stored at the Research Station (Appendix 11).

In 2018, AWIARE representatives were included as members of a stakeholder's committee to review the Weedon Island Tidal Restoration feasibility study. Comments regarding potential impacts to cultural resources and recommendations for avoiding such impacts were incorporated into the final document.

In October 2019 and January 2020, PCSO investigated reported looting on an archaeological site located within the the Preserve (8PI1700, Feather Sound Mound). AWIARE assisted the PCSO when a drone flight was conducted in October and accompanied deputies on a field visit in January. No evidence of recent looting was observed.

The prehistoric dugout canoe excavated in 2011 from intertidal waters in the northern portion of the Preserve completed its conservation process in 2015 and was put on display at the WIPCNHC in October of that year. The exhibit featuring the canoe describes the recovery process, its age and cultural associations, and the importance of canoe travel for coastal Indigenous people. The $70,000 exhibit was funded by grants from FOWI, the Florida Endowment for the Humanities, the Hough Family Foundation, and individual donations.

Other educational programs highlighting the Preserve's cultural resources include an Archaeology Lecture Series, volunteer opportunities at the AWIARE Research Station, Junior and Adult Archaeology Camps, and site tours. The programs are co-sponsored by AWIARE and

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its partners, the Central Gulf Coast Archaeological Society and the Florida Public Archaeology Network (FPAN).

Goal G1: Continue to support educational programs that promote the important cultural resources throughout the Preserve.

Opportunities for research at the Preserve and the greater Tampa Bay region by AWIARE and outside professional groups and universities will continue. AWIARE also will continue to assist the County in reviewing and providing professional input on any federal, state, or county mandated projects conducted on the Preserve. All permitting will be handled through PCR and in coordination with DHR.

Goal G2: Continue to support research opportunities that identify and protect archaeological sites at the Preserve.

The Florida Master Site File (Appendix 19) lists the number of cultural resource locations in the Preserve. Projects AWIARE is interested in pursuing include updating the National Register of Historic Places listing for the Weedon Island site (8PI1) to incorporate areas outside of the arbitrary boundary established in 1972; continuing to conduct and document, in coordination with Pinellas County, a yearly program of site monitoring, continuing to support and fund long-term research at sites on the Preserve, and continuing to educate the public about the Preserve's unique history.

Goal G3: Maintain strong partnerships with AWIARE and other agencies and organizations to provide sound stewardship of cultural resources. (Long-term)

H. SECURITY

The Preserve is protected by a multi-faceted security program. First, land access to the Preserve is possible only by one road, which is equipped with a gate. Cameras located at the gated entrance near the power plant are monitored by Duke Energy. Duke Energy has the ability to grant or deny access through remote control. This arrangement effectively restricts public use of the Preserve to regular hours of operation.

A second level of security is accomplished through a contract with the PCSO to provide deputies assigned specifically to the County's environmental lands to enforce ordinances and laws. The contract provides two deputies to patrol the preserve both by land and water. This contract is renewed annually and is funded through part of PCR's annual operating budget.

A third level of security is proved by the PCR South District program. Until August 2021, a ranger, not stationed all day at the Preserve, patrolled the Preserve a minimum of once per day to provide safety and security of the trails, boardwalks, and facilities. The addition of rangers onsite daily since September 2021 provided enhanced security of the natural and cultural resources. PCR is expected to add two more rangers in 2023 to provide full time coverage of the Preserve. Rangers can provide assistance to visitors as needed and ensure compliance of Preserve rules and ordinances.

Objective: Enforce rules and regulations as detailed in Pinellas County Code of Ordinances Chapter 90 to protect the natural and cultural resources supported by the Preserve.

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All structures, office and research station, are equipped with smoke detectors and 10-lb. ABC type fire extinguishers. The facilities are inspected annually by the Pinellas County Fire Marshall and any deficiencies are corrected. Vehicles with keyed ignition systems are locked and the keys secured inside the maintenance shop building.

Fencing and signage also serve a vital role in resource protection. The landward portions of the Preserve are fenced and posted to enforce trespassing laws and to protect against illegal activities such as dumping and looting. The waterward extent of the southern portion of the Preserve is posted with signage that identifies regulatory zones for boaters (Figure 20). This was done to protect valuable seagrass beds and other aquatic natural resources.

The north part of the Preserve has approximately three mi. of fencing maintained by the Florida Department of Transportation along Interstate 275, Ulmerton Road, and Dr. Martin Luther King Jr. Street North.

PCR will continue to provide for security of the Preserve. Rangers will patrol the Preserve to provide safety and security of the trails, boardwalks, and facilities. Rangers will also provide assistance to visitors as needed. Volunteers will continue to provide assistance to staff by reporting safety and security concerns.

PCSO will continue to be contracted, as funding allows, to provide security in the Preserve and to enforce rules, ordinances, and laws. This will include enforcement of the existing regulatory zones (Figure 20) to protect the seagrass beds and other aquatic resources. PCSO will continue to notify PCR staff of missing or damaged signs. Inspection of the signs will continue approximately twice a year by PCR staff. Replacement of damaged or missing signs will continue to be completed by Pinellas County Department of Public Works Water and Navigation.

Goal H1: As funding allows, increase the number of patrols completed by rangers to provide coverage from opening to closing of the Preserve seven days per week.
Goal H2: As funding allows, contract PCSO for law enforcement officers dedicated to patrolling Weedon Island Preserve and other environmental lands.

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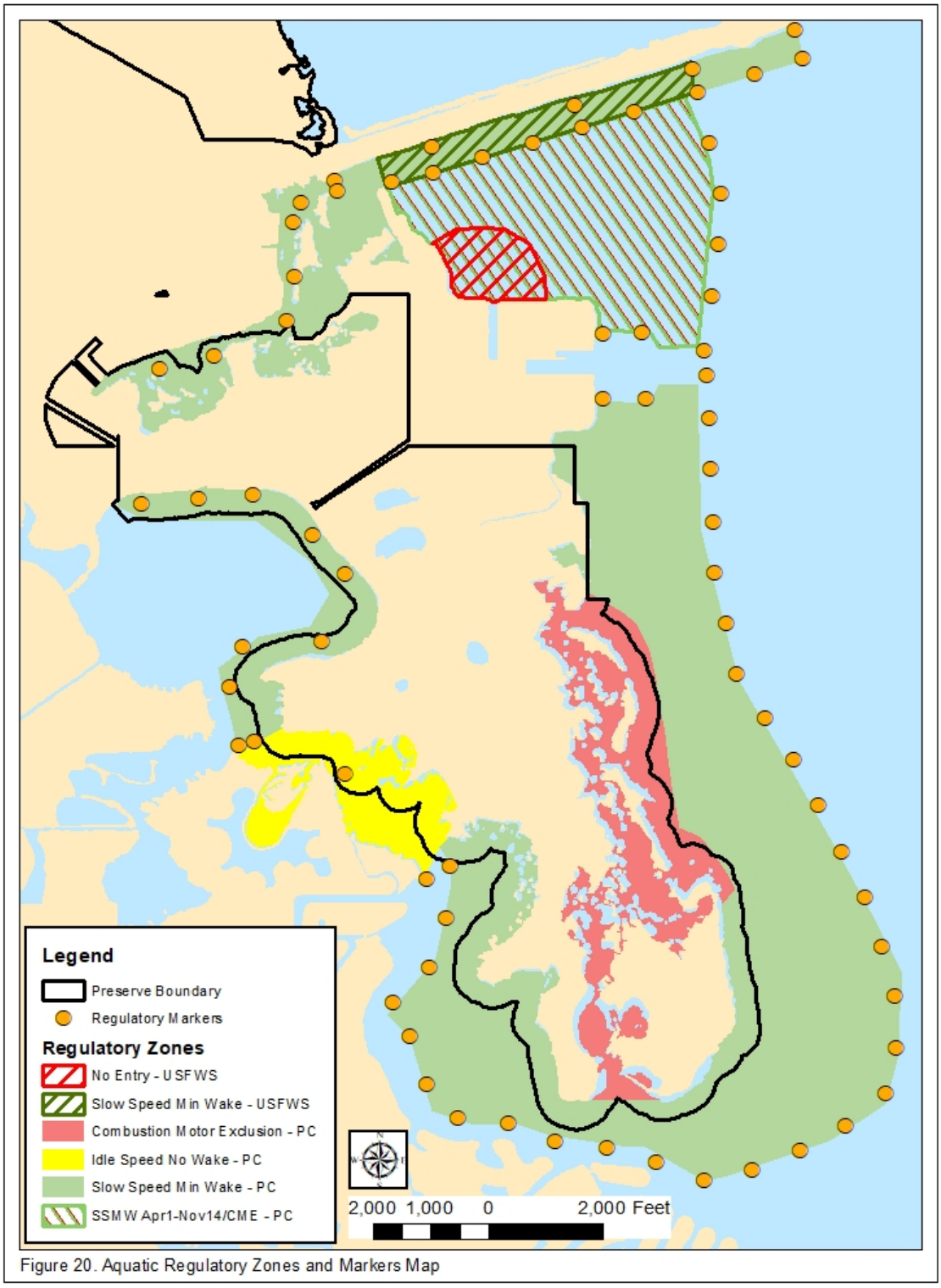


Figure 20. Aquatic Regulatory Zones and Markers Map

SECTION 4. PUBLIC RECREATION

The Preserve is located along the eastern shoreline in central Pinellas County and has become a popular destination for ecological, cultural and recreational users from both Pinellas and Hillsborough Counties. Conservation strategies for long-term balance between human and nonhuman needs are necessary for sustainability of the ecological, cultural and recreational resources.

Because the Preserve is relatively undeveloped, it retains a high scenic and recreational value as well as ecological and cultural significance. Resource-based recreational activities at the Preserve are compatible with the conservation and protection of the natural and cultural resources of the Preserve. No alternative or multiple uses of the property were considered for this Plan.

A. PUBLIC ACCESS

Public access into the Preserve is through the one entrance road, Weedon Drive NE, and from the waters surrounding the island. Public access from the water is typically at the canoe launch and fishing pier.

The only paved roads at the Preserve are Weedon Drive NE, which enters the Preserve and terminates at the pier, the maintenance area access road, which terminates at the maintenance shop and the road to the WIPCNHC. Speed limits are posted and enforced to protect wildlife and visitors.

The northern portion of the Preserve has no paved roads or designated public access. While it is not designated public access, the waters along the shoreline are often used by boaters in Tampa Bay.

The Preserve hours of operation are 7:00 a.m. to the time posted at the entrance, typically 15 min. before sunset. The Preserve is open 363 days per year and closed to the public the day after Thanksgiving and on December 25th. There are currently no fees collected for accessing the Preserve.

Objective: Provide 363 days of public access for resource-based outdoor recreation which is compatible with the conservation and protection of the natural and cultural resources.

<u>Public Recreation Infrastructure</u>

The Preserve is managed for the conservation and protection of natural and historical resources and for resource-based public outdoor recreation which is compatible with the conservation and protection of the Preserve. There are boardwalks, hiking trails, a canoe trail, an observation tower and a fishing pier in the Preserve which provide for hiking, nature viewing, and fishing opportunities (Figure 21). New directional trail signs, funded by FOWI, will be installed on the hiking trails by April 2022. To protect the natural and cultural resources and for visitor safety, all off-trail activity is prohibited unless authorized by PCR.

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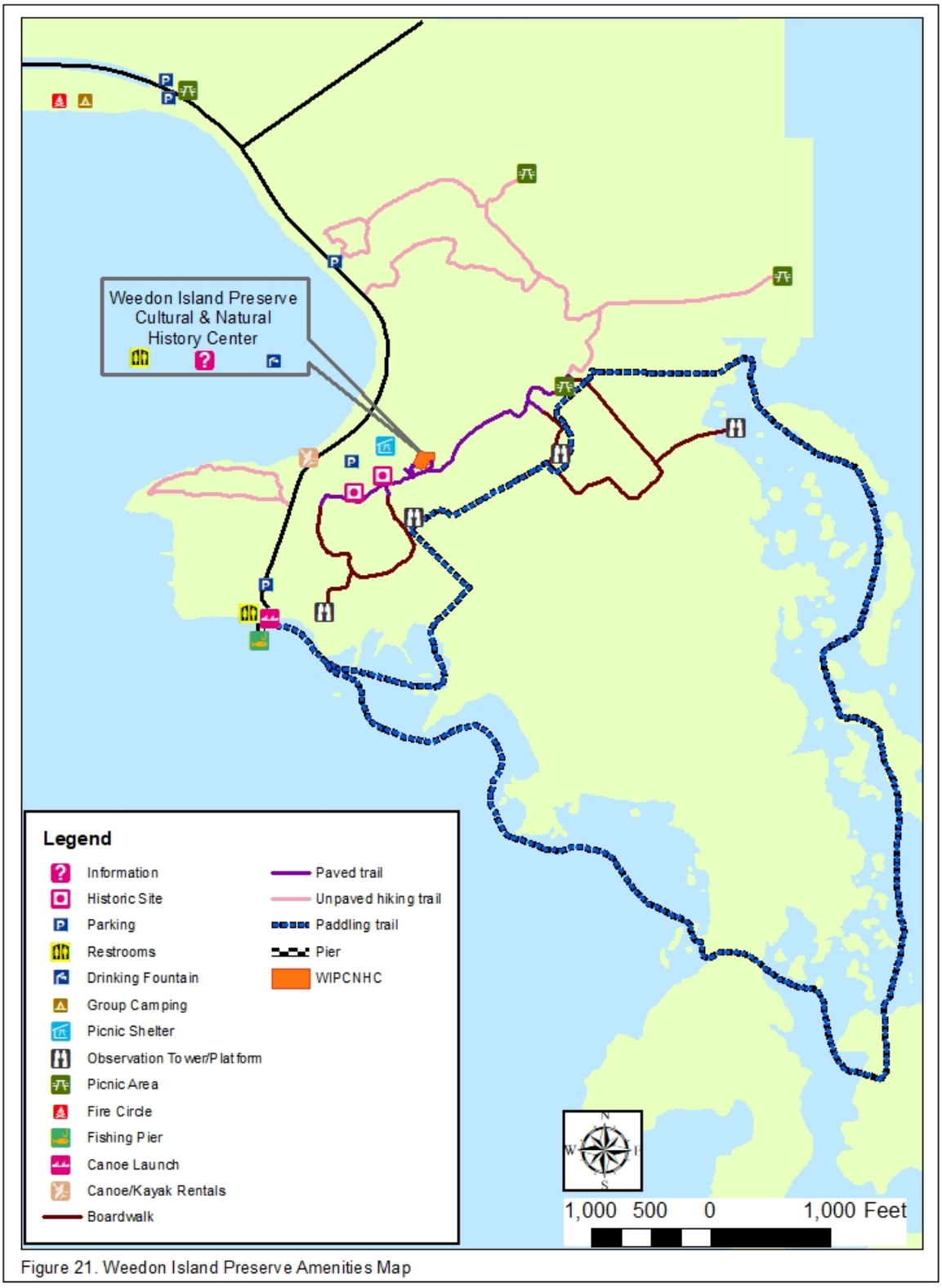


Figure 21. Weedon Island Preserve Amenities Map

All vehicles (except baby carriages and wheelchairs) are prohibited on all trails. Vehicles, including bicycles, are restricted to Weedon Island Drive NE and the parking lot of the WIPCNHC. Bicycle racks are located at the trailheads with appropriate signage. To protect the natural resources and for visitor safety, some of the general rules for the Preserve prohibit the following:

- dogs and other pets
- alcoholic beverages
- fireworks
- release of any wildlife or domesticated animals

To minimize impacts to the Preserve, some parts of the trails also function as firebreaks. All trails are subject to closure due to wildfires, prescribed burns, downed trees, and routine and emergency maintenance. Individual trail brochures, fliers and/or signs contain pertinent information, including rules, for each of the recreational areas.

Boardwalk and Tower

A 2-mi. handicap-accessible boardwalk meanders through the mosquito-ditched mangrove swamp (Figure 21). There are three observation decks on the boardwalk, two of which overlook tidal ponds and the other the tidal flats in Tampa Bay. A 45-ft. observation tower, also overlooking Tampa Bay, provides visitors a panoramic view of Tampa Bay, St. Petersburg and Tampa areas.

Along the boardwalks and trails are 20 interpretive educational signs. The signs illustrate how various components of an ecosystem are interrelated and detail the importance of many of the natural resources.

Hiking Trails

The Preserve supports multiple hiking trails (Figure 21). Boy Scout Loop was developed with the assistance a local Boy Scouts of America troop. This 1-mi. unpaved trail loops through scrubby flatwoods, mosquito-ditched mangrove swamps and maritime and xeric hammocks.

Another 1.7-mi. of trails is accessible from the main loop or from the WIPCNHC parking lot. Three picnic areas are located throughout the trails.

A 0.5-mi. trail provides access to the shoreline of Riviera Bay. This trail demonstrates the cultural and natural significance of the Preserve, and transverses an ecologically diverse area. It also passes a shell mound located on the point with visible shell scatter. Also, on the mound top are four concrete mixed shell pilings from a 1940's airplane tracking tower. These cultural artifacts create the opportunity to convey information to visitors about early inhabitants.

Paddling Trail

The canoe trail is a 4-mi. loop that starts at the pier canoe launch. Thirty-six numbered markers are strategically located along the trail to help paddlers orient themselves (Figure 22). This trail

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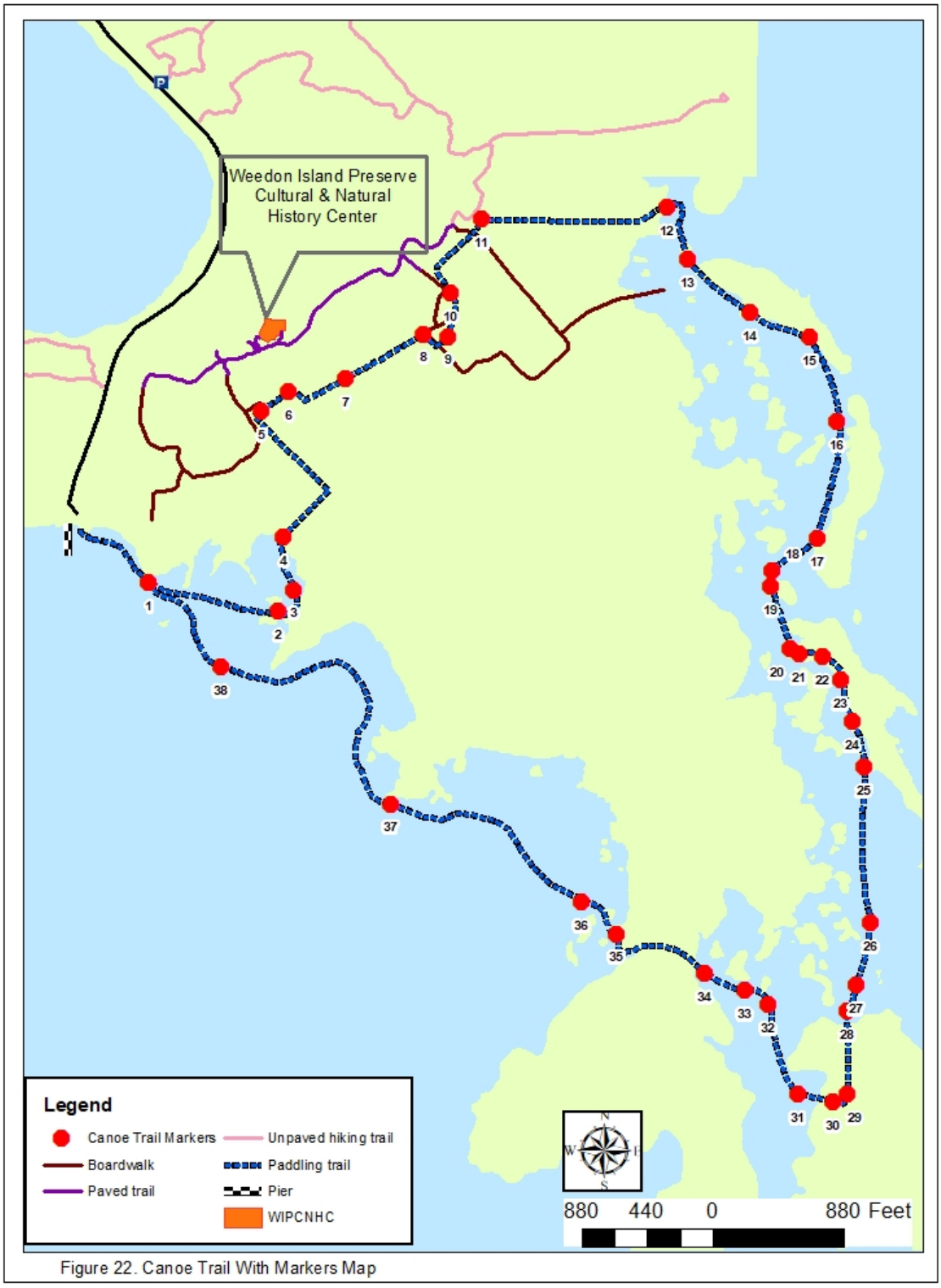


Figure 22. Canoe Trail With Markers Map

is best accessed at mid to high tide, and meanders through the mosquito ditches, small mangrove islands, and along the edge of Tampa Bay.

Rentals

PCR has a contract vendor that provides rental of canoes and kayaks (Appendix 20). Sweetwater Kayak Outfitters, Inc. was the vendor from 2006 through 2021. ECOmersion, has been the contracted vendor s started in January 2022. With limited space at the canoe/kayak launch, a reserved launch site is provided to the vendor during established Preserve hours.

The vendor is open 363 day per year from 9:00 a.m. to 5:00 p.m. (last rental at 3:30 p.m.) weather permitting. Visitors can rent kayaks, canoes, or paddle boards and paddle the canoe trail (Figure 22) though the mangrove tunnels.

Fishing Pier and Canoe Launch

A 220-ft. pier, located at the southern end of Weedon Island Drive NE, provides a platform for saltwater fishing at the Preserve. In 2021, the decking of the pier was replaced. Also provided at this location is a restroom facility, parking spaces, and a canoe washing station.

Located adjacent to the fishing pier is a canoe/kayak launch and floating dock. The paddling trail and other destinations are accessible from this launch site. The floating dock provides short-term dockage for small boats.

Camping

Limited group camping is available along the shoreline of Riviera Bay and west of Weedon Drive on County-owned property in the Preserve (Figure 21). Groups are required to complete a service project to obtain permission to use this primitive camp site. A fire circle has been installed for the convenience and safety of campers.

Parking

Parking is permitted only in designated spaces. There are 15 parking spaces (1 handicapped) along the road that leads to the canoe launch and pier. WIPCNHC has 105 (6 handicapped) parking spaces. There are seven spaces at picnic area #1 and 4 spaces at the trailhead for the Boy Scout Trail. An additional nine spaces are at the maintenance area. All parking spaces are paved.

Goal A1: Patrol the Preserve from 7:00 a.m. to the posted closing time for visitor services.

Goal A2: Continue to offer kayak, canoe and paddle board rentals through a contracted vendor.

Goal A3: Investigate the feasibility of upgrading the floating dock to meet American Disabilities Act (ADA) requirements.

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Maintenance

Maintenance of the trails, boardwalks and public use areas is the responsibility of PCR staff. The PCR South Horticulture Operations is responsible for maintaining mowed areas and firebreaks in the Preserve. Volunteers support maintenance of trails and boardwalks by trimming overgrown vegetation.

From 2012 to August 2021, off-site rangers patrolled the Preserve a minimum of once per day and provided daily garbage removal and cleaning of the restroom facilities and picnic shelter. Since August 2021, at least one ranger has been seen onsite for 10 hours per day to provide these services. Visitors can report maintenance issues directly to staff, through the County's "SeeClickFix" program, Live Chat, and Parks Public Email. Maintenance needed to infrastructure is reported to PCR South Trades by volunteers and staff. The South Trades crew completes repairs of the boardwalks, fishing pier, restroom facilities and picnic shelter.

The Facility Operations Division of the County's Department of Administrative Services is responsible for maintenance of WIPCNHC.

Goal A4: Conduct routine inspections of boardwalks, hiking trails, observation tower, and fishing pier daily.

Goal A5: Conduct inspections of the Paddling Trail each month.

Carrying Capacity

Carrying capacity of the Preserve is determined by the number of available parking spaces. Visitation numbers for the Preserve are derived from a car counter located on the inbound lane east of the emergency gate on Weedon Drive NE. PCR visitation is estimated separately for weekdays (number of cars x 2.5 people/car) and for weekends and Holidays (number of cars x 3.0 people/car). These estimates do not account for the number of bicyclists entering the Preserve. While the WIPCNHC was closed due to COVID-19 from March 19, 2020 until June, 2021, the Preserve remained opened. The Preserve experienced an increase in visitation of 35% during the pandemic. Visitation into the Preserve is presented in Table 5.

Table 5. Weedon Island Preserve Visitation October 2012 – September 2021

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
239,211	247,895	261,138	285,481	270,228	252,358	217,697	457,963	620,901	861,841

Over the past 10 years, the Preserve has become a popular destination for hiking and quiet water access. The number of vehicles at the Preserve exceeds the number of parking spaces available on most weekends and holidays. This has led to vehicles parking in the grass throughout the Preserve, despite numerous "No Parking" signs and attempts to block access to the grass.

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Until August 2021, rangers patrolled the Preserve once per day. Tickets were issued to vehicles found parked in non-designated parking areas. PCR hopes to alleviate this parking problem with enhanced enforcement of the established parking rule covered in Pinellas County Code of Ordinances Chapter 90. Internal discussions to accommodate all users and not exceed parking and carrying capacity will continue.

Goal A6: Continue to provide 363 days of public access from 7:00 a.m. to posted closing time.

Goal A7: Enforce the carrying capacity of the Preserve to protect the natural and cultural resources.

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SECTION 5. OUTREACH AND EDUCATION

A. WEEDON ISLAND PRESERVE CULTURAL AND NATURAL HISTORY CENTER

The WIPCNHC, located at 1800 Weedon Dr. NE, Saint Petersburg, FL, opened in December 2002. The purpose of WIPCNHC is to increase the public's appreciation of the value of Pinellas County environmental lands, and cultural and natural resources in general. Through exhibits, educational programs, and guided hikes, visitors can experience, discover, and better understand the connections between people and the land. The three-story WIPCNHC was designed with the help of the Seminole Tribe of Florida. With their input, the orientation of the WIPCNHC was constructed along the cardinal points of the compass (north, south, east, and west) with the entrance facing east. The WIPCNHC houses office space for staff, an auditorium with seating capacity of 106, a well- equipped classroom with seating for 30, and a large exhibit gallery. The exhibits in the WIPCNHC are scheduled to updated in 2022 and 2023. The cost is expected to be $1M, funded by the County's CIP. The WIPCNHC is open to the public Thursday, Friday and Saturday from 9:00 a.m. until 4:00 p.m. and Sunday from 11:00 a.m. until 4:00 p.m. and closed on all County recognized holidays.

Objective: Provide education and outreach programs describing the cultural and natural resources of coastal ecosystems and the benefits of preserving and enhancing these cultural and natural resources.

Management of WIPCNHC is supported through the UF/ IFAS Extension, Pinellas County Extension Department, which is a partnership between Pinellas County and the University of Florida. Staffing for the WIPCNHC consists of one 0.5 fulltime equivalent (FTE) Extension Specialist and two 0.5 FTE Education Support Specialists. One (FTE) UF/IFAS Extension Pinellas County Faculty also maintains an office at the WIPCNHC and provides educational activities and coastal and marine specific subject matter expertise. Staff manage volunteers, coordinate educational programs and activities, and build and maintain community partnerships.

Additionally, a partnership has been established with the FWC statewide Florida Youth Conservation Centers Network program (FYCCN; Appendix 21). FYCCN is designed to encourage and empower children to participate in traditional outdoor recreation. The FYCCN contract has expired and is in process of being renewed. The previous contract enabled FYCCN to utilize ed center property to host educational outdoor programs. Sensing Nature was the partner that did the actual programs. Programs are ongoing while the new contract, which will provide additional criteria and guidelines on how the relationship works, is being developed currently.

The FPAN is a state agency whose mission is to promote and facilitate the conservation, study and public understanding of Florida's archaeological heritage through regional centers throughout the state. The West Central Region is located in Tampa, hosted by the USF and serves Desoto, Hardee, Highlands, Hillsborough, Manatee, Pasco, Pinellas, Polk and Sarasota counties. In 2012, FPAN West Central Region entered a partnership with Pinellas County to open a satellite office at WIPCNHC (Appendix 22). FPAN, along with AWIARE, serve as the Archaeology “arm” of the Weedon Island Partnership Team. They provide monthly public archaeological seminars and workshops for the public at the WIPCNHC auditorium and

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classroom. FPAN also has been consulted on archaeological matters such as the canoe excavation, preservation and construction of the display.

WIPCNHC exhibit hall and additional displays help visitors understand natural Florida, the cultural history of the Preserve, and how people and the environment shaped each other over time. The exhibit gallery, "Weedon Island Preserve: Connecting People and Place," with 6,000 sq. ft. of interactive exhibits, appeals to all ages. The interactive exhibits highlight many aspects of the history, ecology, and archaeology of the Preserve. Visitors are invited to explore the exhibits, which allow opportunities to travel underwater, through mangrove swamps, and even back in time. The gallery is free and open to the public Thursday, Friday, and Saturday from 9:00 a.m. until 4:00 p.m. and Sunday from 11:00 a.m. until 4:00 p.m. WIPCNHC visitation from 2012 through 2021 (Table 6) includes visitors viewing the exhibit hall and attending programs and events.

Table 6. WIPCNHC Visitation October 2012 – September 2021. The WIPNHC was open 3 days per week in 2012 through 2013, and 4 days per week in 2017 – 2021. WIPNHC was closed from March 19, 2020 until June, 2021 due to COVID-19.

2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
18806	17939	18409	16711	19762	18759	20176	22649	14998	4526

Programming offered at the WIPCNHC include events, educational workshops for families, guided, hikes and canoe trips, book times for preschoolers, summer camps, and general public presentations on topics such as ecology, sustainability, history, art, archaeology, and Native American culture.

The UF/IFAS Extension Pinellas County Sea Grant Agent hosts the “Going Coastal” program for families and interested public on topics such as manatees, sea turtles, sharks, marine debris, coral reefs, mangrove ecology. The “Salty Topics” program is a marine-research series bringing local scientists and researchers in front of an interested adult audience. The agent also coordinates with the Land Manager to plan volunteer environmental restoration projects and coastal clean-ups on the Preserve. Coastal clean-up programs teach people about marine debris and associated issues such as microplastics. Environmental restoration projects remove invasive tree species such as Brazilian pepper and Australian pine from mangrove forests and adjacent islands.

Special programs are held for targeted audiences such as teachers, home school educators, youth groups, government decision-makers, business professionals, and area neighborhood residents. Private and public pre-school and elementary school groups regularly visit the exhibit gallery and Preserve trails.

Partnerships and expanded support through FOWI, AWIARE, FPAN, and FYCCN have increased educational opportunities, supported school field trips and increased volunteer participation. Developing impactful and informative educational programs that support local issues tied to preservation of natural and cultural resources will continue to be a focus in future years for the WIPCNHC.

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In early 2020, Pinellas County decided for the safety of the public and staff the WIPCNHC would be closed to the public due to the COVID-19 pandemic. This included the suspension of all in-person educational programs and events. This closure began in March 2020 and ended in June 2021. Although in-person educational programs were not permitted, staff amended their approach and began virtual programming, utilizing Zoom, Microsoft Teams and other digital media to provide environmental and archeological education to the public. Staff utilized software and purchased camera equipment to develop, produce and post educational films, used social media to provide information on timely topics and embraced an overall transition to digital media to continue the mission of the WIPCNHC. In June of 2021, the WIPCNHC was reopened to the public. Guided tours have recommenced along with limited (small class sizes) in-person educational programs. Virtual programming and social media will continue in an effort to meet the demands of the public. Table 7 shows the numbers of programs and participants each year from 2012 through 2021.

Table 7. WIPCNHC Programs and Participants October 2012 – September 2021.

	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Programs	60	126	158	231	195	207	204	141	133	116
Participants	2644	4455	4048	5184	5871	5492	5114	4620	4254	3401

As resources allow, PCR will continue to provide access to WIPCNHC during established hours of operation from 9:00 a.m. to 4:00 p.m. and one day per week from 11:00 a.m. to 4:00 p.m. Access for additional days will be provided if additional resources can be secured.

PCR will continue to provide for public understanding and appreciation of natural and cultural resources through exhibits, educational programs, and interpretive hikes. Monthly programs related to ecology, sustainability, history, art, archaeology, Native American culture, and other relevant topics will be provided. Additional programs and events will be provided in collaboration with FOWI, AWIARE, FPAN, FYCCN, and other partners.

Goal A1: Continue to provide outreach and educational programs addressing the cultural and natural resources of the Preserve.

Goal A2: Continue to provide programs through virtual programming and social media to expand audience within and outside of Pinellas County.

Goal A3: Continue to evaluate funding opportunities to increase the staffing and hours of operation of the WIPCNHC.

B. *WEEDON ISLAND PRESERVE VISITOR GUIDE*

The *Weedon Island Preserve Visitor Guide* is a brochure that is distributed to visitors via the WIPCNHC, PCR Administration office, and the Pinellas County Clearwater Courthouse Information Desk (Appendix 23). The brochure provides information about the rules of the Preserve, information about the cultural and natural resources, the WIPCNHC, and pertinent contact information. It also provides a map showing all trails, recreational amenities and historic sites throughout the Preserve.

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PCR will continue to print the *Weedon Island Preserve Visitor Guide* as resources allow. The brochure will be made available online and for distribution to visitors.

Goal B1: As needed, update Weedon Island Preserve brochure and make available online; as resources allow, provide hardcopy brochures for distribution to visitors at County offices.

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SECTION 6. BUDGET

Funding support for management of the Preserve is provided through PCR's general operating budget. Restoration efforts are provided through the County's CIP funds and grants. Facility improvements are provided through the County's CIP funds.

A. FUNDING SOURCES

The PCR operating budget covers salaries and all equipment for prescribed burning, exotic vegetation management, education, safety and security, and maintenance to existing facilities including recreational facilities and trails. PCR receives herbicides upon request from the FWC Upland Invasive Plant Management Program Herbicide Bank to help facilitate exotic vegetation management.

Restoration projects are funded through the County's CIP funds (Penny for Pinellas) and grants (e.g., SWFWMD and TBEP). Tree Bank Fund, a special fund that receives revenue from assessed environmental penalties, is also used to help fund restoration projects.

B. REVENUE SOURCES

Sweetwater Kayaks, a contract vendor, has generated revenue for canoe and kayak rentals in the Preserve from 2006 through 2021. The money generated from canoe and kayak rentals goes into the County general operating fund and is not used directly to facilitate the restoration or management of these lands. The canoe and kayak rental revenue is presented in Table 8. ECOmersion has been the contracted vendor since 2022, with revenue estimated to be $60,000 per year through 2031.

Table 8. Total revenue generated from Sweetwater rentals October 2012 – September 2021

2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
$26,410	$30,623	$46,925	$59,546	$65,533	$60,806	$10,844	$59,557	$85,544	$132,924

C. ANNUAL BUDGET

This budget represents an estimate of staff time, administrative costs, equipment costs, and general operating costs. Though not currently budgeted, additional CIP funds will be requested for restoration projects in future years. The proposed budget for WIP from 2022 through 2031 is presented in Table 9. For simplicity, adjustments for inflation are not incorporated over time. It is assumed that regular operating budgets will increase commensurate with inflation.

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	Table 9. Estimated Annual Budget for Operation and Management of Weedon Island Preserve (Amount in thousands of dollars; includes staff time.) FY22-31									
	2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
	South Operations									
Safety & Security, Public Use, Repairs & Maintenance	168	316	316	316	316	316	316	316	316	316
	Natural and Cultural Resources									
Natural and Cultural Resource Management	85	85	85	85	85	85	85	85	85	85
	County Wide Horticulture									
Mowing and Fire Break Maintenance	6	6	6	6	6	6	6	6	6	6
	Weedon Island Preserve and Natural History Center									
Outreach and Education	101	101	101	101	101	101	101	101	101	101
Exhibit Maintenance	18	18	18	18	18	18	18	18	18	18
Facility Costs-Real Estate Management Operations Division	157	157	157	157	157	157	157	157	157	157
	Law Enforcement									
Contract with PCSO	62	62	62	62	62	62	62	62	62	62
	CIP (Penny for Pinellas)									
Restoration Projects	525	289	0	0	0	0	0	0	0	0
WIPCNHC Exhibit Updates	500	500	0	0	0	0	0	0	0	0
TOTALS	**1.6M**	**1.5M**	**745K**	**745K**	**745K**	**745K**	**745K**	**745K**	**745K**	**745K**

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Vanatta, Jr., E.S., Stem, L.T., Wittstruck., W.H., Pettry, D.E., Spieth, J.W. 1972. Soil Survey of Pinellas County, Florida. United States Department of Agriculture, Soil Conservation Service in cooperation with University of Florida Agricultural Experiment Stations. Washington, D.C.

The Weedon Island Story. 2005. Pinellas County Department of Environmental Management, Environmental Lands Division, Tarpon Springs, Florida

Weisman, Brent R., Johathan Dean, Matthew O'Brien, and Lori D. Collins. 2005. Rev. 2008. Comprehensive Cultural Resource Survey of Weedon Island Preserve. Pinellas County, Florida.

DRAFT

APPENDIX 1
State Lease # 3985 and 3376

ATL1

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA

AMENDMENT NUMBER TWO TO LEASE NUMBER 3985
WEEDON ISLAND PRESERVE

THIS LEASE AMENDMENT is entered into this 4th day of FEBRUARY, 2014, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR" and PINELLAS COUNTY, a political subdivision of the State of Florida, hereinafter referred to as "LESSEE";

W I T N E S S E T H

WHEREAS, LESSOR, by virtue of Section 253.03, Florida Statutes, holds title to certain lands and property for the use and benefit of the State of Florida; and

WHEREAS, on June 29, 1993, LESSOR and LESSEE entered into Lease Number 3985 (the "lease"); and

WHEREAS, LESSOR and LESSEE desire to amend the lease to revise and replace section numbers 8, 13, and 24 of Lease Number 3985.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties hereto agree as follows:

1. Section 8 of Lease Number 3985 is hereby amended and replaced by the following section:

8. Management Plan: LEESEE shall prepare and submit a Management Plan for the lease premises in accordance with Chapter 18-2 and 18-4, Florida Administrative Code, within 12 months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and

maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. LESSEEE shall provide LESSOR with an opportunity to participate in all phases of preparing and developing the Management Plan for the leased premises. The Management Plan shall be submitted to LESSOR in draft form for review and comments within ten months of the effective date of this lease. LEESSEE shall give LESSOR reasonable notice of the application for receipt of any state, federal or local permits as well as any public hearings or meetings relating to the development or use of the leased premises. LESSEE shall not proceed with development of said leased premises including, but not limited to, funding, permit applications, design or building contracts until the Management Plan required herein has been submitted and approved. Any financial commitments made by LESSEE which are not in compliance with the terms of this lease shall be done at the LESSEE's own risk. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every ten (10) years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

2. Section 13 of Lease Number 3985 is hereby amended and replaced by the following section:

13. Insurance Requirements: During the term of this lease LESSEE shall procure and maintain policies of fire, extended risk, and liability insurance

coverage. The extended risk and fire insurance coverage shall be in an amount equal to the full insurable replacement value of any improvements or fixtures located on the leased premises. The liability insurance coverage shall be in amounts not less than $200,000.00 per occurrence and $300,000.00 per accident for personal injury, death, and property damage on the leased premise. Such policies of insurance shall name LESSOR, the State of Florida and LESSEE as co-insureds. LESSEE shall submit written evidence of having all insurance policies required herein prior to the effective date of this lease and shall submit annually thereafter, written evidence of maintaining such insurance to the Bureau of Land Management Services, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399. LESSEE shall purchase all policies of insurance from a financially-responsible insurer duly authorized to do business in the State of Florida. In the alternative, LESSEE may elect to be self-insured pursuant to Section 768.28, Florida Statute, and shall provide written evidence of self-insurance to LESSOR. LESSEE'S self-insurance shall provide for casualty and liability coverage. LESSEE shall immediately notify LESSOR and the insurer of any erection or removal of any building or other improvement on the leased premises and any changes affecting the value of any improvements and shall request the insurer to make adequate changes in the coverage to reflect the changes in value. LESSEE shall be financially responsible for any loss due to failure to obtain adequate insurance coverage, and failure to maintain such policies or certificate in the amounts set fourth shall constitute a breach of this lease.

3. Section 24 of Lease Number 3985 is hereby amended and replaced by the following section:

24. Notice: All notices given under this lease shall be in writing and shall be served by certified mail including, but not limited to, notice of any violation served pursuant to 253.04, Florida Statutes, to the last address of

the party to whom notices is to be given, as designated by such party in writing. LESSOR and LESSEE hereby designate their address as follows:

LESSOR: Division of State Lands
Bureau of Land Management Services
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

LESSEE: Pinellas County Real Estate Management
Real Property Division
509 East Avenue South
Clearwater, Florida 33756

4. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of Lease Number 3985, except as amended, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE as of the date of this amendment.

5. It is understood and agreed by LESSOR and LESSEE that this Amendment Number Two to Lease Number 3985 is hereby binding upon the parties hereto and their successors and assigns.

IN WITNESS WHEREOF, the parties have caused this lease amendment to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Witness

By: _____ (SEAL)
CHERYL C. McCALL, CHIEF,
BUREAU OF PUBLIC LAND
ADMINISTRATION, DIVISION OF
STATE LANDS, STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Print/Type Witness Name

Witness

Print/Type Witness Name

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 4th day of FEBRUARY, 2014, by Cheryl C. McCall, Chief, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

Notary Public, State of Florida

Print/Type Notary Name

Commission Number

Commission Expires:

DAVID LEE FEWELL
MY COMMISSION # FF 039635
EXPIRES: July 24, 2017
Bonded Thru Notary Public Underwriters

Approved as to Form and Legality

By: _____
DEP Attorney

Witness

Print/Type Witness Name

Witness

Print/Type Witness Name

Pinellas County Board of County Commissioners

By: Karen Seel

Karen Seel, Chairman

"LESSEE"

STATE OF FLORIDA
COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me this 14 day of January, 2014, by Kenneth T. Welch, as Chairman, on behalf of the Board of County Commissioners of Pinellas County, Florida. He is personally known to me or has produced _____ as identification.

Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

NORMAN D. LOY
MY COMMISSION # EE 185883
EXPIRES: April 2, 2016
Bonded Thru Budget Notary Services

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

By _____
Attorney

BOARD OF COUNTY COMMISSIONERS

DATE: May 18, 2010
AGENDA ITEM NO. 19.

Consent Agenda ☐ Regular Agenda ☑ Public Hearing ☐

County Administrator's Signature:

Subject:

Approve the Release of Sublease 4103 and Amendment One to Lease No. 3985 regarding Weedon Island Preserve.

Department:

Real Estate Management, Real Property Division

Staff Member Responsible:

Paul S. Sacco, Director

Recommended Action:

I RECOMMEND THE BOARD OF COUNTY COMMISSIONERS APPROVE THE RELEASE OF SUBLEASE NO. 4103 AND APPROVE AMENDMENT ONE TO LEASE 3985, THE CHAIRMAN TO SIGN, AND THE CLERK TO ATTEST.

Summary Explanation/Background:

The State of Florida Department of Environmental Protection, Office of Greenways and Trails ("State") has sublet two parcels of land in the Weedon Island Preserve to Pinellas County Department of Environmental Management ("DEM"). Each Lease and Sublease comes with a cost of $300.00. The State desires DEM to include these two parcels in an existing larger Lease.

The purpose of this Amendment One to Lease 3985 is to add to this Lease property in Weedon Island currently managed under Sublease 4103. The property under the Release of Sublease No. 4103 will be incorporated into current lease No. 3985 and will save the County $300.00 in administrative fees. This property will remain under the existing Management Plan in the same manner as the Weedon Island Preserve.

Pinellas County leases these lands for conservation, protection of natural and historical resources based on public outdoor recreation as set forth in subsection 259.032(11) Florida Statutes.

Fiscal Impact/Cost/Revenue Summary:

$300.00 savings annually.

Exhibits/Attachments Attached:

Contract Review Transmittal Slip
Maps
Release of Sublease
Amendment No. 1 to Lease No. 3985

CATS #32842

CONTRACT REVIEW TRANSMITTAL SLIP

PROJECT: State of Florida – 1st Amendment to Lease 3985 and Release of Sublease 4103

TYPE: ( ) Lease ( ) License
(X) Amendment and (X) Termination

ESTIMATED EXPENDITURE/REVENUE:
$ 300.00 savings
(Circle appropriate choice above.)

In accordance with the policy guide for Contract Administration, the attached documents are submitted for your review and suggested comments and/or changes.

- *To assist other reviewers in this process, please mark your comments and/or suggested changes directly upon the document itself in INK.*
- *So that we can correctly identify which are your comments on this form, please indicate the page numbers that correspond to your suggested changes and/or comments.*

Upon completion of your review, please complete the Contract Review Transmittal Slip below and call Beth Spaulding at ext. 45447 so that it can be picked up and taken to the next Review Authority on the list.

Review Authority	Review Date	Review Signature	Corres. Pg. #'s to Document	Comments Included/Addressed Initial & Date
Real Est. Mgmt. (Dave DelMonte)	3-29-10		4-19-10	4/16/10
Real Est. Mgmt. (Paul Sacco)	3/30/10			4/16/10
~~Real Est.~~ Environmental Mgmt. (Will Davis)	4/7/10			4/16/10
Risk Mgmt. (Beth Wininger)	4/8/10			4/16/10
Legal (Jason Ester)	4/9/10			4/16/10
Legal (Michael Zas)	4/14/10			4/16/10
County Admin. (Mark Woodard)	4/15/10		Please have Office provide explanation 4-19-10	4/16/10

Please return to Real Estate Management Department, Real Property Division by March 26, 2010
All inquiries should be made to Beth Spaulding at telephone extension 45447 or 43496.

ATL1

43.6 Acres

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA

AMENDMENT NUMBER *ONE* TO LEASE NUMBER *3985*
WEEDON ISLAND PRESERVE

THIS LEASE AMENDMENT is entered into this 26th day of MAY, 2010, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR" and PINELLAS COUNTY, FLORIDA, a political subdivision of the State of Florida, hereinafter referred to as "LESSEE";

W I T N E S S E T H

WHEREAS, LESSOR, by virtue of Section 253.03, Florida Statutes, holds title to certain lands and property for the use and benefit of the State of Florida; and

WHEREAS, on October 1, 1993, LESSOR and LESSEE entered into Lease Number *3985*; and

WHEREAS, LESSOR and LESSEE desire to amend the lease to add land to the leased premises.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties hereto agree as follows:

1. The legal description of the leased premises set forth in Exhibit "A" of Lease Number *3985* is hereby amended to include the real property described in Exhibit "A," attached hereto, and by reference made a part hereof.

2. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of the Lease Number *3985*, except as amended, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE.

3. It is understood and agreed by LESSOR and LESSEE that this Amendment Number *ONE* to Lease Number *3985* is hereby binding upon the parties hereto and their successors and assigns.

IN WITNESS WHEREOF, the parties have caused this lease amendment to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Dave Fewell
Witness

DAVE FEWELL
Print/Type Witness Name

Judy Woodard
Witness

Judy Woodard
Print/Type Witness Name

By: Gloria C. Barber (SEAL)
GLORIA C. BARBER, OPERATIONS AND MANAGEMENT CONSULTANT MANAGER, BUREAU OF PUBLIC LAND ADMINISTRATION, DIVISION OF STATE LANDS, STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 26th day of MAY, 2009, by Gloria C. Barber, Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.



Dave L Fewell
Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

Approved as to Form and Legality

By: DEP Attorney

ATTEST: Ken Burke
Clerk of Circuit Court

By: Chad M Totten

Chad M Totten
Print/Type Name

Deputy Clerk
Title

PINELLAS COUNTY, FLORIDA
By and through its Board of County Commissioners

By: Susan Latvala

~~Karen Williams Seel~~ Susan Latvala
Vice-Chairman

"LESSEE"

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

By MZ
Attorney

STATE OF FLORIDA
COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me this 18 day of May 2010, by ~~Karen Williams Seel~~ Susan Latvala, as Vice Chairman, and ~~Ken Burke~~ Deputy Clerk of Circuit Court, on behalf of ~~the Board of County Commissioners~~ of Pinellas County, Florida. They are personally known to me or who have produced _____ as identification.

Cynthia N. Haumann
Notary Public, State of Florida

Cynthia N. Haumann
Type Notary Name

Commission Number:

Commission Expires:

CYNTHIA N. HAUMANN
Notary Public - State of Florida
My Commission Expires Jun 19, 2010
Commission # DD 565300
Bonded By National Notary Assn.

This Instrument Prepared By and
Please Return To:
Boyd, Lindsey, Branch & Sliger, P.A.
1407 Piedmont Drive East
Tallahassee, Florida 32312

WARRANTY DEED
(STATUTORY FORM - SECTION 689.02, F.S.)

THIS INDENTURE, made this 9 day of March, A.D. 2001, between Florida Power Corporation, a Florida Corporation, grantor, and the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, whose post'office address is c/o Florida Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Boulevard, Mail Station 115, Tallahassee, FL 32399-3000, grantee,

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and their heirs, legal representatives, successors and assigns. "Grantor" and "grantee" are used for singular and plural, as the context requires and the use of any gender shall include all genders.)

WITNESSETH: That the said grantor, for and in consideration of the sum of Ten Dollars and other good and valuable considerations, to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's successors and assigns forever, the following described land situate, lying and being in Pinellas County, Florida, to-wit:

See Exhibit "A" attached hereto and by reference made a part hereof.

Reserving unto Florida Power Corporation an easement for above – ground electric transmission lines being 5 feet on each side of the existing overhead power lines and guy anchor as depicted on sheet 5 of 7 of that certain boundary survey prepared by Florida Design Consultants, Inc., project #FDC 129-67.

and

Reserving unto Florida Power Corporation a 40-foot wide easement as referenced in Exhibit "B", incorporated herein.

Property Appraiser's Parcel Identification Number:
21-30-17-00000-410-0000; 21-30-17-00000-310-0000; 20-30-17-00000-130-0100

This conveyance is subject to easements, restrictions, limitations and conditions of record if any now exist, but any such interests that may have been terminated are not hereby re-imposed.

AND the said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF the grantor has hereunto set grantor's hand and seal, the day and year first above written.
Signed, sealed and delivered in the presence of:

FLORIDA POWER CORP. LEGAL DEPT. APPROVED Date 2/20/01 By DMT

(Signature of First Witness)
Byron W. Carey
Printed name of First Witness

(Signature of Second Witness)
VICTORIA Currm
Printed name of second Witness

FLORIDA POWER CORPORATION
By: _____
Lloyd M. Yates as Vice President

Attest: _____
Assistant Secretary

Exhibit "A"
Page 4 of 6 Pages
Amendment Number 1 to Lease No. 3985

STATE OF ~~FLORIDA~~ North Carolina
COUNTY OF Wake

The foregoing instrument was acknowledged before me this 9th day of March, 2001, by Lloyd M. Yates as Vice President of Florida Power Corporation, a Florida Corporation, on behalf of the corporation. Such person (notary Public must check applicable box):

(✓) is personally known to me
( ) produced a current driver license
( ) produced _____ as identification

KIMBERLEY C. CROSS NOTARY PUBLIC *** GRANVILLE COUNTY, N.C. (NOTARY PUBLIC SEAL)

Exhibit A
Page 4 of 8
Amendment No. 3
to Lease 4103

Kimberley C. Cross
Notary Public
Kimberley C. Cross
(Printed, Typed or Stamped Name of Notary Public)
Commission No.: _____
My Commission Expires: Oct. 25, 2002

EXHIBIT "A"

Parcel One:

The South ½ of the Northeast ¼ of Section 20, Township 30 South, Range 17 East, Pinellas County, Florida, LESS the South 200 feet thereof.

Parcel Two:

A portion of the fractional West ½ of the Southwest ¼ of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida, and being more particularly described as follows:

Beginning at the Northwest corner of the fractional Southwest ¼ of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida; thence Southerly, along the Westerly line of said fractional Southwest ¼ of Section 21, 730 feet more or less to a point on the Mean High Water Line, hereinafter known as Point "A" for convenience; return thence to the point of beginning; thence Southeasterly 1,870 feet more or less to the Northwest corner of the Southeast ¼ of the Southwest ¼ of said Section 21; thence Southerly, along the West line of said Southeast ¼ of the Southwest ¼ of said Section 21, 600 feet more or less to the Mean High Water Line along Riviera Bay; thence Northwesterly along said Mean High Water Line, and binding therewith, to the aforesaid Point "A".

LESS that portion reserved for access to the Florida Power Bartow Plant Facility described as follows:

Commence at the Northwest corner of the fractional Southwest 1/4 of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida; thence S45°14'36"E for 1288.33 feet to POINT OF BEGINNING; thence continue S45°14'36"E for 60.91 feet; thence S54°41'01"W for 192.77 feet to the point of intersection of a non-tangent curve and the northeasterly boundary of a 60 foot Ingress/Egress Easement as recorded in Official Records Book 8690, page 427, Official Records Book 8690, page 433, Official Records Book 9047, page 879, Official Records Book 9054, page 2030 all of the Public Records of Pinellas County, Florida; said curve being concave southwesterly, having a radial bearing of S53°45'49"W; thence 120.63 feet along the arc of said curve to the left, having a radius of 1303.24 feet, a central angle of 05°18'13", and a chord bearing N38°53'17"W for 120.59 feet; thence leaving said northeasterly boundary of said 60 foot Ingress/Egress Easement, N84°19'13"E for 122.06 feet; thence N54°41'01"E for 83.69 feet to the POINT OF BEGINNING.

DSM APPROVED
By JK Date 2-20-01

Weedon Island/Florida Power Corporation
Parcels 1 and 2
Pinellas County

TOGETHER WITH:

That portion of the ingress/egress easement recorded in Official Record Book 8690, Page 427 of the Public Records of Pinellas County, Florida, bounded on the West by the West line of Government Lot 1, Section 20, Township 30 South, Range 17 East and bounded on the East by the West line of the Fractional Southwest ¼ of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida.

ROS1

RELEASE OF SUBLEASE
ON
LEASE NO. 4103

STATE OF FLORIDA
COUNTY OF PINELLAS
SUBLEASE NO. 4103-003

The undersigned on the 10th day of May, 2010, do(es) hereby quitclaim, release and surrender all right, title and interest in and to the lands described in attached Exhibit "A" which are subleased under Sublease Agreement No. 4103-003, dated May 7, 2001 between the STATE of FLORIDA DEPARTMENT of ENVIRONMENTAL PROTECTION, OFFICE of GREENWAYS and TRAILS as SUBLESSOR, and PINELLAS COUNTY, a political subdivision of the State of Florida as SUBLESSEE, effective the day 6th of July, 2010.

ATTEST: Ken Burke
Clerk of Circuit Court

By: Chad M Totten
Chad M Totten
Print/Type Name
Deputy Clerk
Title

PINELLAS COUNTY, FLORIDA
By and through its Board of County Commissioners

By: Susan Latvala
~~Karen Williams Seel~~ Susan Latvala
Vice Chairman

"LESSEE"

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

By _____ Attorney

STATE OF FLORIDA
COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me this 18 day of May 2010, by ~~Karen Williams Seel~~ Susan Latvala, as Vice Chairman, and Ken Burke, as Clerk of Circuit Court, on behalf of the Board of County Commissioners of Pinellas County, Florida. They are personally known to me or who have produced _____ as identification.

Chad Totten

Notary Public, State of Florida
Cynthia N. Haumann
Type Notary Name

Commission Number: DD 565300

Commission Expires: June 19, 2010

CYNTHIA N. HAUMANN
Notary Public - State of Florida
My Commission Expires Jun 19, 2010
Commission # DD 565300
Bonded By National Notary Assn.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF GREENWAYS AND TRAILS as SUBLESSOR under Lease No. 4103 hereby consents to the foregoing Release of Sublease this 8th day of July 2009. 10

STATE OF FLORIDA DEPARTMENT OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF GREENWAYS AND TRAILS

By: _____ (SEAL)
~~Jena B. Brooks, Director~~
James M. Wood, Assistant Director

Witness

Matthew D. Klein
Print/Type Witness Name

Heather Pence
Witness

Heather Pence
Print/Type Witness Name

"SUBLESSOR"

STATE OF FLORIDA
COUNTY OF LEON

James M. Wood Assistant Director

The foregoing instrument was acknowledged before me this 8th day of July, 2009, by ~~Jena B. Brooks~~, as ~~Director~~ of the Office of Greenways and Trails, State of Florida Department of Environmental Protection. She is personally known to me or who has produced _____ as identification.

Notary Public, State of Florida

Shannon Franklin
Print/Type Notary Name

Commission Number: DD 958758

Commission Expires: May 23, 2014

SHANNON FRANKLIN MY COMMISSION EXPIRES May 23, 2014 #DD 958758 Bonded thru Troy Fain-Insurance NOTARY PUBLIC, STATE OF FLORIDA

The BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA hereby consents to the foregoing Release of Sublease, this 9th day of July, 2010.

Judy Woodard
Witness
Judy Woodard
Print/Type Name
Alicia Buffin
Witness
Alicia Buffin
Print/Type Name

By: Victoria F. Thompson (SEAL)
Victoria F. Thompson, Program Administrator, Bureau of Public Land Administration Division of State Lands State of Florida Department of Environmental Protection

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 9th day of July, 2010, by Victoria F. Thompson, Program Administrator, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, acting as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

DAVID L. FEWELL
MY COMMISSION EXPIRES
February 28, 2012
DD 763203
Bonded thru Troy Fain-Insurance
NOTARY PUBLIC, STATE OF FLORIDA

David L Fewell
Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

Approved as to Form and Legality
By:
DEP Attorney

EXHIBIT "A"

Parcel One:

The South ½ of the Northeast ¼ of Section 20, Township 30 South, Range 17 East, Pinellas County, Florida, LESS the South 200 feet thereof.

Parcel Two:

A portion of the fractional West ½ of the Southwest ¼ of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida, and being more particularly described as follows:

Beginning at the Northwest corner of the fractional Southwest ¼ of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida; thence Southerly, along the Westerly line of said fractional Southwest ¼ of Section 21, 730 feet more or less to a point on the Mean High Water Line, hereinafter known as Point "A" for convenience; return thence to the point of beginning; thence Southeasterly 1,870 feet more or less to the Northwest corner of the Southeast ¼ of the Southwest ¼ of said Section 21; thence Southerly, along the West line of said Southeast ¼ of the Southwest ¼ of said Section 21, 600 feet more or less to the Mean High Water Line along Riviera Bay; thence Northwesterly along said Mean High Water Line, and binding therewith, to the aforesaid Point "A".

LESS that portion reserved for access to the Florida Power Bartow Plant Facility described as follows:

Commence at the Northwest corner of the fractional Southwest 1/4 of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida; thence S45°14'36"E for 1288.33 feet to POINT OF BEGINNING; thence continue S45°14'36"E for 60.91 feet; thence S54°41'01"W for 192.77 feet to the point of intersection of a non-tangent curve and the northeasterly boundary of a 60 foot Ingress/Egress Easement as recorded in Official Records Book 8690, page 427, Official Records Book 8690, page 433, Official Records Book 9047, page 879, Official Records Book 9054, page 2030 all of the Public Records of Pinellas County, Florida; said curve being concave southwesterly, having a radial bearing of S53°45'49"W; thence 120.63 feet along the arc of said curve to the left, having a radius of 1303.24 feet, a central angle of 05°18'13", and a chord bearing N38°53'17"W for 120.59 feet; thence leaving said northeasterly boundary of said 60 foot Ingress/Egress Easement, N84°19'13"E for 122.06 feet; thence N54°41'01"E for 83.69 feet to the POINT OF BEGINNING.

TOGETHER WITH:

That portion of the ingress/egress easement recorded in Official Record Book 8690, Page 427 of the Public Records of Pinellas County, Florida, bounded on the West by the West line of Government Lot 1, Section 20, Township 30 South, Range 17 East and bounded on the East by the West line of the Fractional Southwest ¼ of Section 21, Township 30 South, Range 17 East, Pinellas County, Florida.

RSM APPROVED
By SK Date 2-20-07

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND
OF THE STATE OF FLORIDA

LEASE AGREEMENT

Lease No. 3985

THIS LEASE AGREEMENT, made and entered into this 29th day of June 1993, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA hereinafter referred to as "LESSOR", and PINELLAS COUNTY, FLORIDA, hereinafter referred to as "LESSEE".

LESSOR, for and in consideration of mutual covenants and agreements hereinafter contained, does hereby lease to said LESSEE, the lands described in paragraph 2 below, together with the improvements thereon, and subject to the following terms and conditions:

1. DELEGATIONS OF AUTHORITY: LESSOR'S responsibilities and obligations herein shall be exercised by the Division of State Lands, Department of Natural Resources.

2. DESCRIPTION OF PREMISES: The property subject to this lease, is situated in the County of Pinellas, State of Florida and is more particularly described in Exhibits "A" and "B" attached hereto and hereinafter called the "leased premises".

3. TERM: The term of this lease shall be for a period of 50 years commencing on October 1, 1993 and ending on September 30, 2043 unless sooner terminated pursuant to the provisions of this lease.

4. PURPOSE: LESSEE shall manage the leased premises only for the conservation and protection of natural and historical resources and for resource based public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023(11), Florida Statutes, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 8 of this lease.

5. QUIET ENJOYMENT AND RIGHT OF USE: LESSEE shall have the right of ingress and egress to, from and upon the leased

premises for all purposes necessary to the full quiet enjoyment by said LESSEE of the rights conveyed herein.

6. UNAUTHORIZED USE: LESSEE shall, through its agents and employees prevent the unauthorized use of the leased premises or any use thereof not in conformity with this lease.

7. ASSIGNMENT: This lease shall not be assigned in whole or in part without the prior written consent of LESSOR. Any assignment made either in whole or in part without the prior written consent of LESSOR shall be void and without legal effect.

8. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises in accordance with Chapters 18-2 and 18-4, Florida Administrative Code, within 12 months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. LESSEE shall provide LESSOR with an opportunity to participate in all phases of preparing and developing the Management Plan for the leased premises. The Management Plan shall be submitted to LESSOR in draft form for review and comments within ten months of the effective date of this lease. LESSEE shall give LESSOR reasonable notice of the application for and receipt of any state, federal or local permits as well as any public hearings or meetings relating to the development or use of the leased premises. LESSEE shall not proceed with development of said leased premises including, but not limited to, funding, permit applications, design or building contracts until the Management Plan required herein has been submitted and approved. Any financial commitments made by LESSEE which are not in compliance with the terms of this lease shall be done at LESSEE'S own risk. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall

provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every five (5) years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

9. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

10. SUBLEASES: This lease is for the purposes specified herein and subleases of any nature are prohibited, without the prior written approval of LESSOR. Any sublease not approved in writing by LESSOR shall be void and without legal effect.

11. RIGHT OF INSPECTION: LESSOR or its duly authorized agents, representatives or employees shall have the right at any and all times to inspect the leased premises and the works and operations of LESSEE in any matter pertaining to this lease.

12. PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures, improvements, and signs shall be constructed at the expense of LESSEE in accordance with plans prepared by professional designers and shall require the prior written approval of LESSOR as to purpose, location and design. Further, no trees, other than non-native species, shall be removed or major land alterations done without the prior written approval of LESSOR. Removable equipment and removable improvements placed on the leased premises by LESSEE which do not become a permanent part of the leased premises will remain the property of LESSEE and may be removed by LESSEE upon termination of this lease.

13. INSURANCE REQUIREMENTS: During the term of this lease LESSEE shall procure and maintain policies of fire, extended risk, and liability insurance coverage. The extended risk and fire insurance coverage shall be in an amount equal to the full

insurable replacement value of any improvements or fixtures located on the leased premises. The liability insurance coverage shall be in amounts not less than $100,000.00 per occurrence and $200,000.00 per accident for personal injury, death, and property damage on the leased premises. Such policies of insurance shall name LESSOR, the State of Florida and LESSEE as co-insureds. LESSEE shall submit written evidence of having procured all insurance policies required herein prior to the effective date of this lease and shall submit annually thereafter, written evidence of maintaining such insurance to the Bureau of Land Management Services, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399. LESSEE shall purchase all policies of insurance from a financially-responsible insurer duly authorized to do business in the State of Florida. In the alternative, LESSEE may elect to be self-insured pursuant to Section 768.28, Florida Statutes, and shall provide written evidence of such self-insurance to LESSOR. LESSEE'S self-insurance shall provide for casualty and liability coverage. LESSEE shall immediately notify LESSOR and the insurer of any erection or removal of any building or other improvement on the leased premises and any changes affecting the value of any improvements and shall request the insurer to make adequate changes in the coverage to reflect the changes in value. LESSEE shall be financially responsible for any loss due to failure to obtain adequate insurance coverage, and the failure to maintain such policies or certificate in the amounts set forth shall constitute a breach of this lease.

14. LIABILITY: Each party is responsible for all personal injury and property damage attributable to the negligent acts or omissions of that party and the agents and employees thereof. Nothing herein shall be construed as an indemnity or a waiver of sovereign immunity enjoyed by any party hereto, as provided in Section 768.28, Florida Statutes, as amended, or any other law providing limitations on claims, including limitations of liability enjoyed by a landowner providing land to the public for outdoor recreational purposes, as provided in Section 375.251, Florida Statutes.

15. PAYMENT OF TAXES, ASSESSMENTS AND LIENS: Both LESSOR and LESSEE are tax exempt, as an agency and a political subdivision of the State of Florida, respectively, and therefore the instant transaction will be entitled to tax-exempt treatment. In the event either of the parties or the transaction should lose their tax-exempt status, resulting in the imposition of taxes or drainage special assessments on the transaction, then LESSEE shall assume responsibility for and shall pay all liabilities that accrue to the leased premises or to the improvements thereon, including any and all ad valorem or sales taxes, drainage or special assessments, of every kind, up to the sum of $10,000 per fiscal year. For the purposes of this paragraph only, the fiscal year refers to the County's fiscal year of October 1 through September 30. If the total taxes or assessment imposed on this transaction exceed $10,000 in any fiscal year, LESSOR may terminate this lease, in writing, without penalty, effective upon the effective date of any legislation resulting in the imposition of such tax or assessment, or upon such other effective date established by the LESSOR. LESSEE shall also assume full responsibility and pay for all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the leased premises as a result of any activities of LESSEE or its agents, employees, or contractors, arising from or relating to this lease.

16. NO WAIVER OF BREACH: The failure of LESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this lease shall not be construed as a waiver of such covenants, terms or conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by LESSOR.

17. TIME: Time is expressly declared to be of the essence of this lease.

18. NON DISCRIMINATION: LESSEE shall not discriminate against any individual because of that individual's race, color,

religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the leased premises or upon lands adjacent to and used as an adjunct of the leased premises.

19. UTILITY FEES: LESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water and other public utilities to the leased premises and for having the utilities turned off when the leased premises are surrendered.

20. MINERAL RIGHTS: This lease does not cover petroleum or petroleum products or minerals and does not give the right to LESSEE to drill for or develop the same.

21. RIGHT OF AUDIT: LESSEE shall make available to LESSOR all financial and other records relating to this lease, and LESSOR shall have the right to audit such records at any reasonable time during the term of this lease. This right shall be continuous until this lease expires or is terminated. This lease may be terminated by LESSOR should LESSEE fail to allow public access to all documents, papers, letters or other materials made or received in conjunction with this lease, pursuant to the provisions of Chapter 119, Florida Statutes.

22. CONDITION OF PREMISES: LESSOR assumes no liability or obligation to LESSEE with reference to the conditions of the leased premises. The leased premises herein are leased by LESSOR to LESSEE in an "as is" condition, with LESSOR assuming no responsibility for the care, repair, maintenance or improvement of the leased premises for the benefit of LESSEE.

23. COMPLIANCE WITH LAWS: LESSEE agrees that this lease is contingent upon and subject to LESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules and laws of the State of Florida or the United States or of Pinellas County and/or any municipality in which the leased premises are located.

24. NOTICE: All notices given under this lease shall be in writing and shall be served by certified mail including, but not limited to, notice of any violation served pursuant to 253.04,

Florida Statutes, to the last address of the party to whom notice is to be given, as designated by such party in writing. LESSOR and LESSEE hereby designate their address as follows:

LESSOR: Division of State Lands
Bureau of Land Management Services
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

LESSEE: Pinellas County Real Estate Management Division
General Services
201 Rogers Street
Clearwater, Florida 34616

25. BREACH OF COVENANTS, TERMS, OR CONDITIONS: Should LESSEE breach any of the covenants, terms, or conditions of this lease, LESSOR shall give written notice to LESSEE to remedy such breach within sixty (60) days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty (60) days of receipt of written notice, LESSOR may either terminate this lease and recover from LESSEE all damages LESSOR may incur by reason of the breach including, but not limited to, the cost of recovering the leased premises and attorneys' fees or maintain this lease in full force and effect and exercise all rights and remedies herein conferred upon LESSOR.

26. DAMAGE TO THE PREMISES: LESSEE agrees that it will not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises, any act which may result in damage or depreciation of value to the leased premises, or any part thereof. LESSEE shall not dispose of any contaminants including, but not limited to, hazardous or toxic substances, chemicals or other agents used or produced by in LESSEE'S operations, on the leased premises or on any adjacent state land or in any manner not permitted by law.

27. SURRENDER OF PREMISES: Upon termination or expiration of this lease, LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, LESSEE shall give written notification to the Bureau of Land Management Services, Division of State Lands, Department of Natural Resources, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399 at least six

(6) months prior to the release of any or all of the leased premises. Notification shall include a legal description , this lease number, and an explanation of the release. The release shall only be valid if approved by LESSOR through the execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon termination or expiration of this lease, all improvements including both physical structures and modifications to the leased premises shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises a representative of the Division of State Lands shall perform an on-site inspection and the keys to any building on the leased premises shall be turned over to the Division. If the improvements do not meet all conditions as set forth in paragraphs 10 and 36 herein, LESSEE shall pay all costs necessary to meet the prescribed conditions.

28. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18-2.004(1)(d), Florida Administrative Code, which have been selected, developed, or approved by LESSOR or other land managing agencies for the protection and enhancement of the leased premises.

29. PUBLIC LANDS ARTHROPOD CONTROL PLAN: LESSEE shall carry out an arthropod control plan in accordance with the existing plan approved June 15, 1989, and any subsequent amendments thereof. Said plan shall be incorporated into the Management Plan required by paragraph (8) of this lease.

30. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything to be done which purports to create a lien or encumbrance of any nature against the real property contained in the leased premises including, but not limited to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

31. PARTIAL INVALIDITY: If any term, covenant, condition or provision of this lease shall be ruled by a court of competent jurisdiction, to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

32. ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Chapters 18-2 and 18-4, Florida Administrative Code, shall be reviewed by the Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the leased premises.

33. DUPLICATE ORIGINALS: This lease is executed in duplicate originals each of which shall be considered an original for all purposes.

34. ENTIRE UNDERSTANDING: This lease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of LESSOR.

35. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and the improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the leased premises free of trash or litter, meeting all building and safety codes in the location situated, maintaining the planned improvements as set forth in the approved Management Plan and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good condition as the same may be on the effective date of this lease; provided, however, that any removal, closure, etc, of the above improvements shall be acceptable when the proposed activity is consistent with the goals of conservation, protection and enhancement of the natural

and historical resources within the leased premises and with the approved Management Plan.

36. GOVERNING LAW: This lease shall be governed by and interpreted according to the laws of the State of Florida.

37. SECTION CAPTIONS: Articles, subsections and other captions contained in this lease are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this lease or any provisions thereof.

38. FISCAL FUNDING BY LESSEE: In the event that funds are not appropriated by the LESSEE in any succeeding fiscal year for the purposes or activities described herein and to be funded by LESSEE, then, after written notice to LESSOR, this lease shall terminate at the expiration of the last fiscal year for which funds were appropriated and expended. For the purposes of this paragraph, LESSEE shall provide LESSOR written notice within (10) days whenever during the budget preparation process it appears to the County Administrator that no funding will be available for the successive fiscal year because the County has not provided adequate funding to preform these contractual obligations in any proposed budget.. Alternatively, if during the budget hearing process some or all of the budget intended for these contractual obligations is deleted, making fulfillment of these contractual obligations financially impractical or impossible, then within five (5) days of the deletion, LESSEE shall provide LESSOR written notice of this fact.

39. EARLY TERMINATION: The early termination of this lease (prior to the expiration date referenced in paragraph 3 above) by either party shall not relieve the LESSEE of any liabilities or obligations incurred by LESSEE under this lease prior to the effective date of such termination.

40. EXISTING FISHING PIER: The existing fishing pier structure and those certain sovereignty submerged lands located beneath the existing structure, as referenced in Exhibit "A", shall be used for passive recreational purposes only (such as fishing and sight-seeing) and no vessels shall be allowed to

moor or dock along any portion of the pier, at any time.

41. ADJOINING SOVEREIGNTY SUBMERGED LANDS: Those certain sovereignty submerged lands described in Exhibit "B" attached hereto are included within the leased premises, and shall be managed by the LESSEE for the purposes set forth in paragraph 4, above, subject to all terms and conditions contained in this lease, and also to the following specific terms and conditions:

a) Subject to all encumbrances, LESSEE shall manage the submerged lands described in Exhibit "B" for user health and safety protection, for recreation, and for protection of said submerged lands, and adjoining upland riparian property, which management shall not conflict with ongoing programs of the State for conservation, protection, and enhancement of the submerged lands. Nor shall this lease be construed in any way to interfere with the maintenance of public navigation projects or other public works projects authorized by the United State Congress. Nor shall this lease be construed in any way to interfere with traditional riparian rights of private land owners. Nor shall this lease be construed to apply to any lands title to which is not vested in the LESSOR.

b) It is understood and agreed that in addition to the health and safety protection, and property protection activities herein provided for, LESSEE shall be required to address management of these submerged lands as part of the management plan required by paragraph (8) of this lease.

IN WITNESS WHEREOF, the parties have caused this lease to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Witness

Witness

By: _____ (SEAL)
ACTING DIRECTOR FOR LAND MANAGEMENT SERVICES, DIVISION OF STATE LANDS, DEPARTMENT OF NATURAL RESOURCES
"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 18th day of June 1993, by Daniel T. Crabb, Acting Director, Land Management Services, Division of State Lands, Department of Natural Resources, who is personally known to me and who did not take an oath.

_____
Notary Public, State of Florida
Printed, typed or stamped name:

(SEAL)

Commission No.: CC269197

My Commission Expires: March 19, 1997

Approved as to Form and Legality

By: _____
DNR Attorney

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

By _____
Asst. Co. Attorney

PINELLAS COUNTY, FLORIDA
ACTING BY AND THROUGH THE BOARD OF COUNTY COMMISSIONERS OF PINELLAS COUNTY, FLORIDA

Witness

Witness

BY: _____ (SEAL)
Vice
Its: Chairman

Attest: ATTEST: KARLEEN F. DeBLAKER, CLERK

Its: By: _____ Deputy Clerk

"LESSEE"

STATE OF FLORIDA
COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me this 29th day of June 1993, by Bruce Tyndall, as Vice-Chairman, and Norma Grant, Deputy Clerk, Board of County Commissioners of Pinellas County, Florida, who is/are personally known to me and who did/did not take an oath.

_____
Notary Public, State of Florida
Printed, typed or stamped name:

(SEAL)

Commission No. _____

My Commission Expires:

Exhibit "A"
Weedon Island

The following described land, situate, lying and being in the County of Pinellas, State of Florida, to-wit:

Fractional SE1/4 of SW1/4 of Section 21; Government Lots 1 and 2 in Section 27; NE1/4 of Section 28; and Government Lots 1 and 3 in Section 28; and Government Lots 1 and 2 in Section 34; all being in Township 30 South, Range 17 East, Pinellas County, Florida; and Government Lot 1 in Section 33, Township 30 South, Range 17 East; and Government Lot 3, Section 34, Township 30 South, Range 17 East; Also beginning at a point 660 feet South of the 1/4 section corner on the West Boundary of Section 34, Township 30 South, Range 17 East, thence South 58 deg. E 274.56 feet, thence N 63 deg. 15 min. E 132 feet, thence N 36 deg. 30 min. E 132 feet, thence N 14 deg. E 330 feet, thence E 660 feet, thence South 85 deg. 45 min. E 528 feet, thence South 12 deg. 15 min. W 198 feet, thence South 78 deg. E 264 feet, thence North 61 deg. 45 min. E 132 feet, thence North 49 deg. East 528 feet, thence North 18 deg. East 207.24 feet, thence East 151.1 feet, thence South 36 deg 461/2 min. West 1185.4 feet thence North 87 deg. 55 min. West 1930 feet, thence North 220 feet to P.O.B.; and also including that portion of an existing wooden fishing pier (formerly part of a bridge) which connects as a Southerly extension of said Weedon Drive and extends 210 feet M.O.L into the heretofore described waterway, and the sovereignty submerged lands located beneath the existing fishing pier structure.

Together with a non-exclusive easement for vehicular and pedestrian ingress and egress over, across and through that portion of Pinellas County Road 151, also known as Weedon Drive, on Weedon Island lying South of the intersection of said County Road No. 151 and the Florida Power Corporation plant access road, South to that waterway between, and connecting, Riviera Bay and Bayou Grande; said road lying within the Southwest 1/4 of Section 21 and the Northwest 1/4 of Section 28, Township 30 South, Range 17 East.

Subject to all pre-existing easements and matters of record.

Exhibit "B"

All those sovereignty submerged lands lying within 400 feet of the Mean High Water Line or Ordinary High Water Line and within the riparian lines of the upland real property described in Exhibit "A", less and except those sovereignty submerged lands which have been designated as open for the harvesting of shellfish by the Department of Natural Resources.

ATL1

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA

AMENDMENT NUMBER ONE TO LEASE NUMBER 3376

THIS LEASE AMENDMENT is entered into this 4th day of FEBRUARY, 2014, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR" and PINELLAS COUNTY, FLORIDA, a political subdivision of the State of Florida, hereinafter referred to as "LESSEE";

W I T N E S S E T H

WHEREAS, LESSOR, by virtue of Section 253.03, Florida Statutes, holds title to certain lands and property for the use and benefit of the State of Florida; and

WHEREAS, on September 12, 1995, LESSOR and LESSEE entered into Lease Number 3376 (the "lease"); and

WHEREAS, LESSOR and LESSEE desire to amend the lease to revise and replace section numbers 8, 13, and 24 of Lease Number 3376.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties hereto agree as follows:

1. Section 8 of Lease Number 3376 is hereby amended and replaced by the following section:

8. Management Plan: LEESEE shall prepare and submit a Management Plan for the lease premises in accordance with Chapter 18-2 and 18-4, Florida Administrative Code, within 12 months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and

maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. LESSEEE shall provide LESSOR with an opportunity to participate in all phases of preparing and developing the Management Plan for the leased premises. The Management Plan shall be submitted to LESSOR in draft form for review and comments within ten months of the effective date of this lease. LEESSEE shall give LESSOR reasonable notice of the application for receipt of any state, federal or local permits as well as any public hearings or meetings relating to the development or use of the leased premises. LESSEE shall not proceed with development of said leased premises including, but not limited to, funding, permit applications, design or building contracts until the Management Plan required herein has been submitted and approved. Any financial commitments made by LESSEE which are not in compliance with the terms of this lease shall be done at the LESSEE's own risk. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every ten (10) years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

2. Section 13 of Lease Number 3376 is hereby amended and replaced by the following section:

13. Insurance Requirements: During the term of this lease LESSEE shall procure and maintain policies of fire, extended risk, and liability insurance coverage. The extended risk and fire insurance coverage shall be in an amount equal to the full insurable replacement value of any improvements or fixtures located on the leased premises. The liability insurance coverage shall be in amounts not less than $200,000.00 per occurrence and $300,000.00 per accident for personal injury, death, and property damage on the leased premise. Such policies of insurance shall name LESSOR, the State of Florida and LESSEE as co-insureds. LESSEE shall submit written evidence of having all insurance policies required herein prior to the effective date of this lease and shall submit annually thereafter, written evidence of maintaining such insurance to the Bureau of Land Management Services, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399. LESSEE shall purchase all policies of insurance from a financially-responsible insurer duly authorized to do business in the State of Florida. In the alternative, LESSEE may elect to be self-insured pursuant to Section 768.28, Florida Statute, and shall provide written evidence of self-insurance to LESSOR. LESSEE'S self-insurance shall provide for casualty and liability coverage. LESSEE shall immediately notify LESSOR and the insurer of any erection or removal of any building or other improvement on the leased premises and any changes affecting the value of any improvements and shall request the insurer to make adequate changes in the coverage to reflect the changes in value. LESSEE shall be financially responsible for any loss due to failure to obtain adequate insurance coverage, and failure to maintain such policies or certificate in the amounts set fourth shall constitute a breach of this lease.

3. Section 24 of Lease Number 3376 is hereby amended and replaced by the following section:

24. Notice: All notices given under this lease shall be in writing and shall be served by certified mail including, but not limited to, notice of any violation served pursuant to 253.04, Florida Statutes, to the last address of the party to whom notices is to be given, as designated by such party in writing. LESSOR and LESSEE hereby designate their address as follows:

LESSOR: Division of State Lands
Bureau of Land Management Services
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

LESSEE: Pinellas County Real Estate Management
Real Property Division
509 East Avenue South
Clearwater, Florida 33756

4. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of Lease Number 3376, except as amended, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE as of the date of this amendment.

5. It is understood and agreed by LESSOR and LESSEE that this Amendment Number One to Lease Number 3376 is hereby binding upon the parties hereto and their successors and assigns.

IN WITNESS WHEREOF, the parties have caused this lease amendment to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Witness

By: _____ (SEAL)
CHERYL C. McCALL, CHIEF,
BUREAU OF PUBLIC LAND
ADMINISTRATION, DIVISION OF
STATE LANDS, STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Print/Type Witness Name

Witness

Print/Type Witness Name

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 4th day of FEBRUARY, 2014, by Cheryl C. McCall, Chief, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires

DAVID LEE FEWELL
MY COMMISSION # FF 039635
EXPIRES: July 24, 2017
Bonded Thru Notary Public Underwriters

Approved as to Form and Legality

By: _____
DEP Attorney

Witness

Print/Type Witness Name

Witness

Print/Type Witness Name

Pinellas County Board of County Commissioners

By: Karen Seel

~~Kenneth T. Welch, Chairman~~

Karen Seel, Chairman

"LESSEE"

STATE OF FLORIDA
COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me this 14th day of January, 2014 by Karen Seel Chairman, on behalf of the Board of County Commissioners of Pinellas County, Florida. He is personally known to me or has produced _____ as identification.

Notary Public, State of Florida

Norman D. Loy

Print/Type Notary Name

Commission Number:

Commission Expires:

NORMAN D. LOY
MY COMMISSION # EE 185883
EXPIRES: April 2, 2016
Bonded Thru Budget Notary Services

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

By _____
Attorney

OAL8102

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND
OF THE STATE OF FLORIDA

LEASE AGREEMENT

Lease No. 3376

THIS LEASE AGREEMENT, made and entered into this 12th day of September 1995, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA hereinafter referred to as "LESSOR", and PINELLAS COUNTY, FLORIDA hereinafter referred to as "LESSEE".

LESSOR, for and in consideration of mutual covenants and agreements hereinafter contained, does hereby lease to said LESSEE, the lands described in paragraph 2 below, together with the improvements thereon, and subject to the following terms and conditions:

1. DELEGATIONS OF AUTHORITY: LESSOR'S responsibilities and obligations herein shall be exercised by the Division of State Lands, Department of Environmental Protection.

2. DESCRIPTION OF PREMISES: The property subject to this lease, is situated in the County of Pinellas, State of Florida and is more particularly described in Exhibit "A" attached hereto and hereinafter called the "leased premises".

3. TERM: The term of this lease shall be for a period of 50 years commencing on September 12, 1995 and ending on September 11, 2045 unless sooner terminated pursuant to the provisions of this lease.

4. PURPOSE: LESSEE shall manage the leased premises only for the conservation and protection of natural and historical resources and for resource based public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023(11), Florida Statutes, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 8 of this lease.

5. QUIET ENJOYMENT AND RIGHT OF USE: LESSEE shall have the right of ingress and egress to, from and upon the leased

premises for all purposes necessary to the full quiet enjoyment by said LESSEE of the rights conveyed herein.

6. UNAUTHORIZED USE: LESSEE shall, through its officers and employees prevent the unauthorized use of the leased premises or any use thereof not in conformity with this lease.

7. ASSIGNMENT: This lease shall not be assigned in whole or in part without the prior written consent of LESSOR. Any assignment made either in whole or in part without the prior written consent of LESSOR shall be void and without legal effect.

8. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises in accordance with Chapters 18-2 and 18-4, Florida Administrative Code, within 12 months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. LESSEE shall provide LESSOR with an opportunity to participate in all phases of preparing and developing the Management Plan for the leased premises. The Management Plan shall be submitted to LESSOR in draft form for review and comments within ten months of the effective date of this lease. LESSEE shall give LESSOR reasonable notice of the application for and receipt of any state, federal or local permits as well as any public hearings or meetings relating to the development or use of the leased premises. LESSEE shall not proceed with development of said leased premises including, but not limited to, funding, permit applications, design or building contracts until the Management Plan required herein has been submitted and approved. Any financial commitments made by LESSEE which are not in compliance with the terms of this lease shall be done at LESSEE'S own risk. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall

provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every five (5) years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

9. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

10. SUBLEASES: This lease is for the purposes specified herein and subleases of any nature are prohibited, without the prior written approval of LESSOR. Any sublease not approved in writing by LESSOR shall be void and without legal effect.

11. RIGHT OF INSPECTION: LESSOR or its duly authorized agents, representatives or employees shall have the right at any and all times to inspect the leased premises and the works and operations of LESSEE in any matter pertaining to this lease.

12. PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures, improvements, and signs shall be constructed at the expense of LESSEE in accordance with plans prepared by professional designers and shall require the prior written approval of LESSOR as to purpose, location and design. Further, no trees, other than non-native species, shall be removed or major land alterations done without the prior written approval of LESSOR. Removable equipment and removable improvements placed on the leased premises by LESSEE which do not become a permanent part of the leased premises will remain the property of LESSEE and may be removed by LESSEE upon termination of this lease.

13. INSURANCE REQUIREMENTS: During the term of this lease LESSEE shall procure and maintain policies of fire, extended risk, and liability insurance coverage. The extended risk and fire insurance coverage shall be in an amount equal to the full

insurable replacement value of any improvements or fixtures located on the leased premises. The liability insurance coverage shall be in amounts not less than $100,000.00 per occurrence and $200,000.00 per accident for personal injury, death, and property damage on the leased premises. Such policies of insurance shall name LESSOR, the State of Florida and LESSEE as co-insureds. LESSEE shall submit written evidence of having procured all insurance policies required herein prior to the effective date of this lease and shall submit annually thereafter, written evidence of maintaining such insurance to the Bureau of Land Management Services, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399. LESSEE shall purchase all policies of insurance from a financially-responsible insurer duly authorized to do business in the State of Florida. In the alternative, LESSEE may elect to be self-insured pursuant to Section 768.28, Florida Statutes, and shall provide written evidence of such self-insurance to LESSOR. LESSEE'S self-insurance shall provide for casualty and liability coverage. LESSEE shall immediately notify LESSOR and the insurer of any erection or removal of any building or other improvement on the leased premises and any changes affecting the value of any improvements and shall request the insurer to make adequate changes in the coverage to reflect the changes in value. LESSEE shall be financially responsible for any loss due to failure to obtain adequate insurance coverage, and the failure to maintain such policies or certificate in the amounts set forth shall constitute a breach of this lease.

14. INDEMNIFICATION: Each party is responsible for all personal injury and property damage attributable to the negligent acts or omissions of that party and the officers and employees thereof. Nothing herein shall be construed as an indemnity or a waiver of sovereign immunity enjoyed by any party hereto, as provided in Section 768.28, Florida Statutes, as amended, or any other law providing limitations on claims, including limitations of liability enjoyed by a landowner providing land to the public for outdoor recreation purposes, as provided in Section 375.251, Florida Statutes.

15. PAYMENT OF TAXES AND ASSESSMENTS: Neither the LESSOR nor the LESSEE is currently subject to any ad valorem taxes or drainage or special assessments. If at any time in the future the LESSEE loses its exemption from as valorem taxes or drainage or special assessments, this lease shall automatically terminate effective from the date of imposition of taxation.

16. NO WAIVER OF BREACH: The failure of LESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this lease shall not be construed as a waiver of such covenants, terms or conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by LESSOR.

17. TIME: Time is expressly declared to be of the essence of this lease.

18. NON DISCRIMINATION: LESSEE shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the leased premises or upon lands adjacent to and used as an adjunct of the leased premises.

19. UTILITY FEES: LESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water and other public utilities to the leased premises and for having the utilities turned off when the leased premises are surrendered.

20. MINERAL RIGHTS: This lease does not cover petroleum or petroleum products or minerals and does not give the right to LESSEE to drill for or develop the same.

21. RIGHT OF AUDIT: LESSEE shall make available to LESSOR all financial and other records relating to this lease, and LESSOR shall have the right to audit such records at any reasonable time during the term of this lease. This right shall be continuous until this lease expires or is terminated. This lease may be terminated by LESSOR should LESSEE fail to allow

public access to all documents, papers, letters or other materials made or received in conjunction with this lease, pursuant to the provisions of Chapter 119, Florida Statutes.

22. CONDITION OF PREMISES: LESSOR assumes no liability or obligation to LESSEE with reference to the conditions of the leased premises. The leased premises herein are leased by LESSOR to LESSEE in an "as is" condition, with LESSOR assuming no responsibility for the care, repair, maintenance or improvement of the leased premises for the benefit of LESSEE.

23. COMPLIANCE WITH LAWS: LESSEE agrees that this lease is contingent upon and subject to LESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules and laws of the State of Florida or the United States or of Pinellas County and/or any municipality in which the leased premises is located.

24. NOTICE: All notices given under this lease shall be in writing and shall be served by certified mail including, but not limited to, notice of any violation served pursuant to 253.04, Florida Statutes, to the last address of the party to whom notice is to be given, as designated by such party in writing. LESSOR and LESSEE hereby designate their address as follows:

LESSOR: Department of Environmental Protection
Division of State Lands
Bureau of Land Management Services,
Mail Station 130
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

LESSEE: Pinellas County
Pinellas County Real Estate Management Division
315 Court Street
Clearwater, Florida 33516

25. BREACH OF COVENANTS, TERMS, OR CONDITIONS: Should LESSEE breach any of the covenants, terms, or conditions of this lease, LESSOR shall give written notice to LESSEE to remedy such breach within sixty (60) days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty (60) days of receipt of written notice, LESSOR may either terminate this lease and recover from LESSEE all damages LESSOR may inour by reason of the breach including, but not limited to, the cost of recovering the leased premises and

attorneys' fees or maintain this lease in full force and effect and exercise all rights and remedies herein conferred upon LESSOR.

26. DAMAGE TO THE PREMISES: LESSEE agrees that it will not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises, any act which may result in damage or depreciation of value to the leased premises, or any part thereof. LESSEE shall not dispose of any contaminants including, but not limited to, hazardous or toxic substances, chemicals or other agents used or produced by in LESSEE'S operations, on the leased premises or on any adjacent state land or in any manner not permitted by law.

27. SURRENDER OF PREMISES: Upon termination or expiration of this lease, LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, LESSEE shall give written notification to the Bureau of Land Management Services, Division of State Lands, Department of Environmental Protection, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399 at least six (6) months prior to the release of any or all of the leased premises. Notification shall include a legal description , this lease number, and an explanation of the release. The release shall only be valid if approved by LESSOR through the execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon termination or expiration of this lease, all improvements including both physical structures and modifications to the leased premises shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises a representative of the Division of State Lands shall perform an on-site inspection and the keys to any building on the leased premises shall be turned over to the Division. If the improvements do not meet all conditions as set forth in paragraphs 12 and 35 herein, LESSEE shall pay all costs necessary

to meet the prescribed conditions.

28. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18D2.004(1)(d), Florida Administrative Code, which have been selected, developed, or approved by LESSOR or other land managing agencies for the protection and enhancement of the leased premises.

29. PUBLIC LANDS ARTHROPOD CONTROL PLAN: LESSEE shall carry out an arthropod control plan in accordance with the existing plan approved June 15, 1989, and any subsequent amendments thereof. Said plan shall be incorporated into the Management Plan, required by paragraph (8) of this lease.

30. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything to be done which purports to create a lien or encumbrance of any nature against the real property contained in the leased premises including, but not limited to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

31. PARTIAL INVALIDITY: If any term, covenant, condition or provision of this lease shall be ruled by a court of competent jurisdiction, to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

32. ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Chapters 18-2 and 18-4, Florida Administrative Code, shall be reviewed by the Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the leased premises.

33. DUPLICATE ORIGINALS: This lease is executed in duplicate originals each of which shall be considered an original for all purposes.

34. ENTIRE UNDERSTANDING: This lease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of LESSOR.

35. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and the improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the leased premises free of trash or litter, meeting all building and safety codes in the location situated, maintaining the planned improvements as set forth in the approved Management Plan and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good condition as the same may be on the effective date of this lease; provided, however, that any removal, closure, etc, of the above improvements shall be acceptable when the proposed activity is consistent with the goals of conservation, protection and enhancement of the natural and historical resources within the leased premises and with the approved Management Plan.

36. GOVERNING LAW: This lease shall be governed by and interpreted according to the laws of the State of Florida.

37. SECTION CAPTIONS: Articles, subsections and other captions contained in this lease are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this lease or any provisions thereof.

38. FISCAL FUNDING: In the event funds are not appropriated by the LESSEE in any succeeding fiscal year for the purposes described herein, then this Lease shall be deemed to terminate at the expiration of the last fiscal year for which funds were appropriated and expended. In the event of termination, LESSEE continues to be responsible for returning the lease condition required by the Lease upon termination, subject to future funding in later fiscal years,

IN WITNESS WHEREOF, the parties have caused this lease to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

By: _____ (SEAL)
DIRECTOR, DIVISION OF STATE LANDS, DEPARTMENT OF ENVIRONMENTAL PROTECTION

_____
Witness

_____
Printed/typed name

_____
Witness

_____
Printed/typed name

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this _____ day of _____ 19___, by Percy W. Mallison, Jr., as Director, Division of State Lands, Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida, who is personally known to me.

_____
Notary Public, State of Florida
Printed, typed or stamped name:

(SEAL)

Commission No. _____

My Commission Expires:

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY
SUBJECT TO PROPER EXECUTION
By DCP
By _____
Asst. Co. Attorney

Approved as to Form and Legality

By: _____
DEP Attorney

BOARD OF COUNTY COMMISSIONERS OF PINELLAS COUNTY, FLORIDA

BY: _____ (SEAL)

Its: CHAIRMAN

Attest: KARLEEN F. DeBLAKER
Clerk of Circuit Court

Print name:

By: Norma Grant
Deputy Clerk of the Circuit Court

Print name: Norma Grant

Jo Anne Reilly
Witness
Jo Anne Reilly
Printed/typed name

_____
Witness

_____
Printed/typed name

STATE OF FLORIDA
COUNTY OF PINELLAS

The foregoing instrument was acknowledged before me this 12 day of September 1995, by Steven M. Seibert, as Chairman, as agent for and on behalf of the Board of County Commissioners of Pinellas County, Florida, who is personally known to me.

Eleanor Calcese
Notary Public, State of Florida
Printed, typed or stamped name:

(SEAL)

Commission No. _____

My Commission Expires:

ELEANOR CALCESE
MY COMMISSION # CC433328 EXPIRES
March 28, 1999
BONDED THRU TROY FAIN INSURANCE, INC.

13,365.80

84064095 O.R. 5728 PAGE 1513

~~O.R. 5728 PAGE 405~~

Kathleen S. Ambler
CLERK CIRCUIT COURT

MAR 30 | 10 PM '84 ~~84063419~~

SPECIAL WARRANTY DEED

18	16641526 77	
	.40	34.40
	TOTAL	34.00

THIS INDENTURE, made this 27th day of March, 1984, between RUTH B. KIRBY, KATHERINE BECKSTROM, JOSEPH FEIN and WILLARD FEIN, as all of the Trustees of The Ed C. Wright Trust, hereinafter called "Grantor", and The Board of Trustees of the Internal Improvement Trust Fund of the State of Florida, hereinafter referred to as "Grantee", whose mailing address is as follows: Department of Natural Resources, 3900 Commonwealth Boulevard, Room 412, Land Acquisition, Tallahassee, Florida 32303.

W I T N E S S E T H :

That the Grantor, for and in consideration of the sum of Ten Dollars ($10.00), and other good and valuable consideration, to it in hand paid, the receipt whereof is hereby acknowledged, has granted, bargained, sold, aliened, remised, released, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto the Grantee, its successors and assigns forever, all that certain parcel of land lying and being in the County of Pinellas, State of Florida, as more particularly described in Schedule A annexed hereto, and by this reference made a part hereof.

TOGETHER with all of the tenements, hereditaments, appurtenances and riparian rights thereto belonging or in anywise appertaining including timber rights, water rights and oil, gas and mineral rights to the real property described in Schedule A annexed hereto.

TOGETHER without warranty any interest of Grantor in any streams, canals, water bodies, drainage ditches, alleys, roads, streets; easements of access and utility rights of way, abutting or adjoining the real property described in Schedule A annexed hereto.

Subject to taxes accruing subsequent to December 31, 1983, and all easements, restrictions and reservations of record among the Public Records of Pinellas County, Florida.

Instrument being re-recorded to correct documentary stamp error

This Instrument Prepared By and Return To:

Stephen J. Mitchell, Esquire
Annis, Mitchell, Cockey, Edwards & Roehn, P.A.
Suite 2100
One Tampa City Center
Tampa, Florida 33602

Ck Cash Ck Chg	
40 Rec	34.00
41 DS	
43 Int	
Ck Tot	34.00

MAR 29 9 52 AM '84
Kathleen S. Ambler
CLERK CIRCUIT COURT

10. 3376
EXHIBIT A
PAGE 11 OF 21

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~~O.R. 5728 PAGE 466~~

TO HAVE AND TO HOLD the above described premises, with the appurtenances, on to the said Grantee, its successors and assigns, in fee simple forever.

AND THE GRANTOR does specifically warrant the title to said property subject to the matters referred to above and will defend the same against the lawful claims of all persons claiming by, through or under the Grantor, but not otherwise.

IT IS EXPRESSLY understood and agreed that the individuals executing this instrument do so solely in his or her capacity as a Trustee of The Ed C. Wright Trust, and that said individuals shall not be personally liable for any acts or actions of The Ed C. Wright Trust and that all parties concerned shall look solely to The Ed C. Wright Trust property for satisfaction of any claims.

IN WITNESS WHEREOF, the Grantor has caused these presents to be duly executed in its name, by those hereunto duly authorized, the day and year first above written.

Signed, sealed and delivered
in the presence of:

F. Stewart Hayle

Sandra L. Simpson

F. Stewart Hayle

Sandra L. Simpson

F. Stewart Hayle

Sandra L. Simpson

F. Stewart Hayle

Sandra L. Simpson

THE ED C. WRIGHT TRUST

By: Ruth B. Kirby
Ruth B. Kirby, Individually
and as Trustee

By: Katherine Beckstrom
Katherine Beckstrom, Individually
and as Trustee

By: Joseph Fein
Joseph Fein, Individually
and as Trustee

By: Willard Fein
Willard Fein, Individually
and as Trustee

NO. 3376
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~~O. R. 5728 PAGE 467~~

STATE OF FLORIDA
COUNTY OF Pinellas

BEFORE ME, the undersigned authority, personally appeared RUTH B. KIRBY, who acknowledged to me that she is the person who executed the above instrument individually and as Trustee of The Ed C. Wright Trust.

SWORN TO AND SUBSCRIBED before me this 27th day of March 1984.

Notary Public, State of Florida at Large

My Commission Expires:
Notary Public, State of Florida
My Commission Expires June 2, 1987
Bonded Thru Troy Fain-Insurance, Inc.

STATE OF FLORIDA
COUNTY OF Pinellas

BEFORE ME, the undersigned authority, personally appeared KATHERINE BECKSTROM, who acknowledged to me that she is the person who executed the above instrument individually and as Trustee of The Ed C. Wright Trust.

SWORN TO AND SUBSCRIBED before me this 27th day of March 1984.

Notary Public, State of Florida at Large

My Commission Expires:
Notary Public, State of Florida
My Commission Expires June 2, 1987
Bonded Thru Troy Fain-Insurance, Inc.

STATE OF FLORIDA
COUNTY OF Pinellas

BEFORE ME, the undersigned authority, personally appeared JOSEPH FEIN, who acknowledged to me that he is the person who executed the above instrument individually and as Trustee of The Ed C. Wright Trust.

SWORN TO AND SUBSCRIBED before me this 21st day of March 1984.

Notary Public, State of Florida at Large

My Commission Expires:
Notary Public, State of Florida
My Commission Expires June 2, 1987
Bonded Thru Troy Fain-Insurance, Inc.

NO. 3376
EXHIBIT A
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~~O. R. 5728 PAGE 468~~

STATE OF FLORIDA
COUNTY OF Pinellas

BEFORE ME, the undersigned authority, personally appeared WILLARD FEIN, who acknowledged to me that she is the person who executed the above instrument individually and as Trustee of The Ed C. Wright Trust.

SWORN TO AND SUBSCRIBED before me this 27th day of March 1984.

Notary Public, State of Florida at Large

My Commission Expires:

Notary Public, State of Florida
My Commission Expires June 2, 1987
Bonded Thru Fain & Jones Insurance, Inc.

SJM25(3)

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT. OF REVENUE $ 900.00

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT. OF REVENUE $ 900.00

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT. OF REVENUE $ 900.00

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STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT. OF REVENUE $ 900.00

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SCHEDULE A

THE PROPERTY CONSISTS OF PARCELS 103, 108, 109, 110, 111, 112 and 114

PARCEL 103

O.R. 5728 PAGE 469

A PORTION OF GOVERNMENT LOTS 3 AND 4 IN FRACTIONAL SECTION 35 AND A PORTION OF GOVERNMENT LOT 1 IN FRACTIONAL SECTION 36, ALL IN TOWNSHIP 29 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, AND A PORTION OF THE NORTHEAST 1/4 OF SECTION 2 AND A PORTION OF FRACTIONAL SECTION 1, ALL IN TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS: O.R. 5728 PAGE 1517

FROM THE NORTHEAST CORNER OF FEATHER COVE UNIT ONE, AS RECORDED IN PLAT BOOK 85, PAGES 74-75, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE SOUTH 2433.57 FEET OF THE NORTHEAST 1/4 OF SAID SECTION 2, AS A POINT OF BEGINNING; THENCE ALONG THE NORTH LINE OF THE SOUTH 2433.57 FEET OF THE NORTHEAST 1/4 OF SAID SECTION 2, S.89°51'16"E., 2677.58 FEET TO A POINT ON THE EAST LINE OF SAID SECTION 2; THENCE ALONG SAID SECTION LINE, S.00°24'43"W., 1033.59 FEET CALCULATED, 1033.49 FEET MEASURED, TO THE NORTHWEST CORNER OF THE SOUTH 1400 FEET OF THE WEST 1140.89 FEET OF THE NORTHWEST 1/4 OF SAID SECTION 1; THENCE ALONG THE NORTH LINE THEREOF, S.89°50'58"E., 1140.90 FEET TO THE NORTHEAST CORNER THEREOF; THENCE ALONG THE EAST LINE THEREOF S.00°24'43"W., 400.01 FEET TO THE NORTHWEST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5273, PAGE 1962, OF PINELLAS COUNTY, FLORIDA; THENCE ALONG THE NORTH LINE THEREOF, S.90°00'00"E., 1000.00 FEET; THENCE ALONG THE EAST LINE THEREOF, S.00°13'05"W., 1122.37 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 2, N.00°10'21"E., 227.48 FEET TO THE NORTHWEST CORNER THEREOF; THENCE ALONG THE WEST LINE OF GOVERNMENT LOT 3 IN SAID FRACTIONAL SECTION 35, CONTINUE N.00°10'21"E., 231.59 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

LESS THE FOLLOWING DESCRIBED PARCEL: FROM THE NORTHEAST CORNER OF FEATHER COVE UNIT ONE, AS RECORDED IN PLAT BOOK 85, PAGES 74-75, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE SOUTH 2433.57 FEET OF THE NORTHEAST 1/4 OF SAID SECTION 2, AS A POINT OF REFERENCE; THENCE ALONG THE NORTH LINE OF SAID SOUTH 2433.57 FEET THEREOF S. 89°51'16" E., 1734.37 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID LINE S. 89°51'16" E., 188.32 FEET; THENCE LEAVING SAID LINE N. 52°11'59" W., 73.66 FEET; THENCE N. 89°51'16" W., 130.00 FEET; THENCE S. 00°08'44" W., 45.00 FEET TO THE POINT OF BEGINNING.

AND

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT OF REVENUE $00.00

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT OF REVENUE $85.80

STATE OF FLORIDA DOCUMENTARY STAMP TAX DEPT OF REVENUE $00.00

O. 3376

EXHIBIT A

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PARCEL 108

O.R. 5728 PAGE 410

A PORTION OF THE SOUTH 1/2 OF FRACTIONAL SECTION 1, TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, LESS RIGHTS-OF-WAY FOR STATE ROAD 688 (ULMERTON ROAD), STATE ROAD 400 (INTERSTATE 275), AND A BORROW PIT, BEING DESCRIBED AS FOLLOWS:

O.R. 5728 PAGE 1518

FROM THE SOUTHWEST CORNER OF SAID SECTION 1, SAID POINT ALSO BEING THE NORTHWEST CORNER OF SECTION 12, TOWNSHIP 30 SOUTH, RANGE 16 EAST, AS A POINT OF REFERENCE; THENCE ALONG THE WEST LINE OF SAID SECTION 12, S.00°07'43"W., 12.00 FEET TO THE SURVEY LINE OF STATE ROAD 688, AS DESCRIBED IN OFFICIAL RECORDS BOOK 460, PAGE 332 OF PINELLAS COUNTY, FLORIDA; THENCE ALONG SAID SURVEY LINE S.89°49'48"E., 4201.70 FEET TO STATION 195+00; THENCE LEAVING SAID SURVEY LINE, N.00°10'12"E., 200.00 FEET TO A POINT WHERE THE RIGHT-OF-WAY OF SAID STATE ROAD 688 (ULMERTON ROAD) ENDS AND THE RIGHT-OF-WAY OF SAID STATE ROAD 400 (INTERSTATE 275, AS DESCRIBED IN OFFICIAL RECORDS BOOK 381, PAGE 90) BEGINS, SAID POINT ALSO BEING THE POINT OF BEGINNING; THENCE FOLLOWING SAID RIGHT-OF-WAY OF STATE ROAD 400, N.00°10'12"E., 248.67 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A NORTHWESTERLY, THEN NORTHEASTERLY DIRECTION TO A POINT ON THE WESTERLY RIGHT-OF-WAY OF A BORROW PIT DESCRIBED IN OFFICIAL RECORDS BOOK 381, PAGE 91 OF PINELLAS COUNTY, FLORIDA, SAID POINT BEING 720.11 FEET, MORE OR LESS, N.00°10'12"E., OF THE POINT OF BEGINNING, AND ALSO HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE ALONG SAID RIGHT-OF-WAY N.00°10'12"E., 194.73 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "C" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE NORTHERLY RIGHT-OF-WAY OF SAID STATE ROAD 688 (ULMERTON ROAD), SAID LINE BEING 200.00 FEET NORTHERLY OF THE AFOREMENTIONED SURVEY LINE, N.89°49'48"W., 2554.35 FEET; THENCE LEAVING SAID RIGHT-OF-WAY, N.29°18'50"E., 581.50 FEET; THENCE S.70°11'30"E., 340.00 FEET; THENCE N.00°01'15"E., 864.11 FEET; THENCE N.55°17'23"W., 887.89 FEET TO A POINT ON THE EASTERLY BOUNDARY OF AN 80-FOOT INGRESS-EGRESS EASEMENT DESCRIBED IN OFFICIAL RECORDS BOOK 4197, PAGE 237, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5273, PAGE 1962, ALL OF PINELLAS COUNTY, FLORIDA; THENCE LEAVING SAID EASEMENT BOUNDARY ALONG THE SOUTH LINE OF SAID LANDS, S.90°00'00"E., 494.12 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "D" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO AFOREMENTIONED POINT "C".

AND

PARCEL 109

THAT PART OF THE NORTHEAST 1/4 AND THAT PART OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 12, TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, LYING NORTHWESTERLY OF S.R. 400 (INTERSTATE 275) LESS ROAD RIGHTS-OF-WAY FOR S.R. 688 (ULMERTON ROAD), S.R. 400 (INTERSTATE 275), AND S.R. 688 (NINTH STREET NORTH),

PARCEL 110

AND

THAT PART OF THE NORTHEAST 1/4 AND THAT PART OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 12, TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, LYING SOUTHEASTERLY OF S.R. 400 (INTERSTATE 275), LESS ROAD RIGHTS-OF-WAY FOR S.R. 400 (INTERSTATE 275) AND S.R. 688 (NINTH STREET NORTH),

SUBJECT TO THE FOLLOWING CONTINUOUS DRAINAGE EASEMENT: LYING WITHIN 25 FEET EACH SIDE OF THE FOLLOWING-DESCRIBED DITCH CENTERLINE; COMMENCE ON THE EAST LINE OF SAID SECTION 12, AT A POINT 2580.77 FEET (2581.96 FEET, DEED) NORTHERLY OF THE SOUTHEAST CORNER THEREOF; THENCE S.60°12'45"W. (S.59°53'08"W., DEED) A DISTANCE OF 79.00 FEET; THENCE S.72°44'53"W. (S.72°25'16"W., DEED) A DISTANCE OF 137.94 FEET TO THE WESTERLY RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH, A 400-FOOT RIGHT-OF-WAY). CONTINUE THENCE S.72°44'53"W. (S.72°25'16"W., DEED) 349.74 FEET TO THE END OF SAID DITCH CENTERLINE. LESS AND EXCEPT ANY PORTION OF SAID EASEMENT WHICH LIES WITHIN THE DEDICATED RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH)

AND

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PARCEL 111

A PORTION OF GOVERNMENT LOTS 3 AND 4, AND A PORTION OF THE SOUTHWEST 1/4 OF FRACTIONAL SECTION 7, TOWNSHIP 30 SOUTH, RANGE 17 EAST, PINELLAS COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

FROM THE SOUTHWEST CORNER OF SAID SECTION 7 AS A POINT OF REFERENCE; THENCE ALONG THE WEST LINE OF SAID SECTION 7, N.00°12'45"E., 916.44 FEET; THENCE LEAVING SAID SECTION LINE S.89°48'50"E., 200.00 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH, A 400-FOOT RIGHT-OF-WAY) FOR A POINT OF BEGINNING; THENCE CONTINUE S.89°48'50"E., 1208.14 FEET; THENCE N.53°49'29"E., 438.25 FEET; THENCE N.67°57'40"E., 197.57 FEET; THENCE N.01°40'49"E., 212.64 FEET; THENCE N.86°41'37"E., 488.85 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY OF S.R. 687 (FOURTH STREET NORTH, A 430-FOOT RIGHT-OF-WAY); THENCE ALONG THE WESTERLY RIGHT-OF-WAY OF AFOREMENTIONED S.R. 687 (FOURTH STREET NORTH) N.00°06'38"E., 1526.23 FEET; THENCE FOLLOWING A CHANGE IN DIRECTION IN SAID RIGHT-OF-WAY N.89°53'22"W., 113.14 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER KNOWN AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE AFOREMENTIONED EASTERLY RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH) N.00°12'45"E., 1744.24 FEET; THENCE FOLLOWING A CHANGE IN DIRECTION OF SAID RIGHT-OF-WAY S.89°47'15"E., 154.61 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER KNOWN AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN AN EASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

AND

PARCEL 112

A PORTION OF THE SOUTHEAST 1/4, TOGETHER WITH A PORTION OF GOVERNMENT LOT 2 IN FRACTIONAL SECTION 7, TOWNSHIP 30 SOUTH, RANGE 17 EAST, PINELLAS COUNTY, FLORIDA, LESS ROAD RIGHT-OF-WAY FOR STATE ROAD 687 (FOURTH STREET NORTH), BEING DESCRIBED AS FOLLOWS:

COMMENCE ON THE CENTERLINE OF STATE ROAD 687 (FOURTH STREET NORTH, A 430 FOOT RIGHT-OF-WAY), AT A POINT 1510.95 FEET NORTHERLY OF THE SOUTH LINE OF SAID SECTION 7 FOR A POINT OF REFERENCE; THENCE S.89°50'57"E., 230.00 FEET TO THE EASTERLY RIGHT-OF-WAY OF THE AFOREMENTIONED STATE ROAD 687 (FOURTH STREET NORTH) FOR A POINT OF BEGINNING; THENCE LEAVING SAID RIGHT-OF-WAY, CONTINUE S.89°50'57"E., 360.51 FEET; THENCE S.34°33'01"E., 849.46 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH 812.45 FEET OF THE SOUTHEAST 1/4 OF SAID SECTION 7; THENCE ALONG SAID LINE S.89°51'23"E., 381.28 FEET TO THE SOUTHWEST CORNER OF THE NORTH 1352.00 FEET OF THE SOUTH 2164.45 FEET OF THE EAST 1200.00 FEET OF THE SOUTHEAST 1/4 OF SAID SECTION 7; THENCE ALONG THE WEST LINE THEREOF N.00°16'38"E., 1262.17 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE EASTERLY RIGHT-OF-WAY OF AFOREMENTIONED STATE ROAD 687 (FOURTH STREET NORTH) N.00°06'38"E., 1506.54 FEET; THENCE ALONG A CHANGE OF DIRECTION OF SAID RIGHT-OF-WAY S.89°53'22"E., 149.49 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

AND

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~~O.R. 5728 PAGE 412~~

PARCEL 114

A PORTION OF THE SOUTHWEST 1/4, TOGETHER WITH A PORTION OF GOVERNMENT LOT 2 IN FRACTIONAL SECTION 8, AND A PORTION OF THE NORTHEAST 1/4 OF FRACTIONAL SECTION 17, AND A PORTION OF FRACTIONAL SECTION 16 WHICH LIES NORTHERLY AND WESTERLY OF STATE ROAD 600 (GANDY BOULEVARD), ALL IN TOWNSHIP 30 SOUTH, RANGE 17 EAST, PINELLAS COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

FROM THE SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 8 AS A POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE THEREOF S.89°56'14"E., 2644.54 FEET TO THE SOUTHEAST CORNER THEREOF, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 17; THENCE ALONG THE NORTH-SOUTH CENTERLINE OF SAID SECTION 17, S.00°21'33"W., 1145.20 FEET; THENCE LEAVING SAID NORTH-SOUTH CENTERLINE S.60°51'09"E., 1329.66 FEET; THENCE S.21°31'26"E., 817.03 FEET, TO A POINT ON A LINE WHICH IS 80.00 FEET NORTHERLY AT RIGHT ANGLES AND PARALLEL TO THE EAST-WEST CENTERLINE OF SAID SECTION 17; THENCE ALONG SAID LINE N.89°40'53"E., 1170.97 FEET TO A POINT 80.00 NORTHERLY OF THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 17; THENCE LEAVING SAID LINE S.82°43'44"E., 376.74 FEET; THENCE S.65°36'24"E., 279.87 FEET; THENCE S.39°16'18"E., 136.76 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY OF STATE ROAD 600 (GANDY BOULEVARD, SAID RIGHT-OF-WAY BEING 200 FEET NORTHERLY AND WESTERLY OF THE CENTERLINE); THENCE ALONG SAID RIGHT-OF-WAY N.72°47'21"E., 146.22 FEET; THENCE ALONG A CHANGE OF DIRECTION OF SAID RIGHT-OF-WAY N.17°12'39"W., 60.00 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE WEST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 8, N.00°16'38"E., 1702.50 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

NO. 3376

EXHIBIT A

SCHEDULE A-4 CONTINUED

PARCEL 108

A PORTION OF THE SOUTH 1/2 OF FRACTIONAL SECTION 1, TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, LESS RIGHTS-OF-WAY FOR STATE ROAD 688 (ULMERTON ROAD), STATE ROAD 400 (INTERSTATE 275), AND A BORROW PIT, BEING DESCRIBED AS FOLLOWS:

FROM THE SOUTHWEST CORNER OF SAID SECTION 1, SAID POINT ALSO BEING THE NORTHWEST CORNER OF SECTION 12, TOWNSHIP 30 SOUTH, RANGE 16 EAST, AS A POINT OF REFERENCE; THENCE ALONG THE WEST LINE OF SAID SECTION 12, S.00°07'43"W., 12.00 FEET TO THE SURVEY LINE OF STATE ROAD 688, AS DESCRIBED IN OFFICIAL RECORDS BOOK 460, PAGE 332 OF PINELLAS COUNTY, FLORIDA; THENCE ALONG SAID SURVEY LINE S.89°49'48"E., 4201.70 FEET TO STATION 195+00; THENCE LEAVING SAID SURVEY LINE, N.00°10'12"E., 200.00 FEET TO A POINT WHERE THE RIGHT-OF-WAY OF SAID STATE ROAD 688 (ULMERTON ROAD) ENDS AND THE RIGHT-OF-WAY OF SAID STATE ROAD 400 (INTERSTATE 275, AS DESCRIBED IN OFFICIAL RECORDS BOOK 381, PAGE 90) BEGINS, SAID POINT ALSO BEING THE POINT OF BEGINNING; THENCE FOLLOWING SAID RIGHT-OF-WAY OF STATE ROAD 400, N.00°10'12"E., 248.67 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A NORTHWESTERLY, THEN NORTHEASTERLY DIRECTION TO A POINT ON THE WESTERLY RIGHT-OF-WAY OF A BORROW PIT DESCRIBED IN OFFICIAL RECORDS BOOK 381, PAGE 91 OF PINELLAS COUNTY, FLORIDA, SAID POINT BEING 720.11 FEET, MORE OR LESS, N.00°10'12"E., OF THE POINT OF BEGINNING, AND ALSO HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE ALONG SAID RIGHT-OF-WAY N.00°10'12"E., 194.73 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "C" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE NORTHERLY RIGHT-OF-WAY OF SAID STATE ROAD 688 (ULMERTON ROAD), SAID LINE BEING 200.00 FEET NORTHERLY OF THE AFOREMENTIONED SURVEY LINE, N.89°49'48"W., 2554.35 FEET; THENCE LEAVING SAID RIGHT-OF-WAY, N.29°18'50"E., 581.50 FEET; THENCE S.70°11'30"E., 340.00 FEET; THENCE N.00°01'15"E., 864.11 FEET; THENCE N.55°17'23"W., 887.89 FEET TO A POINT ON THE EASTERLY BOUNDARY OF AN 80-FOOT INGRESS-EGRESS EASEMENT DESCRIBED IN OFFICIAL RECORDS BOOK 4197, PAGE 237, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5273, PAGE 1962, ALL OF PINELLAS COUNTY, FLORIDA; THENCE LEAVING SAID EASEMENT BOUNDARY ALONG THE SOUTH LINE OF SAID LANDS, S.90°00'00"E., 494.12 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "D" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO AFOREMENTIONED POINT "C".

PARCEL 109

THAT PART OF THE NORTHEAST 1/4 AND THAT PART OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 12, TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, LYING NORTHWESTERLY OF S.R. 400 (INTERSTATE 275) LESS ROAD RIGHTS-OF-WAY FOR S.R. 688 (ULMERTON ROAD), S.R. 400 (INTERSTATE 275), AND S.R. 688 (NINTH STREET NORTH),

PARCEL 110

THAT PART OF THE NORTHEAST 1/4 AND THAT PART OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 12, TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, LYING SOUTHEASTERLY OF S.R. 400 (INTERSTATE 275), LESS ROAD RIGHTS-OF-WAY FOR S.R. 400 (INTERSTATE 275) AND S.R. 688 (NINTH STREET NORTH),

SUBJECT TO THE FOLLOWING CONTINUOUS DRAINAGE EASEMENT: LYING WITHIN 25 FEET EACH SIDE OF THE FOLLOWING-DESCRIBED DITCH CENTERLINE: COMMENCE ON THE EAST LINE OF SAID SECTION 12, AT A POINT 2580.77 FEET (2581.96 FEET, DEED) NORTHERLY OF THE SOUTHEAST CORNER THEREOF; THENCE S.60°12'45"W. (S.59°53'08"W., DEED) A DISTANCE OF 79.00 FEET; THENCE S.72°44'53"W. (S.72°25'16"W., DEED) A DISTANCE OF 137.94 FEET TO THE WESTERLY RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH, A 400-FOOT RIGHT-OF-WAY). CONTINUE THENCE S.72°44'53"W. (S.72°25'16"W., DEED) 349.74 FEET TO THE END OF SAID DITCH CENTERLINE. LESS AND EXCEPT ANY PORTION OF SAID EASEMENT WHICH LIES WITHIN THE DEDICATED RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH)

NO. 3376

EXHIBIT A

PARCEL 111

A PORTION OF GOVERNMENT LOTS 3 AND 4, AND A PORTION OF THE SOUTHWEST 1/4 OF FRACTIONAL SECTION 7, TOWNSHIP 30 SOUTH, RANGE 17 EAST, PINELLAS COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

FROM THE SOUTHWEST CORNER OF SAID SECTION 7 AS A POINT OF REFERENCE; THENCE ALONG THE WEST LINE OF SAID SECTION 7, N.00°12'45"E., 916.44 FEET; THENCE LEAVING SAID SECTION LINE S.89°48'50"E., 200.00 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH, A 400-FOOT RIGHT-OF-WAY) FOR A POINT OF BEGINNING; THENCE CONTINUE S.89°48'50"E., 1208.14 FEET; THENCE N.53°49'29"E., 438.25 FEET; THENCE N.67°57'40"E., 197.57 FEET; THENCE N.01°40'49"E., 212.64 FEET; THENCE N.86°41'37"E., 488.85 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY OF S.R. 687 (FOURTH STREET NORTH, A 430-FOOT RIGHT-OF-WAY); THENCE ALONG THE WESTERLY RIGHT-OF-WAY OF AFOREMENTIONED S.R. 687 (FOURTH STREET NORTH) N.00°06'38"E., 1526.23 FEET; THENCE FOLLOWING A CHANGE IN DIRECTION IN SAID RIGHT-OF-WAY N.89°53'22"W., 113.14 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER KNOWN AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE AFOREMENTIONED EASTERLY RIGHT-OF-WAY OF S.R. 688 (NINTH STREET NORTH) N.00°12'45"E., 1744.24 FEET; THENCE FOLLOWING A CHANGE IN DIRECTION OF SAID RIGHT-OF-WAY S.89°47'15"E., 154.61 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER KNOWN AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN AN EASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

PARCEL 112

A PORTION OF THE SOUTHEAST 1/4, TOGETHER WITH A PORTION OF GOVERNMENT LOT 2 IN FRACTIONAL SECTION 7, TOWNSHIP 30 SOUTH, RANGE 17 EAST, PINELLAS COUNTY, FLORIDA, LESS ROAD RIGHT-OF-WAY FOR STATE ROAD 687 (FOURTH STREET NORTH), BEING DESCRIBED AS FOLLOWS:

COMMENCE ON THE CENTERLINE OF STATE ROAD 687 (FOURTH STREET NORTH, A 430 FOOT RIGHT-OF-WAY), AT A POINT 1510.95 FEET NORTHERLY OF THE SOUTH LINE OF SAID SECTION 7 FOR A POINT OF REFERENCE; THENCE S.89°50'57"E., 230.00 FEET TO THE EASTERLY RIGHT-OF-WAY OF THE AFOREMENTIONED STATE ROAD 687 (FOURTH STREET NORTH) FOR A POINT OF BEGINNING; THENCE LEAVING SAID RIGHT-OF-WAY, CONTINUE S.89°50'57"E., 360.51 FEET; THENCE S.34°33'01"E., 849.46 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH 812.45 FEET OF THE SOUTHEAST 1/4 OF SAID SECTION 7; THENCE ALONG SAID LINE S.89°51'23"E., 381.28 FEET TO THE SOUTHWEST CORNER OF THE NORTH 1352.00 FEET OF THE SOUTH 2164.45 FEET OF THE EAST 1200.00 FEET OF THE SOUTHEAST 1/4 OF SAID SECTION 7; THENCE ALONG THE WEST LINE THEREOF N.00°16'38"E., 1262.17 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE EASTERLY RIGHT-OF-WAY OF AFOREMENTIONED STATE ROAD 687 (FOURTH STREET NORTH) N.00°06'38"E., 1506.54 FEET; THENCE ALONG A CHANGE OF DIRECTION OF SAID RIGHT-OF-WAY S.89°53'22"E., 149.49 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

NO. 3376
EXHIBIT A

PARCEL 114

A PORTION OF THE SOUTHWEST 1/4, TOGETHER WITH A PORTION OF GOVERNMENT LOT 2 IN FRACTIONAL SECTION 8, AND A PORTION OF THE NORTHEAST 1/4 OF FRACTIONAL SECTION 17, AND A PORTION OF FRACTIONAL SECTION 16 WHICH LIES NORTHERLY AND WESTERLY OF STATE ROAD 600 (GANDY BOULEVARD), ALL IN TOWNSHIP 30 SOUTH, RANGE 17 EAST, PINELLAS COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

FROM THE SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 8 AS A POINT OF BEGINNING; THENCE ALONG THE SOUTH LINE THEREOF S.89°56'14"E., 2644.54 FEET TO THE SOUTHEAST CORNER THEREOF, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 17; THENCE ALONG THE NORTH-SOUTH CENTERLINE OF SAID SECTION 17, S.00°21'33"W., 1145.20 FEET; THENCE LEAVING SAID NORTH-SOUTH CENTERLINE S.60°51'09"E., 1329.66 FEET; THENCE S.21°31'26"E., 817.03 FEET, TO A POINT ON A LINE WHICH IS 80.00 FEET NORTHERLY AT RIGHT ANGLES AND PARALLEL TO THE EAST-WEST CENTERLINE OF SAID SECTION 17; THENCE ALONG SAID LINE N.89°40'53"E., 1170.97 FEET TO A POINT 80.00 FEET NORTHERLY OF THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SAID SECTION 17; THENCE LEAVING SAID LINE S.82°43'44"E., 376.74 FEET; THENCE S.65°36'24"E., 279.87 FEET; THENCE S.39°16'18"E., 136.76 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY OF STATE ROAD 600 (GANDY BOULEVARD, SAID RIGHT-OF-WAY BEING 200 FEET NORTHERLY AND WESTERLY OF THE CENTERLINE); THENCE ALONG SAID RIGHT-OF-WAY N.72°47'21"E., 146.22 FEET; THENCE ALONG A CHANGE OF DIRECTION OF SAID RIGHT-OF-WAY N.17°12'39"W., 60.00 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE WEST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 8, N.00°16'38"E., 1702.50 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

PARCEL 103

A PORTION OF GOVERNMENT LOTS 3 AND 4 IN FRACTIONAL SECTION 35 AND A PORTION OF GOVERNMENT LOT 1 IN FRACTIONAL SECTION 36, ALL IN TOWNSHIP 29 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, AND A PORTION OF THE NORTHEAST 1/4 OF SECTION 2 AND A PORTION OF FRACTIONAL SECTION 1, ALL IN TOWNSHIP 30 SOUTH, RANGE 16 EAST, PINELLAS COUNTY, FLORIDA, BEING DESCRIBED AS FOLLOWS:

FROM THE NORTHEAST CORNER OF FEATHER COVE UNIT ONE, AS RECORDED IN PLAT BOOK 85, PAGES 74-75, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE SOUTH 2433.57 FEET OF THE NORTHEAST 1/4 OF SAID SECTION 2, AS A POINT OF BEGINNING; THENCE ALONG THE NORTH LINE OF THE SOUTH 2433.57 FEET OF THE NORTHEAST 1/4 OF SAID SECTION 2, S.89°51'16"E., 2677.58 FEET TO A POINT ON THE EAST LINE OF SAID SECTION 2; THENCE ALONG SAID SECTION LINE, S.00°24'43"W., 1033.59 FEET CALCULATED, 1033.49 FEET MEASURED, TO THE NORTHWEST CORNER OF THE SOUTH 1400 FEET OF THE WEST 1140.89 FEET OF THE NORTHWEST 1/4 OF SAID SECTION 1; THENCE ALONG THE NORTH LINE THEREOF, S.89°50'58"E., 1140.90 FEET TO THE NORTHEAST CORNER THEREOF; THENCE ALONG THE EAST LINE THEREOF S.00°24'43"W., 400.01 FEET TO THE NORTHWEST CORNER OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 5273, PAGE 1962, OF PINELLAS COUNTY, FLORIDA; THENCE ALONG THE NORTH LINE THEREOF, S.90°00'00"E., 1000.00 FEET; THENCE ALONG THE EAST LINE THEREOF, S.00°13'05"W., 1122.37 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "A" FOR CONVENIENCE.

RETURN THENCE TO THE POINT OF BEGINNING; THENCE ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 2, N.00°10'21"E., 227.48 FEET TO THE NORTHWEST CORNER THEREOF; THENCE ALONG THE WEST LINE OF GOVERNMENT LOT 3 IN SAID FRACTIONAL SECTION 35, CONTINUE N.00°10'21"E., 231.59 FEET, MORE OR LESS, TO THE MEAN HIGH WATER LINE, SAID POINT HEREINAFTER REFERRED TO AS POINT "B" FOR CONVENIENCE; THENCE FOLLOWING THE MEAN HIGH WATER LINE IN A SOUTHEASTERLY DIRECTION TO THE AFOREMENTIONED POINT "A".

LESS THE FOLLOWING DESCRIBED PARCEL: FROM THE NORTHEAST CORNER OF FEATHER COVE UNIT ONE, AS RECORDED IN PLAT BOOK 85, PAGES 74-75, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE SOUTH 2433.57 FEET OF THE NORTHEAST 1/4 OF SAID SECTION 2, AS A POINT OF REFERENCE; THENCE ALONG THE NORTH LINE OF SAID SOUTH 2433.57 FEET THEREOF S.89°51'16"E., 1734.37 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID LINE S.89°51'16"E., 188.32 FEET; THENCE LEAVING SAID LINE N.52°11'5[illegible]"E., 73.66 FEET; THENCE N.89°51'16"W., 130.00 FEET; THENCE S.00°[illegible]4"W., 45.00 FEET TO THE POINT OF BEGINNING.

3376

EXHIBIT 4

APPENDIX 2
Duke Energy Agreements

Duke Energy Agreement
Preserve Security

USE AND LICENSE AGREEMENT

THIS AGREEMENT is made this 5 day of December, 2005, between PINELLAS COUNTY, a political subdivision of the State of Florida, and the FLORIDA POWER CORPORATION, d/b/a PROGRESS ENERGY FLORIDA, INC., a Florida Corporation.

WHEREAS, PINELLAS COUNTY, hereinafter referred to as the "County", leases from THE BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "TIIF," several parcels of land in Pinellas County, in the area known as Weedon Island (TIIF Parcels); and

WHEREAS, County owns several parcels of land in Pinellas County, in the area known as Weedon Island (County Parcels); and

WHEREAS. FLORIDA POWER CORPORATION d/b/a PROGRESS ENERGY FLORIDA, INC., hereinafter referred to as "FPC", owns several parcels of land in Pinellas County, in the area known as Weedon Island (FPC Parcels); and

WHEREAS, FPC's sole access to their property is through the County's property for which the parties have already exchanged an easement; and

WHEREAS, the County and FPC have individual and mutual needs for the protection of their above-described respective properties; and

WHEREAS, the County constructed a roadway known as Weedon Drive, an entrance station, and entrance gates at the western boundary of the County's property, and installed water and sewer lines.

NOW THEREFORE, for Ten Dollars ($10.00) receipt of which is hereby acknowledged, the mutual covenants described hereinafter, and other good and valuable consideration, the parties hereto agree as follows:

1. Commencement and Term of Agreement: This Agreement shall commence on the date when the last party signs. The term of this Agreement shall be for five (5) years renewable for additional terms of five (5) years for up to a total of twenty-five (25) years by letter agreement between the County Administrator or his designee and FPC, subject to the termination or cancellation provisions contained hereinafter.

2. Purpose of Agreement: The parties agree that the purpose of this agreement is to define the parties' responsibilities with respect to securing the FPC Parcels, County Parcels, and TIIF Parcels, limit public access at certain times, and provide monitoring of ingress and egress during dusk to dawn hours at the County entrance station. The parties seek to protect their respective properties from dumping and vandalism, to protect the natural and cultural resources on the properties, including but not limited to native plant communities, endangered bird and other species, and any property thereon of archaeological significance.

3. Pinellas County's Obligations: The County agrees to the following:

a. To be solely responsible for the maintenance of the portion of the road shared by all three parties' land which lies within the boundaries of the properties owned and leased by both parties described hereinabove.

b. To be solely responsible for major repairs to roadway, entrance station, and entrance gates including but not limited to foundation, roof, walls, electrical, plumbing, air conditioning, heating, windows, replace indoor and outdoor lighting fixtures, indoor and outdoor water fixtures and mechanical systems.

c. To be solely responsible for the landscaping surrounding the entrance station.

d. To be solely responsible for the painting of the interior and exterior walls of the entrance station.

e. To be solely responsible for keeping the interior of the structure clean and in good order including the removal of any trash or debris and general janitorial clean up.

f. To be solely responsible for the payment of monthly electrical service, sewer and water service, local telephone service, trash removal, and janitorial service.

g. To be solely responsible for pest control service, if desired.

h. To notify FPC whenever there is road construction or road maintenance activities that would restrict the use of Weedon Drive. The scheduling of all construction or road maintenance activities shall be coordinated with FPC.

i. To be solely responsible for the development and placement of signage indicating the Weedon Island Preserve.

4. Florida Power Corporation's Obligations:

a. To be solely responsible for staffing the entrance station when the Weedon Island Preserve, as maintained by the County closes at dusk until it reopens in the morning. In the event that FPC staff witness trespass or other illegal activity on County owned or leased property, they shall immediately notify the appropriate law enforcement authorities.

b. To be solely responsible for the development and placement of signage on the entrance gate to identify the Florida Power entrance during the hours when entrance station is staffed if it, in its sole discretion, determines that such signage is needed. The contents of such sign is subject to the approval of County, which approval shall not be unreasonably withheld.

5. Pinellas County's and Florida Power Corporation's Mutual Obligations: The County, and FPC mutually agree to the following:

Allow access to their respective owned and leased properties, as set forth in the existing easements between the parties.

6. Right of Inspection: The parties hereto shall each have the right upon reasonable notice to inspect the other parties' property, but only in matters directly pertaining to this Agreement.

7. License and Use Agreement; Retention of Property Rights: The parties hereto agree and stipulate that this Agreement constitutes permissive use only. Any future agreement to place facilities and related structures to further the purposes of this Agreement shall not operate to create or vest any property right in any party except the underlying fee title holder. The parties agree that they will in no way interfere with or impede the conservation, protection and enhancement efforts or routine business operations of any other party's respective property.

8. Archaeological and Historic Sites: Execution of this Agreement does not affect any party's obligations under Chapter 267, Florida Statutes. The collection of archaeological or historic artifacts or the disturbance of an archaeological or historic site on the property of any other party to this Agreement is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources, and the owner of the affected property.

9. Liability and Indemnification: Each party to this agreement shall be liable to its own employees, agents, representatives, invitees, licensees, officers and directors for property damage and injuries to these people occurring on any of the properties which are the subject of the Agreement, except for such property damage and injuries caused by the intentional or grossly negligent actions or omissions of the other party. Nothing herein shall be deemed a waiver of the provisions of Section 768.28, Florida Statutes, as it may be amended or renumbered from time to time, with respect to the County.

10. Breach of Covenants, Terms, or Conditions; Cancellation: If either of the parties breaches any covenant, term or condition of this Agreement, any other party may give written notice to the breaching party to remedy such breach within thirty (30) days of such notice. If the breaching party fails to remedy the breach to the satisfaction of the complaining party, that party may unilaterally terminate this agreement, effective upon receipt of written notice.

With or without cause, any party to this Agreement may cancel the Agreement upon a minimum of 90-days written notice to the other party.

11. No Waiver of Breach: The failure of any party to insist in any one or more instances upon strict performance of or compliance of any one or more of the covenant, terms or conditions of this Agreement shall not be construed as a waiver of such covenant, terms or conditions of this Agreement, but the same shall continue in full force and effect, and no waiver of a party of any one of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by the waiving party.

12. Notices: All notices given to the COUNTY hereunder shall be forwarded to the COUNTY at the foregoing address, by registered or certified mail, return receipt requested, until FPC is notified otherwise in writing. All notices given to FPC hereunder shall be forwarded to FPC at the following address:

a. For the County:
Lease Manager
Lease Management Division
201 Rogers Street
Clearwater, FL 33756

b. For FPC:
Plant Manager, Bartow Plant
Florida Power Corp. Bartow Plant
P. O. Box 14042, MAC BP 39
St. Petersburg, FL 33733-4042

until either party is notified otherwise in writing.

13. Duplicate Originals: This Agreement shall be executed in at least three duplicate originals, each of which shall be considered an original for all purposes.

14. Entire Agreement: This Agreement sets forth the entire understanding and agreement between the parties and shall be amended only upon the execution of a written approval by both parties hereto.

15. Assignment: This Agreement may be assigned by one party only upon the written consent of the other party. If one party assigns its interest in and obligations under this Agreement by direct assignment or by sale of a portion or all of its property without the written consent of the other party, then this Agreement shall automatically terminate.

16. Compliance With Laws; Governing Law; Venue: The parties agree that this Agreement is contingent upon and subject to all local, State and Federal rules, ordinances, regulations, laws, and statutes. This Agreement shall be governed by the laws of the State of Florida, as well as the ordinances of Pinellas County. Venue for all actions brought under this Agreement shall be in the courts of Pinellas County, Florida.

17. Paragraph Headings: Articles, subsections, paragraphs and other captions contained in this Agreement are for reference purposes only, and are in no way intended to describe, interpret, define, or limit the scope or intent of this Use and License Agreement or the provisions hereof.

18. ORDINANCE 04-63. Pursuant to Ordinance 04-63, the Board of County Commissioners has delegated authority to STEPHEN M. SPRATT, County Administrator, for the purposes of entering into and executing said Use and License Agreement.

IN WITNESS WHEREOF, the parties hereto have hereunder executed this Agreement on the day and year so indicated, to be effective on the day and year first above written.

WITNESS:

By: Della Klay
Print Name: Della Klay

LICENSOR:
PINELLAS COUNTY, FLORIDA
By and through its County Administrator

By: _____
Print Name: Stephen M. Spratt
Title: County Administrator

FLORIDA POWER CORPORATION, doing business as PROGRESS ENERGY FLORIDA, INC.

Harry Sidons
Print Name: Harry Sidons
Witness

By: John S. Keenan
Print Name: JOHN S. KEENAN
Print Title: VICE PRESIDENT

Brenda D. Fritter
Print Name: Brenda D. Fritter
Witness

(Corporate Seal)

APPROVED AS TO FORM
OFFICE OF THE COUNTY ATTORNEY

By: _____
Assistant County Attorney

Jan/2005-0048 WEEDONS IS USE AGREEMENT & LICENSE
7/27/05

RENEWAL INFORMATION

Automatic Unlimited
(Circle one)

Lease No. 2005-0048 Participant: Florida Power Corporation

Current Term End Date: 12/4/2010
Notice to Terminate Days: 90 At any time: ✓
At end of term: _____

County as: (Landlord) or Tenant (circle one)

County Contact: Pam Leisure
Dept.: D.E.M. Phone No. 3-6505

Advised of next renewal period. yes

Inquired as to County need for space/land. yes

Approved renewal: (Yes) or No (circle one)
If No, include reason: _____

Participant Contact: Tom Callahan
Phone No. 827-6161

Advised of next renewal period. yes

Approved renewal: (Yes) or No (circle one)

Staff initials: EMS
Date: 11/10/09

Pinellas County

REAL ESTATE MANAGEMENT DEPARTMENT

MEMORANDUM

TO: Robert S. LaSala, County Administrator

THROUGH: Mark Woodard, Assistant County Administrator

FROM: Paul S. Sacco, Director

SUBJECT: Signature Memorandum
Florida Power Corporation dba Progress Energy Florida, Inc.
Amendment to Use and License Agreement
Weedon Island Gatehouse

DIST.: Paul Cozzie, Director, Culture, Education & Leisure Department

DATE: October 4, 2011

RECOMMENDATIONS: I RECOMMEND THE COUNTY ADMINISTRATOR APPROVE AND EXECUTE THE ATTACHED AMENDMENT TO USE AND LICENSE AGREEMENT.

DISCUSSION: Pursuant to the Use and License Agreement dated December 5, 2005, Florida Power Corporation dba Progress Energy Florida, Inc. ("FPC") currently facilitates security staffing at the Weedon Island Gatehouse from dusk until the Preserve Gate reopens each morning at 6:00 AM. Through this Amendment to Use and License Agreement, FPC seeks to modify the agreement to allow for the use of remotely monitored security technology in lieu of contract security staffing at the gate.

FPC will provide materials, labor and on-going preventative maintenance and repairs of all newly installed equipment. This will include gates and gate operators, badge readers, key pad access, closed circuit television, two-way intercom, remote gate release, surge protection, fiber optic wiring, and all associated network equipment. The gate will be monitored and operated from the main plant so no security personnel will be necessary at the Gatehouse.

FISCAL IMPACT: There is no fiscal impact.

This Amendment to Use and License Agreement falls within the authority the Board of County Commissioners delegated to the County Administrator, pursuant to Section 2-62, Pinellas County Code. Accordingly, we would appreciate your signature where indicated.

APPROVED: Mark S. Woodard for RSL DATE: 10/11/11

Attachments/Exhibits:
Contract Review
Amendment to Use and License Agreement

AMENDMENT TO USE AND LICENSE AGREEMENT

This Amendment is made this 11 day of October 2011, between PINELLAS COUNTY, a political subdivision of the State of Florida and FLORIDA POWER CORP, d/b/a/ PROGRESS ENERGY FLORIDA, INC. ("FPC"), a Florida corporation.

WITNESSETH:

Whereas, PINELLAS COUNTY and FPC entered into that certain Use and License Agreement dated December 5, 2005, (the "Original Agreement") regarding the parties' responsibilities with respect to certain FPC and County owned parcels at Weedon Island, as more particularly described in the Agreement.

Whereas, PINELLAS COUNTY and FPC desire to amend the Original Agreement to provide for automated security technology in lieu of contract security staffing at the Weedon Island gate as well as to amend the automatic extension provision.

Whereas, The Original Agreement together with this Amendment shall hereinafter be referred to as the "Agreement".

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, PINELLAS COUNTY and FPC agree as follows:

1. **Recitals.** The parties agree that the recitals are true and correct and by this reference incorporated and made a part of this Amendment.

2. **Definitions.** The terms used in this Amendment without definition shall have the same meaning as when used in the Original Agreement.

3. **Section 1 is hereby replaced in its entirety with the following language:**

"This Agreement shall commence on the date when the last party signs. The term of this Agreement shall be for five (5) years automatically renewable for additional terms of five (5) years for up to a total of twenty-five (25) years, subject to the termination or cancellation provisions contained hereinafter."

4. **Section 4 (a) and (b) are hereby replaced in their entirety with the following language:**

Florida Power Corporation's Obligations:

a. To be responsible, at its cost, for procuring and installing automated security technology to facilitate remote monitoring of the Weedon Island Preserve Gate (the "Entrance Gate"). FPC shall not be required to locate any staffing at the Entrance Gate. The remote

security technology shall monitor the entrance station from dusk until it reopens in the morning (the "Evening Hours"). In the event FPC staff monitoring the remote security technology witness trespass or other illegal activity on County owned or leased property, it shall immediately notify the appropriate law enforcement authorities.

b. FPC shall provide, at its cost throughout the term of the Agreement, maintenance and repairs of installed security equipment to include gates and gate operators, safety and free exit loops (egress gate only), badge readers; key pad access; CCTV (closed circuit television); two way intercom and remote gate release located in PEF Bartow Command Center, surge protection, and associated network equipment supporting the security hardware.
c. PINELLAS COUNTY shall have access to the Preserve Gate during the Evening Hours using keypad or remote release operated by the BCC.
d. PINELLAS COUNTY acknowledges and agrees that FPC shall not be responsible for monitoring any public activities on the Preserve and that PINELASS COUNTY remains responsible for ensuring visitors exit the Preserve at the conclusion of each day or event.

5. **Counterparts:** This Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, and all of which together shall constitute one and the same instrument. A facsimile copy of this Contract evidencing any signatures shall be considered as an original for all purposes.

6. Except as amended and supplemented hereby, the Original Agreement remains unmodified and in full force and effect. If there are any inconsistencies between this Amendment and the Original Agreement, the terms of this Amendment shall govern

[REMAINDER OF PAGE LEFT BLANK]

The undersigned have duly executed this Amendment as of the day and year first indicated above.

WITNESS:
By: Della Kling
Print Name: Della Kling

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY
By _____
Attorney

WITNESS:
By: Emilio Crespo
Print Name: Emilio Crespo

PINELLAS COUNTY, FLORIDA
By: Mark D. Woodard for PSC
Print Name: Mark Woodard
Title: Assistant County Administrator

FLORIDA POWER CORP d/b/a
PROGRESS ENERGY FLORIDA, INC.
By: T.E. Callagh
Print Name: Thomas E. Callagh
Title: Plant Manager

Duke Energy Agreement
Management of Parcels

LICENSE AGREEMENT

THIS LIMITED LICENSE PRIVILEGE AGREEMENT, made and entered into this 11 day of May, 1999, by and between FLORIDA POWER CORPORATION, a Florida corporation, "LICENSOR" herein, and PINELLAS COUNTY, FLORIDA, a political subdivision of the State of Florida, "LICENSEE" herein;

WITNESSETH:

WHEREAS, LICENSOR is the owner of the fee simple title to the following parcels in Pinellas County, Florida: 20/30/17/00000/130/0100; 21/30/17/00000/100/0000; 21/30/17/00000/210/0000; and 21/30/17/00000/310/0000; recorded in OR Book 1604, page 230 (among other lands) area of said site being hereinafter referred to as the "License Area" as shown in sketch attached hereto as Exhibit "A" and by this reference incorporated herein and made a part hereof; and

WHEREAS, LICENSEE has requested that LICENSOR grant to LICENSEE the limited privilege and license to occupy and utilize the License Area for the purpose of making available to the public LICENSORS fee owned property for recreational purposes without charge, the protection of natural resources, including but not limited to native plant communities, endangered bird and other species, to manage the Property, conduct control burns, remove exotics, and perform environmental restoration of the Licensed Area, and also protection for the two archaeological sites as depicted on attached Exhibit "A"; and

WHEREAS, LICENSOR is willing to grant to LICENSEE the requested limited privilege and license for such occupancy and utilization, subject to certain terms and conditions as stipulated below along with specific requirements as shown on attached Exhibit "B" and by this reference incorporated herein and made a part hereof; and

WHEREAS, LICENSOR will also grant public access easements to archeological sites on licensed Premises; and

WHEREAS, LICENSOR will allow County to build interpretive trails to the archeological sites and conduct guided tours to these sites.

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FOLLOWS:

A. That LICENSOR hereby grants to LICENSEE, and LICENSEE hereby accepts from LICENSOR, the limited privilege and license to occupy and utilize the License Area, together with such other limited privilege and license as may be reasonably necessary or convenient for the full enjoyment of the License Area for the above described purposes only.

B. That for and in consideration of the foregoing limited privilege and license, the LICENSEE hereby covenants to pay to LICENSOR Ten ($10.00) Dollars, the receipt and sufficiency of which are hereby acknowledged, and other good and valuable considerations derived from LICENSEE'S management of LICENSOR'S land and from the provisions of this Agreement. This Agreement shall commence May 1, 1999, and shall run for Five (5) years, and be renewable for additional incremental terms of Five (5) years each for up to a total of Twenty-five (25) years by letter agreement between the County Administrator or his designee and Florida Power Corporation, subject to the termination or cancellation provisions contained hereinafter.

C. It is expressly stipulated by the said LICENSOR and LICENSEE that this License Agreement is a license for permissive use only and that the placing of any improvement upon the property pursuant to this Agreement shall not operate to create or vest any property right in said LICENSEE.

D. It is expressly stipulated by the said LICENSOR and LICENSEE that the privileges provided herein create no perpetual rights but determinable privileges depending solely on the conditions in this Agreement and at no time shall this License Agreement be construed as a License coupled with an interest.

E. That LICENSOR'S consent to LICENSEE'S use of the property described herein is limited. Such conditional and restricted consent creates privileges in the LICENSEE to use the land only insofar as compliance with the conditions herein is continued.

F. That LICENSOR expressly reserves unto itself, its successors, lessees and assigns, the continued right to occupy and utilize the entire License Area and to grant to other parties such privileges affecting the License Area as are not inconsistent with privileges herein granted.

G. That upon LICENSEE'S breach of any covenant or condition contained herein, this License Agreement after written notification by LICENSOR to LICENSEE of such breach and upon failure of LICENSEE to remedy or remove such breach within a period of fifteen (15) working days after receipt of such written notification, shall cease and terminate and shall become null and void without further notice from LICENSOR and the privilege and license herein granted shall thereupon immediately revert to the LICENSOR in absolute; however, LICENSOR expressly does not waive any rights of recourse LICENSOR may have against LICENSEE for damages sustained by LICENSOR as a result of such breach.

H. That LICENSOR hereby expressly reserves the right to revoke this License Agreement at will by giving LICENSEE ninety (90) days written notice, and LICENSEE shall have no right to compensation for any expenditures by LICENSEE upon revocation of this License Agreement.

I. That this privilege and license is personal to LICENSEE and shall not be assigned or transferred in whole or in part without the express prior written consent of LICENSOR, which consent of LICENSOR shall be solely at LICENSOR'S discretion.

J. That the validity of this Agreement is contingent upon LICENSEE first obtaining proper zoning, authority, approval and/or permit from the appropriate governmental body or public agency having jurisdiction over such utilization at this location, as may be required. If such zoning, authority, approval and/or permit is not secured, this Agreement will be considered null and void.

K. That LICENSOR shall not be liable for any damages to LICENSEE'S utilization howsoever resulting from LICENSOR'S continued use and occupancy of the License Area; LICENSOR, however, shall not willfully cause undue damage to LICENSEE'S utilization.

L. That LICENSEE shall comply with all Federal, State and local laws, rules and regulations in respect to the use of the corridor. LICENSEE shall not store, dispose of, treat or generate any hazardous waste or hazardous substance without the express advance written approval from LICENSOR. Approval from LICENSOR shall be solely at the LICENSOR'S discretion. The terms "hazardous waste" or "Hazardous Substance" shall be as defined in 40 C.F.R. Part 261 and in 40 C.F.R. Part 300. Failure to comply with this Paragraph "L" shall be cause for immediate cancellation of this Agreement and LICENSEE expressly agrees to be liable for any violation of this Paragraph "L" to the extent imposed by law.

M. That a free and easily passable twenty foot (20') wide access way be retained along the length of LICENSOR'S 200-foot wide transmission corridor; and, power plant access road for use by LICENSOR for emergency access and for normal maintenance and patrol purposes.

N. That if the utilization area is fenced LICENSEE shall install a sixteen foot (16') wide gate in the fence making that portion of the License Area accessible. Gate should have a lock installed by LICENSOR.

O. That LICENSEE shall assume the sole duty, responsibility and obligation of mowing or otherwise appropriately maintaining the surface of the portion of the License Area upon and across the land involved in a condition compatible with the surrounding area.

P. That any disturbed area within the License Area including LICENSOR'S patrol and access road, shall be restored by LICENSEE to a condition at least as good as that which existed prior to construction activity.

Q. That LICENSEE hereby expressly understands, covenants and agrees (a) that nothing contained in this Agreement or contemplated is intended to or shall increase LICENSOR'S liability for personal injury or death or for any property damage, (b) that LICENSOR does not assume any such additional liability, (c) that liability arising out of the utilization and occupancy of LICENSOR'S License Area by LICENSEE and LICENSEE'S employees, contractors, invitees or any representative, is hereby assumed by LICENSEE and shall be at the sole and exclusive risk of LICENSEE, (d) if and only if such liability is caused solely by LICENSEE'S negligence, that LICENSEE shall answer and satisfy any and all complaints relative to LICENSEE'S utilization of LICENSOR'S License Area and (e) that LICENSEE covenants not to interfere with LICENSOR'S existing and future high voltage underground or overhead electric distribution or transmission lines, pipelines, ingress/egress and related facilities in any manner whatsoever.

R. LICENSEE'S liability under this License Agreement for bodily injury and property damage to third parties and invitees shall not exceed statutory limits. Nothing herein shall constitute a waiver of LICENSEE'S sovereign immunity under Florida law, including but not limited to Section 768.28, Florida Statutes. In no event shall LICENSOR be liable to LICENSEE or third parties for any direct, indirect, incidental, special, consequential, exemplary or punitive damages whatsoever, arising out of or in connection with the construction, maintenance, use, or ownership of the property. LICENSOR is released from any liability for such damages under Florida Statute 375.251.

S. That LICENSEE'S operations, activities and equipment used within the License Area in proximity to any of LICENSOR'S utility facilities shall, at all times, be in strict compliance with applicable provisions of the National Electrical Safety Code (NESC) and the Occupational Safety and Health Act of 1971 (OSHA). LICENSEE is further notified and hereby agrees to so notify any of LICENSEE'S employees, agents, contractors, representatives or other persons engaging in LICENSEE'S supervision or control, that extreme caution is necessary around all of LICENSOR'S electrical and gas/fuel facilities, supporting structures, anchor guys or related appurtenances, and in the event of any damages or injuries, LICENSEE shall immediately report the nature and extent thereof to LICENSOR'S nearest local office.

T. This License Agreement shall be construed in accordance with Florida Law. No amendment or other modification of this Agreement shall be enforceable unless the same shall be in writing and signed by both parties hereto. No failure to insist on full or timely performance of any provision herein shall be construed as a waiver of the right to insist on full or timely performance of the same provision on subsequent occasion, or the full or timely performance of any other provision at any time.

IN WITNESS WHEREOF, the said LICENSOR and LICENSEE have caused these presents to be executed in their respective corporate names by their proper officers thereunto duly authorized and their respective corporate seals to be hereunto affixed and attested, all as of the day and year first above written.

(as LICENSOR)

ATTEST:

By: _____
Print Name: Douglas E. Wentz
Title: Assistant Secretary

By: _____
Print Name: Melisa M. Oliveira
Title: Assistant Corporate Secretary

(corporate seal)

FLORIDA POWER CORPORATION

By: _____
Print Name: Wade F Sperry
Title: ~~President~~ Vice President Fossil Operations

(as LICENSEE)

ATTEST: KARLEEN F. DEBLAKER
Clerk of the Circuit Court

By: _____
Deputy Clerk
Print Name: Linda R. Reed

(seal)

PINELLAS COUNTY, FLORIDA
By and through its Board of
County Commissioners

By: _____
Chairman
Print Name: Sallie Parks

APPROVED AS TO FORM
OFFICE OF THE COUNTY ATTORNEY

By: _____
Sr. Asst. County Attorney

97240.
5/12/98

SPECIFIC REQUIREMENTS

For the purpose of making available to the public LICENSOR's fee owned property for recreational purposes without charge, the protection of natural resources, including but not limited to native plant communities, endangered bird and other species, to manage the Property, conduct control burns, remove exotics, and perform environmental restoration of the Licensed Area, and also protection for the two archaeological sites.

1. That other than LICENSOR's facilities, no overhead wires, poles, light standards, dumpsters, signs, trees, buildings, structures or obstacles shall be located, constructed or installed within the License Area without written approval by LICENSOR.

2. That any shrubbery planted by LICENSEE within the License Area shall be of a variety not exceeding twelve feet (12') in height at maturity.

3. That LICENSEE agrees that no refueling operations take place within the right-of-way.

4. That no parking or storage shall occur under or near LICENSOR's facilities.

5. That LICENSEE shall notify LICENSOR's representative of Transmission Underground (i.e., Paul T. White or his designated alternate, telephone 727/866-5729, St. Petersburg) at least forty-eight (48) hours prior to LICENSEE's performing any excavation within the License Area in order that LICENSOR may arrange for an authorized representative to be on site to assist in establishing the existing location of LICENSOR's underground cable(s) and to observe all excavation activities in proximity to said cable(s) within the License Area.

6. That LICENSEE shall make special note of Guidelines involving LICENSOR's oil pipeline attached as Pages 2 of 3 and 3 of 3 of Exhibit "B", by this reference incorporated herein and made a part hereof, and LICENSEE shall comply fully with said Guidelines.

7. That LICENSEE is responsible for performing an endangered/threatened species study prior to alteration of terrain.

8. That LICENSEE shall notify LICENSOR's representative for Underground Fuel Oil Pipeline (i.e., Yvonne Ponce or her designated alternate, telephone 727/826-4268, St. Petersburg) at least forty-eight (48) hours prior to LICENSEE's performing any excavation within LICENSOR's right-of-way easement strip in order that LICENSOR may arrange for an authorized representative to be on site to assist in establishing the existing location of LICENSOR's underground fuel oil pipeline and to observe all excavation activities in proximity to said pipeline within LICENSOR's right-of-way.

9. That LICENSEE shall notify LICENSOR's plant manager (i.e., David Buell or his designated alternate, telephone 727-943-3006, St. Petersburg) at least forty-eight (48) hours prior to LICENSEE's performing any controlled burns within the License Area in order that LICENSOR may arrange for an authorized representative to be on site.

GUIDELINES FOR CONSTRUCTION CROSSING OF THE B/A OIL PIPELINE

The Florida Power Corporation-Bartow to Anclote Thermal insulated oil transport line has been installed and is operated in compliance with Title 49-Part 195 Federal D.O.T. - Transportation of Liquids by pipeline. The line is 14" in diameter coated and insulated for a total outside diameter of 17.5".

1. Buried Structures - Crossing Situations

   The minimum clearances required for crossing situations of the B/A oil line and proposed other lines or structures follows:

   a. Maintain 12 inches of clearance between the oil line and other pipes or structures being buried and crossing the line.

   b. When 12 inches of clearance is not practical, provisions can be negotiated with Florida Power Corporation for a substitution of the soil barrier with an approved barrier.

   c. Contact Carney Cameron, (727) 827-6147 or Yvonne Ponce, (727) 826-4268 48 hours prior to construction. An FPC representative must be present to inspect any crossings that are made.

2. Buried Structures - Paralleling Structures

   These are two standards of acceptability for paralleling situations:

   a. Florida Power Corporation R/W, easements and other controlled areas.

      1. All paralleling of buried structures and other pipes to the B/A oil line must maintain a minimum of three (3) feet surface to surface clearance.

   b. All paralleling situations outside the control of the Florida Power Corporation should request the minimum three (3) feet surface to surface clearance.

3. Minimum Soil Cover Over B/A Oil Line

   The minimum soil cover requirements at any location along this Bartow to Anclote oil pipe line has been established to be 48 inches, as referenced from top of the pipe to ground level, road bed, river bottom, drain ditch bottom, etc. Any variance in this minimum protective soil cover must be negotiated with and approved by the Florida Power Corporation. A substitute, protective, equivalent concrete structure is shown on attached Drawings #A-S-34-A-1, and AB-P2-A. Florida Power Corporation must be contacted to determine the appropriate concrete structure.

4. Roadways

Roadways of the oil pipeline must be cased and vented from R/W line to R/W line. Driveways which can be closed to allow for maintenance on the pipeline will not normally be required to provide casing, but will be required to comply with item 3 above.

Note: Actual casing requirements will be determined by conditions at location of the crossing.

5. Building, Structures, Retention Ponds, Wells, Fences

a. All structures, building retention ponds or wells, must maintain a minimum of fifteen (15) feet from B/A oil pipeline centerline. If existing foundation, retention ponds or wells are closer than fifteen (15) feet, designate them as existing and submit information to FPC on design drawings. For retention ponds, the fifteen (15) foot requirement applies from the top of bank to centerline of pipe.

b. Fencing should be constructed in a way that poles straddle either side of line. The fence shall be grounded. Grounding rods shall be 15 feet away from the B/A oil pipeline.

6. Construction Equipment

Equipment or material used in construction activities must not be parked or stored within three (3) feet of the B/A oil pipeline centerline.

Rev 6 9/30/98

BOARD OF COUNTY COMMISSIONERS
Susan Latvala - Chairman
John Morroni - Vice Chairman
Calvin D. Harris
Karen Williams Seel
Robert B. Stewart
Barbara Sheen Todd
Kenneth T. Welch

Pinellas County
GENERAL SERVICES
Lease Management

March 6, 2004

Ms. Brenda Brickhouse
Progress Energy Florida – Bartow Plant
1601 Weedon Island Drive, NE
St. Petersburg, FL 33702

Subject: Exercise Renewal Option

Dear Brenda:

Florida Power Corporation now known as Progress Energy Florida and Pinellas County entered into a Limited License Privilege Agreement dated May 11, 1999. A copy of the document is attached.

According to the terms of the document, the County may renew for additional five (5) year terms by a letter Agreement between the County Administrator and Florida Power Corporation.

The current License will end April 30, 2004. The County would like to exercise its option to renew for another five (5) year term under the same terms and conditions. Please sign and return to our office.

Stephen M. Spratt
County Administrator

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY
By Sarah Richardson
Asst.

Print Name: Brenda Brickhouse
Title: Bartow Plant Manager
Florida Power Corporation

PLEASE ADDRESS REPLY TO:
201 Rogers Street
Clearwater, Florida 33756
Phone: (727) 464-3496
FAX: (727) 464-3374
SUNCOM: 570-3496
Website: www.pinellascounty.org

BOARD OF COUNTY COMMISSIONERS
Robert B. Stewart - Chairman
Calvin D. Harris - Vice Chairman
Ronnie E. Duncan
Susan Latvala
John Morroni
Karen Williams Seel
Kenneth T. Welch

Pinellas County
REAL ESTATE MANAGEMENT

August 21, 2008

Ms. Brenda Brickhouse
Progress Energy Florida
Bartow Plant
1601 Weedon Island Drive, NE
St. Petersburg, FL 33702

Re: Renewal Option (April 30, 2009 – 2014)

Dear Brenda:

Florida Power Corporation, now known as Progress Energy Florida, and Pinellas County entered into a Limited License Privilege Agreement dated May 11, 1999. A copy of the License Agreement is attached for your reference.

According to Paragraph B, the License is renewable for additional incremental terms of five years each by letter agreement between the County Administrator and Florida Power.

The current term expires April 30, 2009. The County would like to exercise its option to renew for another five years under the same terms and conditions.

If Florida Power agrees, please have an appropriate officer sign where indicated and return the original to Lease Mgt. Division, 201 Rogers Street, Clearwater, FL 33756.

PINELLAS COUNTY

By: _____
Fred E. Marquis
Interim County Administrator
DATED: 10/2/08

FLORIDA POWER CORPORATION
d/b/a PROGRESS ENERGY, INC.

BY: _____
Print Name: David W. Sorrick
Print Title: VP- Power Generation Florida
DATED: Sept. 16, 2008

PSS: DJD/bs
Attachment
Beth/1997-0240 Renewal Letter.doc

Duke Energy Agreement
Dock for PCSO Boat

LICENSE AGREEMENT

THIS LICENSE AGREEMENT is made this 11 day of SEPT, 2002, between FLORIDA POWER CORPORATION, a Florida corporation, hereinafter referred to as "FPC" or "LICENSOR," and PINELLAS COUNTY, a political subdivision of the State of Florida, hereinafter referred to as the "COUNTY" or "SHERIFF."

WITNESSETH:

1. PREMISES: The FPC lets and licenses to COUNTY a tract of land more particularly described as a portion of the seawall area to the east of the Florida Power Bartow Plant at Weedon Island and north of the Plant's intake channel and dock, hereinafter referred to the "Premises," for the sole purpose of installing and use of a boat cradle lift. The location of the Property is shown in Exhibit "A." ATTACHED HERETO AS EXHIBIT "A."

2. TERM AND RENTAL: FPC for and in consideration of one dollar ($1.00) receipt of which is hereby acknowledged, and the covenants herein contained on the part of the COUNTY to be kept and performed, hereby grants the COUNTY the use of a portion of FPC's seawall for an initial term of five (5) years, commencing on the effective date (the date of executed by the County Administrator) and ending five (5) years from the date of execution by the COUNTY.

This License shall stand renewed for ten (10) automatic additional one (1) year renewal terms unless either Party gives the other Party three (3) months written notice of termination prior to the end of any said term.

3. USE: This License is made on the express condition that the Premises shall be used only in conformance with the applicable laws and ordinances, for Pinellas County's installation and use of a boat cradle lift for the SHERIFF'S boat, not to exceed 25 feet in length, and for no other purpose or purposes, without the written consent of FPC. All rights of COUNTY hereunder may be terminated by FPC in the event that any other use be made thereof.

The cradle lift is for one power boat, not to exceed 25 feet in length, and shall be used by the Sheriff's Department for law enforcement and public safety purposes only.

4. USE OF SEAWALL BY COUNTY: During the term of the License, the SHERIFF or designee shall have the exclusive use of a portion of seawall for one vertical cradle lift.

5. ASSIGNMENT AND SUBLETTING: COUNTY shall not assign this License; neither shall COUNTY make or permit any offensive or unlawful use of the said Premises; and, COUNTY shall quit and deliver up said Premises at the end of said term in as good condition as they now are, ordinary wear and decay as occasioned by the use of the Premises for Pinellas County's use and damage by the elements excepted.

6. OWNERSHIP OF BOAT CRADLE LIFT: COUNTY shall retain ownership of the boat cradle lift, and shall be entitled to remove the same upon the expiration or termination of this License.

7. UTILITIES: FPC agrees to provide and pay all charges for water consumption and electricity supplied the Premises. FPC shall not be liable in any manner for damages to COUNTY, or for any other claim by COUNTY, resulting from any interruption in utility services.

8. MAINTENANCE: SHERIFF shall keep Sheriff's portion of said Premises free of all trash and rubbish and maintain the same in a clean, neat, orderly and sanitary condition and SHERIFF shall be solely responsible for all maintenance including, but not limited to, electrical fixtures/wiring and routine maintenance of the vertical cradle lift and support system.

9. ACCESS TO PREMISES: During installation of the boat cradle lift, FPC shall allow COUNTY'S technicians, engineers, contractors or subcontractors presenting appropriate identification to access the property. Any damage which might be done to said site by reason of the negligence or willfulness of COUNTY, its officers, employees, contractors, subcontractors, or agents, shall be paid for, corrected or repaired by COUNTY.

10. COVENANT AGAINST LIENS: COUNTY shall have no power or authority to create any lien or permit any lien to attach to Premises. COUNTY is hereby charged with the responsibility of notifying all materialmen, contractors, artisans, mechanics, laborers and other persons contracting with COUNTY with respect to the Premises or any part thereof, that such persons must look to COUNTY to secure payment of any bill for work done or material furnished to the COUNTY, or for any other purpose during the term of this License.

11. DEFAULT: The Parties covenant and agree that if either Party shall violate any of the covenants of this License, the other Party shall provide written notice to the defaulting Party and the defaulting Party shall have ten (10) days from receipt of notice to correct same.

If the defaulting Party fails to correct default, the other Party shall be entitled to any and all remedies available in law and equity.

12. WAIVER: One or more waivers of any covenant or condition by either Party shall not be construed as a waiver of a subsequent breach of the same covenant or conditions by the other Party, and the consent or approval by either Party to or of any act by the other Party requiring consent or approval shall not be construed a consent or approval to or of any subsequent similar act by the other Party.

13. DESTRUCTION OF BOAT CRADLE LIFT AND SUPPORT STRUCTURE: If the boat cradle lift/support structure therein shall be partially damaged by fire or other casualty, the damages shall be repaired by and at the expense of the SHERIFF'S DEPARTMENT. Such repairs shall be made promptly, except that no penalty shall accrue for reasonable delay which may arise by reason of adjustment of insurance on the part of the COUNTY, and for reasonable delay due to the period that repairs are being made for that portion of the Premises rendered unsuitable for use by COUNTY as a result of fire or casualty. If the Premises are totally damaged or rendered wholly untenantable by fire or said other casualty, and the Premises cannot be restored or rebuilt within one hundred twenty (120) days, COUNTY shall have the right and option of terminating this License as of the date of such casualty or cause within thirty (30) days thereafter by giving written notice to FPC. This paragraph does not apply to the seawall.

14. LIABILITY AND INDEMNIFICATION: Each Party to this agreement shall be liable to its own employees, agents, representatives, invitees, licensees, officers and directors for property damage and injuries to these people occurring on any of the properties which are the subject of the Agreement, except for such property damage and injuries caused by the intentional or negligent actions or omissions of the other Party. The potential liability of the COUNTY is limited to that liability permitted under Section 768.28, Florida Statutes, as it may be amended from time-to-time.

15. INSURANCE: COUNTY shall provide FPC with a letter evidencing that COUNTY is self-insured, if FPC so requests.

16. TAXES: FPC covenants and agrees to pay and discharge before delinquency thereof and before penalties shall accrue thereon, any taxes including ad valorem, intangible taxes, and assessments on Premises, including improvements thereof, due and payable during the term of the License and any renewals thereof. In the event that additional ad valorem, rental, sales or similar taxes are levied upon the licensed Premises due to the existence of this License, then COUNTY shall pay all such additional taxes so imposed not to exceed two thousand dollars ($2,000.00) per year.

17. OBSERVANCE OF LAWS: COUNTY agrees to observe, comply with and execute promptly at its expense during the term hereof, all laws, rules, requirements, orders, directives, codes, ordinances and regulations of any and all governmental authorities or agencies, of all municipal departments, bureaus, boards and officials, and of insurance carriers, due to its use or occupancy of the Premises. All additions, alterations, installations, partitions, or changes shall be in full compliance with the aforementioned authorities.

18. SIGNS: Any signs to be installed on the Premises shall have prior approval from FPC.

19. NOTICES: All notices under this Agreement required under this License Agreement shall be forwarded to the County at the following address:

Real Estate Management Division
201 Rogers Street
Clearwater, Florida 33756

AND

Sheriff's Department
Special Operations
10750 Ulmerton Road
Largo, Florida 33778

All notices to the COUNTY shall be forwarded to the COUNTY at the foregoing address by registered or certified mail, return receipt requested, unless FPC is notified otherwise in writing. All notices given to Florida Power Corporation hereunder shall be forwarded to the following address:

Mr. Luis Gonzales
Florida Power Corporation/Bartow Plant
1601 Weedon Island Drive
St. Petersburg, Florida 33702

by registered or certified mail, return receipt requested, unless COUNTY is notified otherwise in writing.

20. ENTIRE AGREEMENT This License Agreement as hereinabove set forth, including all exhibits and riders, if any, incorporates all covenants, promises, agreements, conditions and understandings between the Parties, and no covenant, promise, agreement, condition or understanding, either written or oral, not specifically set forth herein shall be effective to alter the performance or the rights of the Parties as hereinbefore stated.

IN WITNESS WHEREOF, the Parties hereto have hereunto executed this License Agreement the day and year first above written.

WITNESS:

By: Jennifer L. Waggoner
Print Name: Jennifer L. Waggoner
Title: Notary Public

(*Corporate Seal*)

Jennifer L Waggoner
My Commission CC908003
Expires March 22, 2004

FLORIDA POWER CORPORATION

By:
Print Name: BRENDA ETHEREDGE
Title: PLANT MANAGER

PINELLAS COUNTY, FLORIDA

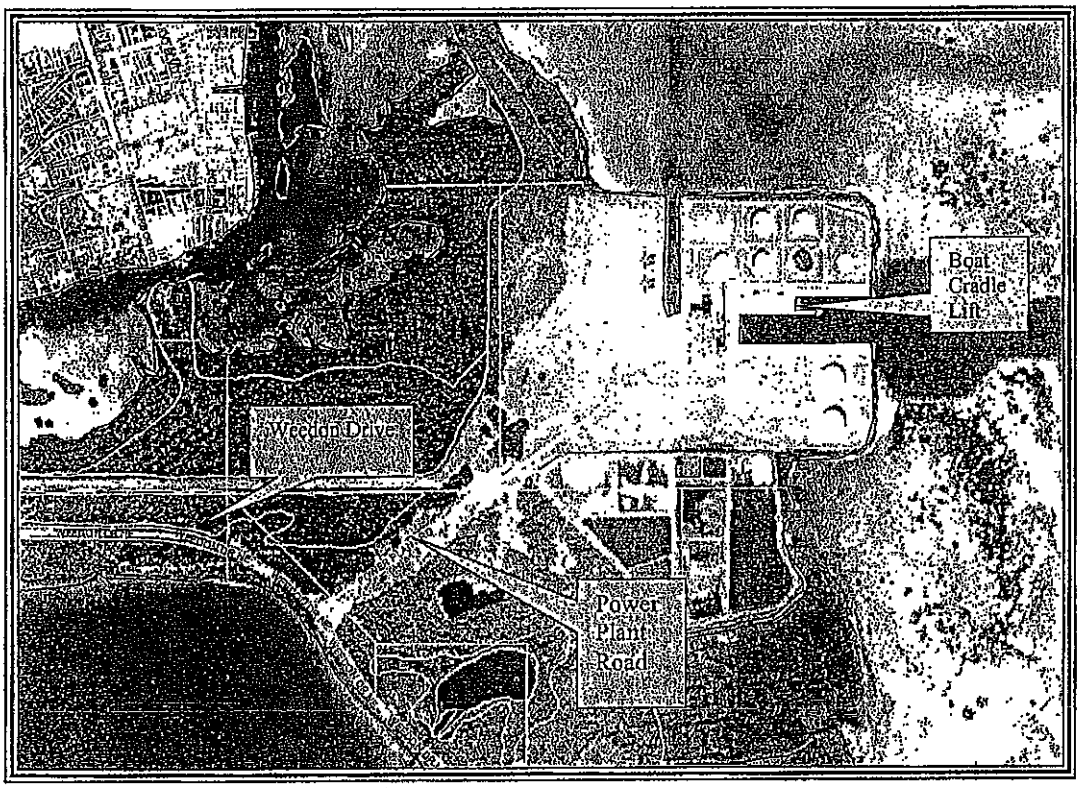
By:
Stephen M. Spratt, County Administrator
Date: October 2, 2002

APPROVED AS TO FORM

Sr. Assistant County Attorney

Exhibit "A"

FLORIDA POWER BARTOW PLANT
BOAT CRADLE LIFT





Pinellas County

Real Estate Management Department
Real Property Division

Renewal Information

☒ Automatic ☐ Unlimited

Lease No: **2002-0506** Participant: **FLORIDA POWER CORPORATION**

Current Term End Date: **September 30, 2011**

Notice to Terminate Days: **90** At any time ☐ At end of term: ☒

County as: Landlord ☐ Tenant ☒

County Contact: **Sgt. Milliken**

Department **Sheriff's Office** Phone No. **727.430.6094**

Advised of next renewal period. Yes ☒ No ☐

Inquired as to County need for space/land. ☒

Approved renewal Yes ☒ No ☐

If NO, include reason: ———

Participant Contact: **Emilio Caragol** Phone No. **email- emilio.caragol@pgnmail.com**

Advised of next renewal period. Yes ☒ No ☐

Approved renewal Yes ☒ No ☐

Staff initials: **SPG** Date: **6/29/2011**

Comments: Spoke to Lt. Somers per last years renewal- he approved & gave me Sgt. Millikens contact number for next years renewal as the new contact.

Griffin, Sean P

From: Caragol, Emilio [Emilio.Caragol@pgnmail.com]
Sent: Tuesday, July 05, 2011 8:44 AM
To: Griffin, Sean P
Subject: RE: Sheriff's boat launch at Weedon Island

Good Morning Sean,

Bartow plant management has approved the extension of the auto-renewal per your email below.

If you have any questions or require additional information please don't hesitate to call me.

Thank you,

Progress Energy

Emilio Caragol
Senior Security Specialist - FSO
Progress Energy Corporate Security
1601 Weedon Island Drive
Mail Code BR-44
St. Petersburg, FL. 33702
T> 727-827-6212
F> 727-827-6112
C> 727-408-0199
emilio.caragol@pgnmail.com

Focus on Safety First

From: Griffin, Sean P [mailto:sgriffin@co.pinellas.fl.us]
Sent: Tuesday, June 28, 2011 8:42 AM
To: Caragol, Emilio
Subject: Sheriff's boat launch at Weedon Island

Hello Mr. Caragol~

Each year around this time we email you for approval of the auto-renewal of the boat launch area at Weedon Island for the Sheriff's use. The term is from 10.1.2011 to 9.30.2011. This will be the 5th of 10 auto-renewals. I would like to ask for the approval of Progress Energy to continue this license agreement.

Thank You for your assistance, and please contact me if you have any questions.

Sean Griffin

RENEWAL INFORMATION

[Automatic] Unlimited
(Circle one)

Lease No. 2002-0504 Participant: FLORIDA POWER CORPORATION
BOAT LIFT CRADLE

Current Term End Date: 10-1-10

Notice to Terminate Days: 3 MOS. At any time: _____
At end of term: 3 MOS ✓

2002-2007 INITIAL
+10 (1 YR)
4 of 10 emails this year.

County as: Landlord or [Tenant] (circle one)

County Contact: SGT SUMERS

Dept.: SHERIFF Phone No. 420-2755

Advised of next renewal period. ✓

Inquired as to County need for space/land. VERY MUCH NEEDED.

Approved renewal: (Yes) or No (circle one)

If No, include reason: _____

Participant Contact: EMILIO CARAGOL

Phone No. emilio.caragol@pgnmail.com

Advised of next renewal period. ✓

Approved renewal: [Yes] or No (circle one)

Staff initials: JA

Date: 9-7-10

FROM: "Caragol, Emilio" <emilio.caragol@pgnmail.com>

To: "Armstrong, Jeanne T" <jarmstro@co.pinellas.fl.us>
Cc: "Callaghan, Tom" <tom.callaghan@pgnmail.com>, "Caragol, Emilio" <emilio.caragol@pgnmail.com>
Subject: RE: Sheriffs' boat launch @ Weedon Island
Date: Tuesday, September 07, 2010 9:52:10 AM

Good morning Jeanne,

Thank you for your email request below. Mr. Tom Callaghan, Manager, Bartow Combined Cycle Plant, 1601 Weedon Island Drive, St. Petersburg, Florida has approved the fourth renewal of the license agreement with Pinellas County Sheriff's Office for the boat launch for the 10/01/10 to 09/30/2011 year.

If you have any questions or require additional information please don't hesitate to contact me.

Regards,

Emilio Caragol

From: Armstrong, Jeanne T [mailto:jarmstro@co.pinellas.fl.us]
Sent: Tuesday, September 07, 2010 9:23 AM
To: Caragol, Emilio
Subject: Sheriffs' boat launch @ Weedon Island

Dear Mr. Caragol,

As was done last year in September, our Department oversees the licensing and use of the boat ramp located at your facility in Weedon Island for the Sheriff's Office use. The Sheriff has again expressed their desire to continue use of this boat launch for the 10/1/10 to 9/30/11 year. Therefore, I would like to ask for the approval of Progress Energy to continue this license agreement. This renewal would be the fourth extended renewal out of ten available.

Thank you for your assistance, and please contact me at 464-5323 with any questions or concerns.

Jeanne

Jeanne T. Armstrong
Lease Specialist
Real Property Division
Ph: 727-464-5323
E-Mail: jarmstro@co.pinellas.fl.us

RENEWAL INFORMATION

(Automatic) Unlimited
(Circle one)

Lease No. 2002-0506 Participant: Florida Power/Bartow Plant

Current Term End Date: 10/1/09
Notice to Terminate Days: 120 At any time: _____
prior to ~~At~~ end of term: ✓

County as: Landlord or (Tenant) (circle one)

County Contact: Sgt. Glenn Wilson
Dept.: Sheriff Phone No. 453-6947

Advised of next renewal period. yes

Inquired as to County need for space/land. yes

Approved renewal: (Yes) or No (circle one)
If No, include reason: _____

Participant Contact: Emilio Caragol Phone No. Email attached

Advised of next renewal period. yes

Approved renewal: (Yes) or No (circle one)

Staff initials: EMS
Date: 9/23/09

Spaulding, Elizabeth M

From: Caragol, Emilio [Emilio.Caragol@pgnmail.com]
Sent: Wednesday, September 23, 2009 9:45 AM
To: Spaulding, Elizabeth M
Subject: FW: Sheriff's boat launch - License Agreement Renewal
Importance: High

From: Caragol, Emilio
Sent: Wednesday, September 23, 2009 9:44 AM
To: 'Spaulding, Elizabeth M '
Cc: Callaghan, Tom; Myers, Darren; Sanchez, Terese; Gonzalez, Luis M
Subject: FW: Sheriff's boat launch - License Agreement Renewal
Importance: High

Good morning Elizabeth,

Per the approval below please proceed with the License Agreement Renewal between Pinellas County Sheriff's Office and Progress Energy for the PCSO boat lift.

If you have any questions or require additional information please don't hesitate to call me.

Thank you,

Emilio Caragol
Senior Security Specialist - CSO
Progress Energy - Corporate Security
Mail Code HP - 29
[illegible]
T 727-820-5212
F 727-[illegible]-1112
C 727-[illegible]-0199
Emilio.Caragol@pgnmail.com

From: Callaghan, Tom
Sent: Wednesday, September 23, 2009 8:38 AM
To: Caragol, Emilio
Cc: Sanchez, Terese; Gonzalez, Luis M; Myers, Darren
Subject: RE: Sheriff's boat launch - License Agreement Renewal

Approved

From: Caragol, Emilio
Sent: Tuesday, September 22, 2009 3:44 PM
To: Callaghan, Tom
Cc: Sanchez, Terese; Gonzalez, Luis M; Myers, Darren
Subject: FW: Sheriff's boat launch - License Agreement Renewal
Importance: High

Tom,

Per Elizabeth email below is time for renewal of the License Agreement with Pinellas County Sheriff's for their boat lift with Progress Energy. The previous agreement was signed by Tom Lawery on 10/29/2008. Their presence at the Bartow plant is value added to the security of the facility in having the Marine Patrol Unit available to us in the event a maritime incident occurs. I recommend this renewal.

Thanks,

Emilio Caragol
[illegible] Specialist - Lease
Progress Fuels Corporate Services
1601 Weedon Island Drive
Mail Code BP - 39
St. Petersburg FL. 33702
P: 727-827-6[illegible]
F: 727-8[illegible]
C: 727-[illegible]
e-mail: [illegible]@pgnmail.com

From: Gonzalez, Luis M
Sent: Tuesday, September 22, 2009 11:27 AM
To: Caragol, Emilio
Subject: FW: Sheriff's boat launch - License Agreement Renewal

Emilio please contact this Elizabeth and let's get this approved by Tom Callaghan.

Semper Fi

Luis Gonzalez
Pipeline & Terminal Supervisor
Bartow Plant
Progress Energy Florida
Tel. 727-827-6276
Fax 727-827-6244
Cell. 727-409-9315

From: Spaulding, Elizabeth M [mailto:bspauld@co.pinellas.fl.us]
Sent: Tuesday, September 22, 2009 8:31 AM
To: Gonzalez, Luis M; thomas.lawrey@pgnmail.com
Subject: FW: Sheriff's boat launch - License Agreement Renewal

The Sheriff's office has expressed the desire to continue to use the boat launch.
Please let me know if you have any other use for that site or if the we may renew the License for another year.

Please call me directly with any questions you may have.

Beth Spaulding
Lease Management
509 East Avenue South
Clearwater, FL 33756
464-5447

RENEWAL INFORMATION

(Automatic) Unlimited
(Circle one)

Lease No. 2002-0506 Participant: Florida Power/Bartow Plant

Current Term End Date: 10/1/08
Notice to Terminate Days: 120 At any time: ____
Prior ~~At~~ end of term: ✓

County as: Landlord or (Tenant) (circle one)

County Contact: Sgt. Glenn Wilson
Dept.: Sheriff Phone No. 453-6947

Advised of next renewal period. yes

Inquired as to County need for space/land. N/A

Approved renewal: (Yes) or No (circle one)
If No, include reason: ____

Participant Contact: Tom Lawery Phone No. 827-6111

Advised of next renewal period. yes

Approved renewal: (Yes) or No (circle one)

Staff initials: BB
Date: 10/29/08

Pinellas County
FACILITY MANAGEMENT
Lease Management

Renewal Information

☒ Automatic		☐ Unlimited	
Lease No.	2002-0506	Participant:	Florida Power (Progress Energy)
Current Term End Date:	Oct 1, 2008		
Notice to Terminate Days:	30	At any time ☐	At end of term: ☒
County as:	Landlord ☐	Tenant ☒	
County Contact:	Mike Dallman		
Department	Sheriff's Dept.	Phone No.	582-6403
Advised of next renewal period.	Yes ☐	No ☒	
Inquired as to County need for space/land. ☐			
Approved renewal	Yes ☒	No ☐	
If No, include reason:	He has no voicemail, email, no contact		
Participant Contact:	Luis Gonzalez	Phone No.	luis.gonzalez@pgnmail.com
Advised of next renewal period.	Yes ☒	No ☐	
Approved renewal	Yes ☒	No ☐	

Staff initials: JDH

Date: 9/27/2007

Duke Energy Florida
Aquatic Regulatory Zone

LICENSE AGREEMENT

THIS LIMITED LICENSE PRIVILEGE AGREEMENT, made and entered into this 1st day of November, 2001, by and between FLORIDA POWER CORPORATION, a Florida corporation "LICENSOR" herein, and PINELLAS COUNTY, a political subdivision of the State of Florida, "LICENSEE" herein;

WITNESSETH:

WHEREAS, LICENSOR is the owner of the fee simple title to certain real property located in Pinellas County, Florida, described more particularly in Exhibit "A" attached hereto, which includes a portion being hereinafter referred to as the "License Area" and as shown on sketch attached hereto as Exhibit "B" and by this reference incorporated herein and made a part hereof; and

WHEREAS, LICENSEE is desirous of acquiring from LICENSOR the limited privilege and license to occupy and utilize the License Area for the installation and maintenance of pilings and signs to regulate boating activities; and

WHEREAS, LICENSOR is willing to grant to LICENSEE the desired limited privilege and license for such occupancy and utilization,

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FOLLOWS:

A. That LICENSOR, hereby grants to LICENSEE, and LICENSEE hereby accepts from LICENSOR, the limited privilege and license to occupy and utilize the license Area for the sole purpose of installing and maintaining pilings and signs regulating boating activities together with such other limited privilege and license as may be reasonably necessary or convenient for the full time enjoyment of the License Area for the above purpose only.

B. That for and in consideration of the foregoing limited privilege and license, the LICENSEE hereby covenants to pay the LICENSOR the sum of $10.00, and other good and valuable consideration, receipt and sufficiency of which is hereby acknowledged by LICENSOR.

C. It is expressly stipulated by the said LICENSOR and LICENSEE that this License Agreement is a license for permissive use only and that the placing of any improvement upon the property pursuant to this Agreement shall not operate to create or vest property right in said LICENSEE.

D. It is expressly stipulated by the said LICENSOR and LICENSEE that the privileges provided herein create no perpetual rights but determinable privileges depending solely on the conditions in this Agreement and at no time shall this License Agreement be construed as a License coupled with an interest.

E. That LICENSOR'S consent to LICENSEE'S use of the property described herein is limited. Such conditional and restricted consent creates privileges in the LICENSEE to use the land only insofar as compliance with the conditions herein continues.

F. That LICENSOR expressly reserves unto itself, its successors, lessees, and assigns, the continued right to occupy and utilize the entire License Area and to grant to other parties such privileges affecting the License Area as are not inconsistent with privileges herein granted. LICENSOR is not exempt from the aquatic regulator zones except as required to do their power plant maintenance work.

G. That LICENSOR agrees to inform LICENSEE thirty (30) days before constructing additional electrical facilities within the License Area so that LICENSEE can relocate or remove the utilization described herein should LICENSOR determine that such utilization would interfere with LICENSOR'S facilities or use of said area.

H. That upon LICENSEE'S breach of any covenant or condition contained herein, this License Agreement, after written notification by LICENSOR to LICENSEE of such breach and upon failure of LICENSEE to remedy or remove such breach within a period of five (5) working days after receipt of such written notification, shall cease and terminate and shall become null and void and the privilege and license herein granted shall thereupon immediately revert to the LICENSOR in absolute, however, LICENSOR expressly does not waive any right of recourse LICENSOR may have against LICENSEE for damages sustained by LICENSOR as a result of such breach.

I. That LICENSOR hereby expressly reserves the right to revoke this License Agreement at will by giving LICENSEE thirty (30) days written notice, and LICENSEE shall have no right to compensation for any expenditures by LICENSEE upon revocation of this License Agreement.

J. That this privilege and license is personal to LICENSEE and shall not be assigned or transferred in whole or in part without the express prior written consent of LICENSOR, which consent of LICENSOR shall be solely at LICENSOR'S discretion.

K. That the validity of this Agreement is contingent upon LICENSEE first obtaining proper zoning, authority, approval and/or permit from the appropriate governmental body or public agency having jurisdiction over such utilization at this location, if required. If such zoning, authority, approval and/or permit is not secured, this Agreement will be considered null and void.

L. That LICENSOR shall not be liable for any damages to LICENSEE'S utilization whatsoever, resulting from LICENSOR'S continued use and occupancy of the License Area; LICENSOR, however, shall not willfully cause undue damage to LICENSEE'S utilization.

M. That LICENSOR'S Utilization Coordinator (telephone 407/475-2231, Maitland) shall be notified by LICENSEE at least seven (7) days prior to LICENSEE'S commencing initial activities within the License Area.

N. That LICENSEE shall comply with all federal, state and local laws, rules and regulations in respect to the use of the License Area. LICENSEE shall not store, dispose of, treat or generate any hazardous waste or hazardous substance on the License Area without express advance written approval from LICENSOR. Approval from LICENSOR shall be solely at the LICENSOR'S discretion. The terms "hazardous waste" or "hazardous substance" shall be defined in 40 C.F.R. Part 261 and in 40 C.F.R. Par 300. Failure to comply with this Paragraph "N" shall be cause for immediate cancellation of this Agreement and LICENSEE expressly agrees to be liable to LICENSOR pursuant to Paragraph "Q" (e) for any violation of this Paragraph "N".

O. That upon completion of operations, LICENSEE shall notify LICENSOR'S Utilization Coordinator heretofore mentioned in the above Paragraph "M" for inspection of the License Area.

P. That LICENSEE shall furnish LICENSOR with a GIS (or equivalent) map(s) of pilings installed. The pilings will be rectified with a GPS within thirty (30) days of final construction of the pilings and signs.

Q. That LICENSEE hereby expressly understands, covenants, and agrees (a) that nothing contained in this AGREEMENT or contemplated is intended to or shall increase LICENSOR'S liability for personal injury or death or for any property damage, (b) that LICENSOR does not assume any such additional liability, (c) that liability arising out of the utilization and occupancy of LICENSOR'S License Area by LICENSEE and LICENSEE'S employees, agents, contractors, invitees or any representative, is hereby assumed by LICENSEE and shall be at the sole and exclusive risk of LICENSEE, (d) if and only if such liability is caused by sole LICENSEE'S negligence, that LICENSEE shall answer and satisfy to LICENSOR'S satisfaction any and all complaints relative to LICENSEE'S utilization of LICENSOR'S License Area, and (e) that LICENSEE covenants not to interfere with LICENSOR'S existing and future high voltage electric transmission lines and related facilities in any manner whatsoever.

R. That LICENSEE'S operations, activities and equipment used within the License Area beneath or in proximity to any of LICENSOR'S electrical facilities shall, at all times, be in strict compliance with applicable provisions of the National Electrical Safety Code (NESC) and the Occupational Safety and Health Act of 1971 (OSHA). LICENSEE is further notified and hereby agrees to so notify any of LICENSEE'S employees, agents, contractors, representatives or other persons engaging in LICENSEE'S activities upon said License Area with LICENSEE'S knowledge and under LICENSEE'S supervision or control, that extreme caution is necessary around all of LICENSOR'S electrical facilities, supporting structures, anchor guys or related appurtenances, and in the event of any damages or injury, LICENSEE shall immediately report the nature and extent thereof to LICENSOR'S nearest local office.

S. LICENSEE is self insured and will provide LICENSOR with a Letter of Self Insurance.

IN WITNESS WHEREOF, the said LICENSOR and LICENSEE have caused these presents to be executed in their respective corporate names by their proper officers thereunto duly authorized and their respective corporate seals to be hereunto affixed and attested, all as of the day and year first above written.

FLORIDA POWER CORP. LEGAL DEPT. APPROVED Date 4/19/01 By mmT

WITNESSES:

Sonja S. McCreary
Sonja S. McCreary

Sheri L. Wright
Sheri L. Wright

FLORIDA POWER CORPORATION
(as LICENSOR)

By: _____
Sarah S. Rogers, Vice President

Attest: _____
Assistant Secretary

ATTEST:
Karleen F. DeBlaker
Clerk of Circuit Court

By: Linda A. Reed
Deputy Clerk

PINELLAS COUNTY
By and through its Board of
County Commissioners

(as LICENSEE)
By: Kathleen Ann Todd
Vice-Chairman

Attest: _____

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

BY Sarah Richardson
ATTORNEY

FLORIDA POWER CORPORATION
ATTACHMENT # 2

PAUL L. BARTOW PLANT - Pinellas County

DESCRIPTION

THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 30 SOUTH, RANGE 17 EAST;
ALL OF THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 30 SOUTH, RANGE 17 EAST,
THE FRACTIONAL NORTHEAST QUARTER OF SECTION 21, TOWNSHIP 30 SOUTH, RANGE 17 EAST;
THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 30 SOUTH, RANGE 17 EAST;
ALL OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 30 SOUTH, RANGE 17 EAST;
THE FRACTIONAL WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 30 SOUTH, RANGE 17 EAST;
ALL OF FRACTIONAL SECTION 28, TOWNSHIP 30 SOUTH, RANGE 17 EAST,

ALL THAT PORTION OF FRACTIONAL SECTION 16, TOWNSHIP 30 SOUTH, RANGE 17 EAST, WHICH LIES SOUTH AND EAST OF THE FOLLOWING DESCRIBE TRACTS OF SUBMERGED OR FILLED LAND IN OLD TAMPA BAY: FROM A POINT WHERE THE CENTER LINE OF GANDY BOULEVARD, PINELLAS COUN INTERSECTS THE WEST BOUNDARY LINE OF SECTION 16, TOWNSHIP 30 SOUTH, RANGE 17 EAST, THE SAID POINT BEING 2016.8 FEET MORE OR LESS, NORTHWARD OF THE SOUTHWEST CORNER OF THE SAID SECTION 16, THENCE RUN IN A NORTHEASTWARDLY DIRECTION ALONG THE CENTER LINE OF GANDY BOULEVARD A DISTANCE OF 957.5 FEET TO A POINT FOR THE TRUE POINT OF BEGINNING, THENCE RUN NORTH 72° 48' 25" EAST A DISTANCE OF 9700 FEET TO A POINT, THENCE RUN SOUTH 17° 11' 35" EAST A DISTANCE OF 350 FEET TO A POINT, THENCE RUN SOUTH 72° 48' 25" WEST A DISTANCE OF 9700 FEET TO A POINT, THENCE RUN NORTH 17° 11' 35" WEST A DISTANCE OF 350 FEET TO THE TRUE POINT OF BEGINNING. BEGIN AGAIN AT THE TRUE POINT OF BEGINNING, THENCE RUN IN A SOUTHEASTWARDLY DIRECTION AT RIGHT ANGLES TO THE CENTER LINE OF GANDY BOULEVARD A DISTANCE OF 50 FEET FOR A SECOND TRUE POINT OF BEGINNING, THENCE CONTINUE IN A SOUTHEASTWARDLY DIRECTION AT RIGHT ANGLES TO THE CENTER LINE OF GANDY BOULEVARD A DISTANCE OF APPROXIMATELY 300 FEET TO THE MEAN LOW WATER MARK OF THE SHORE LINE; BEGIN AGAIN AT THE SECOND TRUE POINT OF BEGINNING, THENCE RUN IN A SOUTHWESTWARDLY DIRECTION PARALLEL TO THE CENTER LINE OF GANDY BOULEVARD AND 50 FEET DISTANT SOUTHEASTWARDLY THEREFROM A DISTANCE OF 970 FEET, MORE OR LESS, TO A POINT IN THE WEST BOUNDARY LINE OF SECTION 16, TOWNSHIP 30 SOUTH, RANGE 17 EAST, THENCE SOUTHERLY ALONG THE WEST BOUNDARY LINE OF THE SAID SECTION 16 A DISTANCE OF APPROXIMATELY 330 FEET TO THE MEAN LOW WATER MARK OF THE SHORE LINE, THENCE IN A NORTHEASTWARDLY DIRECTION ALONG THE SAID MEAN LOW WATER MARK TO A POINT IN THE LINE FIRST DESCRIBED, THE FOREGOING TRACTS INCLUDING ALL RIPARIAN RIGHTS AND RIGHTS OF ACCRETION THERETO BELONGING, EXCEPTING THEREFROM THAT CERTAIN LAND, SUBMERGED LANDS RIPARIAN RIGHTS AND ACCRETIONS EXTENDING FOR A DISTANCE OF 250 FEET IN SECTION 16, TOWNSHIP 30 SOUTH, RANGE 17 EAST, EAST OF LOTS 36, 37, 38 AND 39, BLOCK 5, FLORIDA RIVIERA, PLAT 5 OF SECTION 17, TOWNSHIP 30 SOUTH, RANGE 17 EAST, ACCORDING TO PLAT THEREOF RECORDED IN PLAT BOOK 7, PAGE 41, PINELLAS COUNTY RECORDS, AS SHOWN IN DEED RECORDED AMONG THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA, IN DEED BOOK 1462, PAGE 599;

TOGETHER WITH ALL RIPARIAN AND LITTORAL RIGHTS APPERTAINING THERETO AND INCLUDING ALL RIGHTS OF ACCRETION, ALLUVION AND DERELICTION.

LESS AND EXCEPTING THE FOLLOWING:

The West 250 feet of South 1276.74 feet of Section 16; and all that part of the West 250 feet of the East 500 feet of Section 21 lying North and West of the Pinellas County Bulkhead Line, Segment Eight (as shown by plat thereof recorded August 21, 1964, in Bulkhead Lines Plat Book 1 at Page 90, Public Records of Pinellas County, Florida), all in Township 30 South, Range 17 East.

CERTIFICATE

STATE OF FLORIDA)
)ss.
COUNTY OF PINELLAS)

I, the undersigned authority, hereby certify that the foregoing is a true and correct copy of the legal description presented to me by FLORIDA POWER CORPORATION as the original of such legal description.

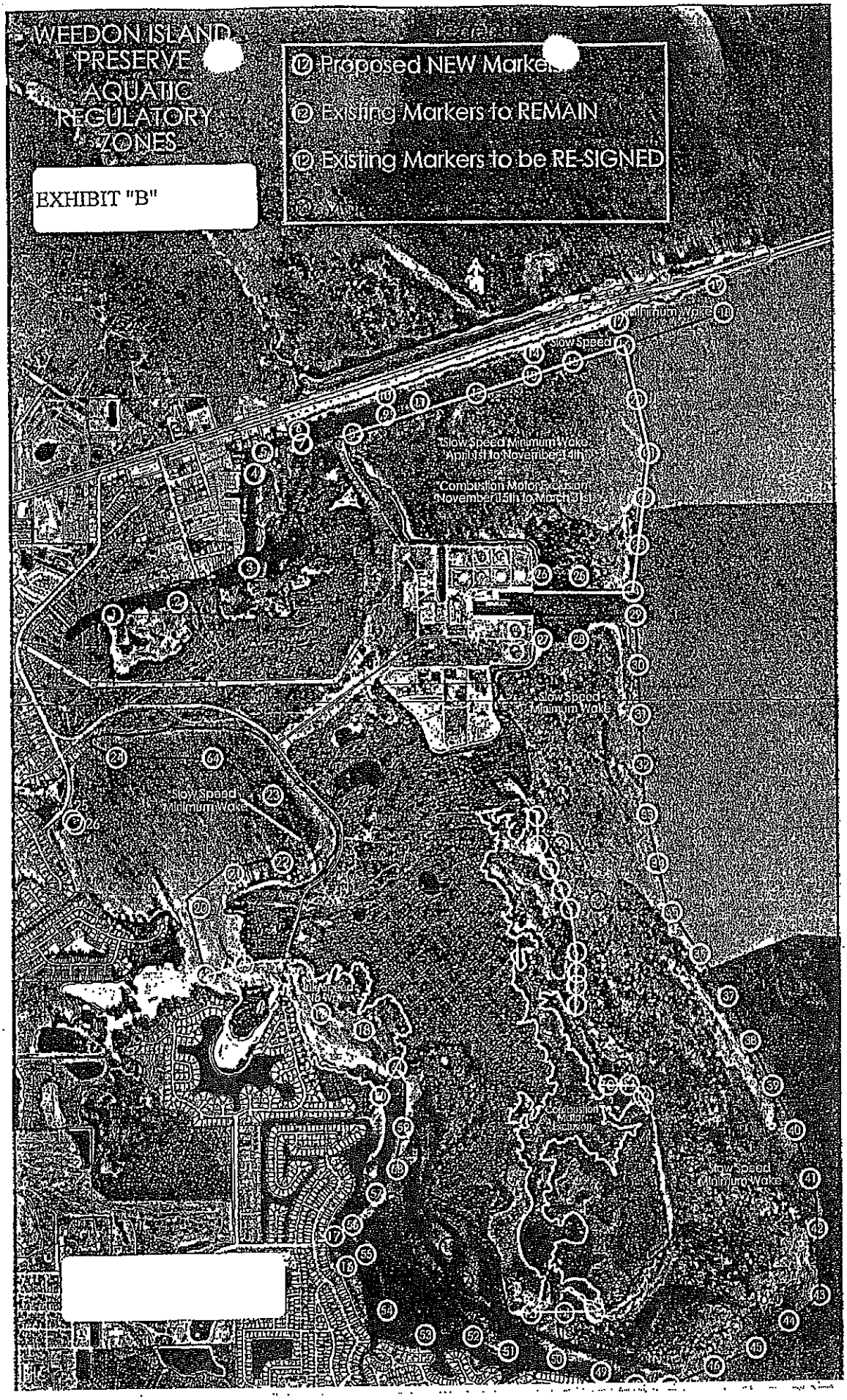
WITNESS my hand and official seal this 30th day of October, 1990.

NOTARY PUBLIC

My Commission Expires: July 23, 1994

R.E. Wisner, Notary Public
State of Florida

EXHIBIT "A"


WEEDON ISLAND PRESERVE AQUATIC REGULATORY ZONES
EXHIBIT "B"
⑰ Proposed NEW Markers
⑫ Existing Markers to REMAIN
⑫ Existing Markers to be RE-SIGNED
Slow Speed Minimum Wake
April 15th to November 14th
Combustion Motor Exclusion
November 15th to March 31st
Slow Speed Minimum Wake
Slow Speed Minimum Wake
Slow Speed Minimum Wake
Slow Speed Minimum Wake

RENEWAL INFORMATION

Automatic [Unlimited]
(Circle one)

Lease No. 2001 - 0216 Participant: FLORIDA POWER / WEEDON

Current Term End Date: 10/31/10
Notice to Terminate Days: N/A At any time: _____
At end of term: _____

County as: Landlord or [Tenant] (circle one)

County Contact: PAM LEASURE
Dept.: PARKS Phone No. E-MAIL ATTCH'D

Advised of next renewal period. ✓

Inquired as to County need for space/land. ✓

Approved renewal: [Yes] or No (circle one)
If No, include reason: _____

Participant Contact: ~~TOM LOWERY / ANTHONY SALVADEEA~~ Tom Callaghan
Phone No. ~~827-6141 (disconnected)~~ 827-6141

Advised of next renewal period. ✓

Approved renewal: (Yes) or No (circle one)

P/C 10/25 2:45pm.

Staff initials: JA
Date: 10/25/10

RENEWAL INFORMATION

Automatic (Unlimited) (Circle one)

Lease No. 2001-0216 Participant: Florida Power/Weedon Island

Current Term End Date: 10/31/09
Notice to Terminate Days: 30 At any time: ✓
At end of term: _____

County as: Landlord or (Tenant) (circle one)

County Contact: Pam Leasure
Dept.: Environmental Management Phone No. 453-6505

Advised of next renewal period. yes

Inquired as to County need for space/land. NO

Approved renewal: (Yes) or No (circle one)
If No, include reason: _____

Participant Contact: Tom Lowery Phone No. 827-6111

Advised of next renewal period. yes

Approved renewal: (Yes) or No (circle one)

Staff initials: BB
Date: 10/29/08

LeaseForms/Renewal Info Form.doc

Spaulding, Elizabeth M

From: Leasure, Pamela S
Sent: Tuesday, October 14, 2008 8:56 AM
To: Spaulding, Elizabeth M
Subject: RE: Progress Energy Renewal - Weedon Island - Boating Speed Signs

Yes please.

Pam Leasure
South County Land Manager
Pinellas County Department of Environmental Management
Environmental Lands Division
1800 Weedon Dr. NE
St. Petersburg, FL 33702
727-453-6505 (office)
727-217-7202 (fax)
www.pinellascounty.org/environment

All mail sent to and from Pinellas County Government is subject to the Public Records Law of Florida.

From: Spaulding, Elizabeth M
Sent: Friday, October 10, 2008 4:12 PM
To: Leasure, Pamela S
Subject: Progress Energy Renewal - Weedon Island - Boating Speed Signs

Hi Pam,

It's renewal time again for the License Agreement. I believe the purpose for this Agreement is to insure the sea grass beds and marine habitat are protected.

Shall we give them another year?

Thanks,
Beth

Pinellas County
FACILITY MANAGEMENT
Lease Management

Renewal Information

☐ Automatic	☒ Unlimited
Lease No. **2001-0216**	Participant: **FL Power (Dba Progress Energy)**
Current Term End Date: **Oct 31, 2008**	
Notice to Terminate Days: **30**	At any time ☒ At end of term: ☐
County as:	Landlord ☐ Tenant ☒
County Contact: **Dr. Bruce Rinker**	
Department **Environmental Mgmt.**	Phone No. **453-6900**
Advised of next renewal period.	Yes ☒ No ☐
Inquired as to County need for space/land. ☒	
Approved renewal	Yes ☒ No ☐
If No, include reason: **Absence of Rejection - Renewal w/o Participant Contact**	
Participant Contact: **Bruce Crawford (not contacted)**	Phone No. _____
Advised of next renewal period.	Yes ☐ No ☒
Approved renewal	Yes ☒ No ☐

Staff initials: **JDH** Date: **11/28/2007**

Braun, Yvonne G

From: Bruce Crawford [bruce.crawford@cohlaw.com]
Sent: Thursday, November 03, 2005 11:30 AM
To: Braun, Yvonne G
Cc: Marva Taylor; william.kramer@pgnmail.com
Subject: RE: License Agreement 11/1/01-Pinellas County & Fl Power

Yvonne,
I will forward this email to in house legal and let you know what Progress Energy decides. Perhaps we could just do a letter confirming the extension but I will have to obtain authorization directly from the Company. I will contact you shortly.
Bruce

-----Original Message-----
From: Braun, Yvonne G [mailto:Gxvre10@co.pinellas.fl.us]
Sent: Monday, October 31, 2005 9:42 AM
To: bruce.crawford@cohlaw.com
Subject: License Agreement 11/1/01-Pinellas County & Fl Power

I am taking the liberty to address this e-mail to you as you were our contact person when the subject agreement was drafted and subsequently signed.

The County's Environmental Mgmt. believes that the agreement should continue for another year. Envir. Mgmt. feels the boating speed regulation signs are necessary to insure the sea grass beds and marine habitat are protected. We hope you concur by replying in the affirmative to this e-mail.

Thank you.

Yvonne G. Braun
Lease Specialist
Lease Management Div.
(727)464-4763

APPENDIX 3
Stakeholder Participants, Pinellas County Response to Stakeholder Comments
And
Public Meeting Transcript

ANIMALS

Birds
Cats
Dogs
Miscellaneous
Pets Supplies/
Services
Livestock
Livestock Supplies/ Services

DOGS

Chihuahua's 2 females sisters 8 months old 1 male 6 years old. $450 per dog. Parents on premises Shots up to date. 813-466-9713

Doberman puppies AKC, M/F, tails, dew claws are done. Hlth cert, 1st shots, microchipped, taking $250 deposits, ready 12/21. $1250 total. 727-207-2050



English Cream Golden Retrievers. Just in time for Christmas! Born 10-14-21 these AKC and Health Clearance puppies will be ready for that Christmas dream. Creamy, Intelligent and playful, 2 Males and 1 Female. Visit us on Facebook at NorthFloridaGoldens & Dog Behaviorist or call 386-288-2991



French Bulldog puppies. My beautiful Ikie has given birth to 5 top quality pups. $890 ea. Call/text 941-763-8729 or email arrettted@aol.com

French Bulldog puppies. Petite. AKC, Health Certs. M & F, all colors. Ready now! $3,200 - $4,500. 813-320-5808 www.purefrenchbulldogs.com



French Bulldog puppies. READY NOW. Purebred, Health Certs. $900. twylacock@aol.com Call or text 941-344-8375

FRENCH BULLDOGS - Champion bred, all ages. Pet & show available. Call 813-629-3333.



French Bulldogs. Our French bulldogs come from heavy champion lines. Our girl Promise (Mom) is a daughter of a direct champion and Cooper (Father) is a direct grandson of "Flying Banner" a Frenchie that was dog of the year in 2016-2017. Our dogs are bred to be family companions and or show dogs meaning structure and temperament is something we strive for in every breeding. Pups will be ready for new families the 2nd week of December. Pups come with Health certificates, up to date shots and AKC registration papers. Taking deposits now. 813-507-9789

German Shepherd. 5 Males, AKC reg. Long coat blk & tan, 16 wks. old. Full shots and Health certs. Bred for show/work, obedience, loyalty. Call or text 352-678-7039

Golden Doodle (Mini) pups, Ready for loving homes Jan. 11th. DOB 11/16. Approx. Adult weight 8-15 Lbs. 1 F, 3 M. $2K-$2,200 Bell, FL Call Sheila **352-214-8789**

Goldendoodle Puppies Blonde and Blonde Mix. POP. PRICE REDUCED to $1000, Cash Only. NO TEXTS!! 813-258-6231 813-310-3952, 813- 695-7813

Goldendoodle puppy. F1B. 1 Male, 15 weeks. Red. Microchipped, shots, wormed, Health certs. $1,500. Spring Hill. 352-777-2017

GARAGE SALES - HILLSBOROUGH

Lutz - Hanna Rd, 18302. Fri. & Sat. 8 - 1, Dec. 10 & 11. Furniture, tools, hardware, misc. items and more.

INSTRUCTION & TRAINING

Instruction & Training

INSTRUCTION & TRAINING

Career Training and Medical Billing. TRAIN ONLINE TO DO MEDICAL BILLING! Get Trained, Certified & ready to work in months! **Call 877-324-4096.** The Mission, Program Information and Tuition is located at Career Technical.edu/consumer-information. M-F 8am-6pm ET

Don't Miss A Beat.
Breaking news, sports, business, arts and more.
Tampa Bay Times
tampabay.com

LEGAL

floodplain as required by Section 2(a)(4) of Executive Order 11988 for Floodplain Management as the proposed action is within and/or affects a floodplain. Additional information may be obtained by contacting: Steven Kelly, EH&S, Evara Health, Phone: 727-421-0162 Email: sjkelly@hcnetwork.org. Written comments on the proposed action and potential impacts to floodplains must be submitted to the following address on or before December 28, 2021. Evara Health 14100 58th St N, Clearwater Fl 33760 : Attn: Steven Kelly-Administration Offices
(198984) 12/08/2021

NOTICE OF SALE IS HEREBY GIVEN that pursuant to FL. s. 715.104 the undersigned intends to auction by public sale, 3 (three) slabs of African Mahogany from invoice # 16675 the property of Miranda Elisabeth Design. Auction will be held at 666 49th St. S. St Pete FL, 33707 at 8 am on 12/21/2021. Dated this 12/2/2021
0000198032 12/08, 12/15/2021

LEGAL

PUBLIC MEETING: WEEDON ISLAND PRESERVE MANAGEMENT UPDATE

Pinellas County will hold a public meeting to present the proposed update to the Weedon Island Preserve Management Plan from 9:00 a.m. to noon on Friday, January 14, 2022 at the Pinellas County Parks and Conservation Administration (12520 Ulmerton Rd., Largo) in the Magnolia Room. The proposed plan can be viewed at www.weedonislandpreserve.org. For more information, call (727)582-2100. [Pinellas County complies with the Americans with Disabilities Act. If you are a person with a disability who needs any accommodation in order to participate in this proceeding, you are entitled, at no cost to you, to the provision of certain assistance. At least seven days prior to the meeting, contact the Office of Human Rights, 400 S. Fort Harrison Ave., Suite 500, Clearwater, FL 33754, (727)-464-4062 (V/TDD).]
12/8/21 0000198323

Notice of Hearing on Petition for Determination of Heirship (Probate)

Case No. 2020PR000022

STATE OF WISCONSIN, CIRCUIT COURT, COLUMBIA COUNTY

IN THE MATTER OF THE ESTATE OF MICHAEL G. FABER

The decedent, MICHAEL G. FABER, date of birth November 6, 1926 and date of death February 11, 2020, was domiciled in Columbia County, State of Wisconsin, mailing address of N2595 County Hwy V, Lodi, WI 53555.

A Petition for Determination of Heirship was filed. The court will hear the petition at the Columbia County Courthouse – Branch 1, 400 De Witt Street, Portage, Wisconsin before Circuit Court Judge Todd J. Hepler on January 4, 2022 at 1:00 p.m.

You do not need to appear unless you object or wish to share additional information about Michael G. Faber's heirs. The petition may be granted if there is no objection.

Publication of this notice is notice to any persons whose names and addresses are unknown. The names or addresses of the following interested persons (if any) are not known or reasonably ascertainable: Lawrence Lord, Thomas Lord, Charles Lord, John Lord, Joseph Lord, Lori Fargen, Patti Parkhurst Braun, Tim Parkhurst, Peggy Faber, Michael Faber, Jerry Faber, Tom Hill, Frances Washburn, Eugene Washburn, Sue Washburn Muellen Bates, Robert Washburn, Barbara Noyes Brown, Ken Noyes, Richard McReynolds, Michael McReynolds, Robert McReynolds, Dayna McReynolds, Lori Michael McReynolds Myers, Margaret Lord or her possible unknown heirs, James Edward Lord or his possible unknown heirs, James Laverne Lord or his possible unknown heirs, Genevieve Nachreiner Siegel or her possible unknown heirs, John Faber or his possible unknown heirs, James Philip Faber or his possible unknown heirs, Scott Charles Lindgren or his possible unknown heirs, Daniel Noyes or his possible unknown heirs, Frederic Washburn or his possible unknown heirs, Carl Washburn or his possible unknown heirs, Beulah Washburn or her possible unknown heirs, Lynn Washburn or her possible unknown heirs, Jack Ronald Schwalke or his possible unknown heirs, and possible unknown heirs of Michael G. Faber. If you are one of the above-named individuals or another heir of Michael G. Faber, please contact attorney for petitioner below by Monday, December 27, 2021.

If you require reasonable accommodations due to a disability to participate in the court process, please call 608-742-9636 prior to the scheduled court date. Please note that the court does not provide transportation.

BY THE COURT: DATE SIGNED: December 2, 2021, Electronically signed by Hon. Todd J. Hepler, Circuit Court Judge
(198991) 12/08, 12/15, 12/22/2021

0000199003-01

0000198323-01

Tampa Bay Times
Published Daily

STATE OF FLORIDA
COUNTY OF Pinellas } ss

PUBLIC MEETING: WEEDON ISLAND PRESERVE MANAGEMENT UPDATE

Pinellas County will hold a public meeting to present the proposed update to the Weedon Island Preserve Management Plan from 9:00 a.m. to noon on Friday, January 14, 2022 at the Pinellas County Parks and Conservation Administration (12520 Ulmerton Rd., Largo) in the Magnolia Room. The proposed plan can be viewed at www.weedonislandpreserve.org. For more information, call (727)582-2100. [Pinellas County complies with the Americans with Disabilities Act. If you are a person with a disability who needs any accommodation in order to participate in this proceeding, you are entitled, at no cost to you, to the provision of certain assistance. At least seven days prior to the meeting, contact the Office of Human Rights, 400 S. Fort Harrison Ave., Suite 500, Clearwater, FL 33754, (727)-464-4062 (V/TDD).]

12/8/21 0000198323

Before the undersigned authority personally appeared **Deirdre Almeida** who on oath says that he/she is **Legal Advertising Representative** of the **Tampa Bay Times** a daily newspaper printed in St. Petersburg, in Pinellas County, Florida, that the attached copy of advertisement, being a Legal Notice in the matter **RE: Weedon Island Preserve** was published in **Tampa Bay Times: 12/ 8/21** in said newspaper in the issues of **Baylink Pinellas**

JEAN M. MITOTES
MY COMMISSION # GG 980397
EXPIRES: July 6, 2024
Bonded Thru Notary Public Underwriters

Affiant further says the said **Tampa Bay Times** is a newspaper published in Pinellas County, Florida and that the said newspaper has heretofore been continuously published in said Pinellas County, Florida each day and has been entered as a second class mail matter at the post office in said Pinellas County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement, and affiant further says that he/she neither paid not promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signature Affiant

Sworn to and subscribed before me this **12/08/2021**

Signature of Notary Public

Personally known X or produced identification

Type of identification produced _____

Tampa Bay Times
tampabay.com

12/01/2021

Order Confirmation and Receipt

Ad Order Number
0000198323

Customer
PINELLAS COUNTY PARKS & CONSERVAT

Payor Customer
PINELLAS COUNTY PARKS & CONSERVAT

PO Number

Sales Rep.
dalmeida

Customer Account
320933

Payor Account
320933

Ordered By
Sydney Criteser

EMail
dalmeida@tampabay.com

Customer Address
12520 ULMERTON ROAD
LARGO FL 33774 USA

Payor Address
12520 ULMERTON ROAD
LARGO FL 33774 USA

Customer Fax

Order Taker
dalmeida

Customer Phone
7275822581

Payor Phone
7275822581

Customer EMail
Criteser, Sydney <scriteser@co.pin

Order Source

Special Pricing

Tear Sheets	Proofs	Affidavits	Blind Box	Promo Type	Materials
0	0	1			

Invoice Text
Weedon Island Preserve

Ad Order Notes
Payment to be applied Friday 12/3 by Elizabeth

Net Amount	Tax Amount	Total Amount	Payment Method	Payment Amount	Amount Due
$146.50	$0.00	$146.50	Credit Card	$146.50	$0.00

Ad Number	Ad Type	Production Method	Production Notes
0000198323-01	CLS Legal Liner	AdBooker	

External Ad Number

Ad Attributes

Ad Released
No

Pick Up

Ad Size
2 X 17 li

Color

WYSIWYG Content

PUBLIC MEETING: WEEDON ISLAND PRESERVE MANAGEMENT UPDATE

Pinellas County will hold a public meeting to present the proposed update to the Weedon Island Preserve Management Plan from 9:00 a.m. to noon on Friday, January 14, 2022 at the Pinellas County Parks and Conservation Administration (12520 Ulmerton Rd., Largo) in the Magnolia Room. The proposed plan can be viewed at www.weedonislandpreserve.org. For more information, call (727)582-2100. [Pinellas County complies with the Americans with Disabilities Act. If you are a person with a disability who needs any accommodation in order to participate in this proceeding, you are entitled, at no cost to you, to the provision of certain assistance. At least seven days prior to the meeting, contact the Office of Human Rights, 400 S. Fort Harrison Ave., Suite 500, Clearwater, FL 33754, (727)-464-4062 (V/TDD).]

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Run Date	Product	Placement	Position	Zone
12/08/2021	Tampa Bay Times	Legals - CLS	Legal	BL-Pinellas

Weedon Island Preserve Advisory Group
Public Meeting
Friday, January 14, 2022

AGENDA

1. Welcome and Introductions

2. Purpose of Weedon Island Preserve Advisory Group

3. Plan Overview – Discuss Sections With Advisory Group

    - Section 1. General Information
    - Section 2. Natural and Cultural Resources
    - Section 3. Resource Management
    - Section 4. Public Recreation
    - Section 5. Outreach and Education
    - Section 6. Budget

4. Public Comments (time limit 3 minutes)

5. Advisory Group Roundtable Discussion

6. Closing Remarks

http://www.pinellascounty.org/park/managedlands/wip.htm

Weedon Island Preserve Advisory Group Public Meeting, Friday, January 14, 2022 9:00 AM - 12:00 Noon		
Name (Print)	**Signature**	**Email Address**
Commissioner Justice		
Honorable Barbara Sheen Todd		
Sgt. Ron Blair		
Paul Backhouse		
Mike Edwards	Michael Edwards	
Michael Dema		michael.dema@stpete.org
Kevin Donaldson		
Bill Fehring	wrote Name	
Jake FitzRoy		
Carla Garbin or Emma Mason		
Nicholas Jennings		
Phyllis Kolianos	Phyllis Kolianos	pkolianos@gmail.com
Emma Mason		
Matt McKinney		
Randy Runnels		
Dan Savercool		
Ed Sherwood / GARY RAULERSON		GRAULERSON@TBEP.ORG
Betty Jo Tompkins		
Mark Walton		Mark.Walton@swfwmd.state.fl.us.

Weedon Island Preserve Advisory Group Public Meeting, Friday, January 14, 2022 9:00 AM - 12:00 Noon		
Name (Print)	**Signature**	**Email Address**
Paul Cozzie	Paul Cozzie	pcozzie@pinellascounty.org
Lyle Fowler	Lyle Fowler	
Jeffery Gellermann	Jeffery Gellermann	
Steve Harper		
Pam Leasure	Pam Leasure	
Eric Teitelbaum	Eric Teitelbaum	
William Fehring	W.K. Fehring	
Michelle Goldstein	Michelle Goldstein	
~~Bob~~ Bob Hurst	Bob Hurst	
Mona Neville	Mona Neville	Mona.Neville@FDACS.gov
Ellie Foden	Ellie Foden	efoden@ecomersion.com.
Cassandra Hobar	Cassandra Hobar	chobar@ecomersion.com

Comprehensive Responses to Public Meeting
Friday, January 14, 2022, 9:00 am to 11:15 pm

PCR held a stakeholder meeting to gather public comments and answer questions on the Draft 2022 Weedon Island Preserve Management Plan Update. Members of the Weedon Island Preserve Advisory Group (WIPAG) were invited to participate and develop a list of suggestions to be considered for incorporation in the Plan. This comprehensive list of comments, suggestions and questions received at the meeting and through e-mail is grouped by topic. Several members of the public were present but chose not to offer comments or suggestions. St. Petersburg Audubon Society's comments (SPAS), through WIPAG member Dan Savercool, are included in this document.

Restoration Projects

Gary Raulerson – Instead of Pilot Project, make clear Wetland Restoration Project. Restoring mangrove/mosquito ditches. Staff Rsponse – The change has been made to clarify the project.

Bill Fehring – Make clear there will be lots of public information on the restoration projects to keep the public informed. Staff Response – Public information text has been added to the document.

Gary Raulerson – Shovel ready project can apply for Tampa Bay Environmental Restoration Fund. Comment Noted.

SPAS – The status of the two restoration projects is unclear. (After reading this multiple times the best way to get any type of status was through looking at the budget. As a further FYI, the rest of the document was understandable with a single read.) Suggest creating a timeline for each project and referring to these timelines throughout the document. The timelines can also highlight major accomplishments, milestones and spending. Staff Response – The text included dates of milestones and projected milestones. Comments Noted

Prescribe Burning

Tie burn units to communities. Staff Response – Figure 13. Prescribed Burn Units Map, now includes the FNAI communities in each unit.

Jake FitzRoy – Conduct public workshops for burning. Comment Noted

Mark Walton – Distribute information to public on prescribed burning, door hangers, meetings. Target burns to units that would benefit the most. Comment Noted

SPAS - Xeric Hammock section, The way the paragraph is written, it's unclear if having a Xeric Hammock is a good thing, bad thing or inevitable thing. It sounds like it wouldn't be a Xeric Hammock if the burning you're planning had started sooner. Is there an intent or idea to 'restore' this acreage or has nature taken its course? A clarifying sentence or two would answer the question. Staff Response – Text has been added to Mechanical Thinning in Section 3.

Monitoring

Gary Raulerson – Conduct regular annual assessments of seagrasses. Comment Noted

Mike Dema – Water Quality, was Weedon impacted by last year's Red Tide. Staff Response – Yes, there was some impact, but not as severe as seen along Pinellas Beaches.

Mark Walton – Consider adding water quality monitoring to the Pilot Project. Comment Noted

Mike Dema – Are SWFWMD aerials used for the seagrass analysis. Staff Response – Yes, spoke with Stacey Day and the information is collected from SWFWMD, Pinellas and Hillsborough and TBEP compiles a report for all.

Gary Raulerson – Seagrass section on TBEP website to combine aerial surveys and transect data. Comment Noted

Mark Walton – Should mention how vulnerable the shell mounds are to sea level rise. Staff Response – This is addressed on page 49 paragraph 3.

Monitoring is a critical management tool to measure success for existing projects as well as highlighting areas for future projects. For example, results of the Feather Sound Tidal Restoration Project show up in the monitoring of seagrasses, water quality and fisheries. Comments Noted

Staffing

Bill Fehring – FOWI strongly support additional rangers. Visitors during pandemic – motorized bike on boardwalk, lots of fishing on boardwalk. Comment Noted

Jake FitzRoy – Rangers are doing an awesome job. Keeping visitors from parking on the grass, keeping pets out of the Preserve and also caught someone spearfishing off the pier. Comment Noted

Gary Raulerson – Easy to contract PCSO but consider partner with FWC. Staff Response – FWC has less law enforcement staff than PCSO. PCSO and FWC do have a partnership agreement and often work together on wildlife issues.

Preserve Visitation

Staff Response: Internal discussions to accommodate all users and not eceed parking and carrying capacity will continue.

Bill Fehring – 88 % increase in visitor number during the pandemic. The FOWI has goals to expand the programs offered at the Ed Center. Outdoor recreation has exploded and there is a need to address the carrying capacity. Comments Noted

Bill Fehring – Consider remote parking for canoe/kayak rental users. Establish off-site parking for visitors. Comment Noted

Jake FitzRoy – Schedule programs two times per month programs and bussing the participants to the Ed Center. Comment Noted

Gary Raulerson – Utilizing the number of parking spaces in the preserve and bussing people from off-sit could take away from the enjoyment of getting out in the Preserve. There might be more visitors than should be in the Preserve. Comment Noted

Mike Dema – Ideas for carrying capacity – create designated times for visitors to come out to rent, stagger times, info boards and social media outlets. Comments Noted

Lyle Fowler – Providing technology to help inform public Preserve is full and continue exploring ways to inform the public.

Public Recreation

Jake FitzRoy – Users are going out without knowledge of tides. Installation of tide clocks. Visitors are getting into the mangroves and have to walk vessels. Comments Noted

Mark Walton – Northern canoe trail or other areas of the could disperse recreational opportunities. Staff Response – Northern trail closed in 2010 due to lack of staffing and available parking.

Bill Fehring – The dock at the pier was designed for canoes and kayakers often launch from the ramp, newer alternative rolling ramps are more efficient and much safer to get into canoes and kayaks and more accommodating for handicap users. Staff Response – Plan revised to investigate a rolling ramp to accommodate handicapped users.

Jake FitzRoy – There is room available to install handicapped accessible alternatives. The County needs to add one more canoe cleaning station at the pier. Staff Response – Plan revised to investigate a rolling ramp to accommodate handicapped users. Comment on cleaning station noted.

Education/Education Center

Bill Fehring – Staff has done a great job expanding the knowledge of WIP through summer camp field trips and online programs. There needs to be a presence of Ed Center staff onsite seven days per week and reopen the Wed - Sun. FOWI is interested in reintroduction of many former programs. Comment Noted

Mark Walton – Ed Center is a very valuable resource that should be used more often. Comment Noted

Jake FitzRoy – Supports increasing educational programs and Sensing Nature programs. Comment Noted

Mike Dema – The Weedon story can be put on more social media outlets. Comment Noted

Phyllis Kolianos – AWIARE would like to reintroduce the monthly night archaeological programs. Comment Noted

Cultural Resources

SPAS – The tone of the Section 2 L. CULTURAL RESOURCES reads far differently than Section 3 G CULTURAL AND RESOURCE MANAGEMENT on page 48-50. Comments Noted

SPAS – The map on Page 31 does not show locations for of the shell mounds, canoe sites etc. The items on the map are vaguely described on Page 30 in the shortest paragraph on the page. This creates further disconnect for the reader. Staff Response – The map shows locations of historical resources and not pre-historical resources.

SPAS – Page 51, 2nd paragraph, Fencing and signage also serve a vital role in resource protection. The landward portions of the Preserve are fenced and posted to enforce trespassing laws and to protect against illegal activities such as dumping and looting. Staff Response – Looting has been added to the text.

Mike Edwards – LMR recommended Hurricane Plan for storage of artifacts. Should mention this in Plan. Staff Response – The Hurricane Plan was included in Appendix 11. A statement that the hurricane plan was completed has been added.

Mike Dema – Why does revenue go to general funds instead of back into the preserve – Staff Response – Parks is not an enterprise fund. The money has to go back into general fund.

Other Suggestions and Comments

SPAS - The document layout of putting the objective and goals as part of the preamble (i.e. the romanette pages) along with putting the goals and objectives is an excellent presentation of the material. The value can be amplified by adding a 1-2 benefits following the goal statements. Adding benefits supplies the 'why' behind the 'what'. Comments Noted

SPAS - There is nothing in the entire document on sea level rise or storm surges etc. This includes monitoring, preparedness, plans or alignment with other County plans.

SPAS – The phrase 'if budget allows' was mentioned throughout the document. The suggestion is to make a stack-ranked list of these item with a 1-2 sentence statement as their importance and reason for their rank. (e.g. more patrols from PSCO is the most important because it prevents further looting of burial grounds and other archeological areas.) Comments Noted

SPAS - This introductory section is an excellent section…esp. with the table of goals and objectives. It would also help to add a table of acronyms (at the front of the document). Staff Response – Abbreviation table added.

SPAS – Appendix 12 is mentioned 11 times in the document and was not found in the attachment package Appendix 13 is mentioned 3 times in the document and was not found in the attachment package Staff Response – The website was checked and verified that both appendixes were in the package.

SPAS – The boundary line shown on the map is illegible - suggest a contrasting color. Staff Response – The map was corrected to clearly show all boundaries.

SPAS – 3rd paragraph appears to be an orphan, what is it connected to, why is it here. Suggest putting the 1st sentence of the paragraph at the end of the paragraph. Comment Noted

Left off at line 21

SPAS – 1st paragraph on page 8. It's not 2032, is this a significant update? The last sentence begs this question. Either explain or remove the sentence. Staff Response: Further clarification added to text.

SPAS – Page 8 Last paragraph title, adding Supports the Board of County Commissioners Strategic Plan improves understanding of the intent. Page title, adding Supports the Pinellas County Comprehensive Plan improves understanding of the intent. Comments Noted

SPAS – Pinellas County Code of Ordinances Chapter 90 is referenced nine times in the document. Pages 41 and 59 are the only pages where the chapter is referred to solely as Chapter 90. It would be helpful to use Pinellas County Code of Ordinances Chapter 90 in all nine occurrences. Staff Response – Text was changed in all nine occurrences.

WEEDON ISLAND PRESERVE ADVISORY GROUP

PUBLIC MEETING

Friday, January 14, 2022

Attendees:

Pam Leasure, Environmental Program Manager, Department of Parks and Conservation Resources

Dr. Steven J. Harper, Environmental Division Manager, Resource and Asset Management, Department of Parks and Conservation Resources

Commissioner Charlie Justice, Pinellas County Commissioner

Michael Dema, City of St. Petersburg, City Attorney's Office

Michael Edwards, Florida Forest Service

Bill Fehring, President, Friends of Weedon Island

Jake FitzRoy, Florida Fish and Wildlife Conservation Commission, Florida Youth Conservation Centers Network

Phyllis Kolianos, Alliance for Weedon Island Archaeological Research and Education

Mark Walton, Southwest Florida Water Management District

Paul Cozzie, Bureau Director, Department of Parks and Conservation Resources

Jeffrey P. Gellermann, Pinellas County Extension Director, UF/IFAS Extension Pinellas County

Lyle Fowler, Parks and Conservation Resources Operations Manager, Department of Parks and Conservation Resources

Gary Raulerson, Tampa Bay Estuary Program

Eric Teitelbaum, Environmental Specialist I, Department of Parks and Conservation Resources

MR. HARPER: Well, good morning and thank you for attending. Today's session is focused on the Weedon Island Preserve Management Plan Update, and this is the formal committee known as the Weedon Island Preserve Advisory Group, affectionately abbreviated WIPAG, and this is a board that is put together of our key stakeholders. So we really appreciate people coming here today to give us feedback and advice in order for us to improve our Management Plan.

My name is Steve Harper. I'm the Environmental Division Director for the Parks and Conservation Resources Department. So management of the natural and cultural resources fall under my area of expertise.

And we'll do introductions in just a second, but I wanted to go ahead and take care of a few housekeeping items just so we're all on the same page. First off, the restrooms are just outside in the hallway here. If you need to excuse yourself, please just feel free to get up and use the restroom when you need. We're not 100 percent sure it's going to take the full three hours. We'll work in a break if it does look like we're running that long. Otherwise feel free to excuse yourself and go use the restroom. Emergency exits, both the front and the back corners of the room. And let me put on my glasses -- there are light

refreshments up here in the upper corner. Please help yourself.

And then probably the most important item involves the microphones. And so in order to be heard and recorded please use your microphone. Everyone thinks their voice carries probably further than it does. The acoustics in this room are not great. So please use your microphone if at all possible. You push the button to talk, and then please when you're done talking if you could push the button again to turn off the microphone. If too many open microphones are on at the same time we'll start getting some feedback. So if you don't mind just turning the mic off when you're done speaking that would be great.

Let's go ahead and do some introductions. I'll introduce myself again. I'm Steve Harper. And to my left is Pam Leasure, and she is our Land Manager for South County all of the properties including Weedon Island south of about Ulmerton Road.

And then the staff that are here as subject matter experts for us to help are: Paul Cozzie, the Director of the Parks and Conservation Resources Department, JP Gellermann, is the Director of the IFAS Extension that is in charge of the education center at Weedon Island Preserve, and Lyle Fowler is our Operations Manager for

South County properties, parks, preserves and management areas that fall south of Ulmerton Road. And he is primarily focused on operations, the safety and security and public use elements of our service to the public. And then coming up from the -- to the front from the back table is Eric Teitelbaum, he is our Environmental Specialist who does a lot of work controlling exotic species and other land management activities at Weedon Island Preserve.

So with that, let's go ahead and have the Board introduce themselves. And we'll start with Commissioner Justice, if you don't mind, and then work our way counter-clockwise.

COMMISSIONER JUSTICE: Good morning. Thank you very much. I'm Charlie Justice. I'm chair of the Pinellas County Commission. I'm happy to be here with you today.

MR. DEMA: Good morning. Michael Dema, I'm Managing Assistant City Attorney for land use and environmental matters for the City of St. Petersburg. And I'm born and raised in Pinellas County, and I've been going to Weedon Island for as long as I remember, so it's an honor to be here today. Thanks.

MR. FITZROY: Hi. I'm Jake FitzRoy. I'm the west central partnership coordinator for the Florida Youth

Conservation Centers Network, part of FWC, Florida Fish and Wildlife. And we work with Weedon a lot and just celebrated our 10-year anniversary of partnership on the 4th.

MR. WALTON: Good morning, everyone. I'm Mark Walton. I'm an Environmental Scientist with Southwest Florida Water Management District in the SWIM section, that's Surface Water Improvement and Management Section. I've been working with Pam on the Weedon Island Tidal Restoration Project. So happy to be here and contribute.

MR. EDWARDS: Good morning. I'm Michael Edwards with the Florida Forestry Services.

MR. RAULERSON: Good morning. Gary Raulerson, Tampa Bay Estuary Program Ecologist. We have recently completed our habitat master plan update and looking forward to implementing this project as part of going forward on those important restoration projects to improve all of Tampa Bay.

MS. KOLIANOS: Phyllis Kolianos. I'm representing Alliance for Weedon Island Archeological Research and Education. We have a research station at Weedon Island Preserve and it's worked out just super I think. Thank you.

MR. FEHRING: I'm Bill Fehring. I'm currently the

president of the Friends of Weedon Island and a volunteer out there for better than a decade.

MR. HARPER: All right. Thank you, everyone. Let's go over a little bit about the purpose of the Advisory Group. As you can tell by the representatives sitting at the table, we have a wide variety of expertise and all are key stakeholders. And so the purpose of the Advisory Group is to do just that, to advise staff how best we can update and improve the Management Plan to best serve the public.

Pam will be doing a detailed deep dive and will solicit your comments at that time. She will be presenting the bulk of the presentation today under the Section 3, Plan Overview. The way we thought it would work best is for -- to cover each topic or each section of the Plan and then solicit comments and suggestions for improvement from the board at that time.

I will recommend that we don't spend too much time on typos or grammar or those types of errors. If you would like to provide a list or a marked-up copy to Pam, we'll be happy to incorporate those changes in the plan as well. But if we could focus maybe on more concepts or substantive comments that would be helpful. it will keep things moving.

So Pam will guide you through a discussion of the

Plan itself and solicit feedback from the Advisory Board. At that time we would like to take comments from the public. Rather than waiting until the very end of the meeting we thought it would be helpful if members of the public could speak. That way the Advisory Group could respond to or incorporate some of the concepts that the general public has brought up.

The way we will do the public comment period is please fill out one of the comment cards that is on the back table and turn them in. Eric will be collecting those and we'll facilitate you. We'll start with a limit of three minutes. But since there aren't that many people here, if you need a few extra minutes that's not a problem. And we would be happy to hear from the general public under Section 4.

And then we'll come back to the roundtable discussion of the group, the Advisory Group. And so at that point in time you can address things that maybe the public brought up but you could also be free to bring up other topics from wherever within the Plan. Things that may span sections or things that you don't feel were adequately addressed during overview, that would be the time for the roundtable discussion, and then we'll go ahead and close out the session.

This is the timeline for updating the Management

Plan, so we've posted the draft plan and all the appendixes on our website and have invited public comment at that time as well. So now we're having our Advisory Group meeting. This is a public meeting. It is being recorded and transcribed for the public record.

Staff will then review all of the comments we've received from both the public and the Advisory Group members and update the Management Plan over the next few weeks. We will then present that to the Board of County Commissioners for their approval in hopefully in mid-February time period, and the Board of County Commissioners will be the next to last vote on the Plan. They will vote for approval.

And then pending their approval, we will take it to the State of Florida at the Department of Environmental Protections ARC Committee, and we will present the Plan to them in mid-June. And they ultimately will have the final say in the approval of the Management Plan.

So that's the overall process. This is an early step in the process, but we sure appreciate your feedback and opportunities for improving the Plan right off the bat.

Are there any questions at this time for the

procedures or process or housekeeping items?

MR. DEMA: I have one.

MR. HARPER: Yes.

MR. DEMA: Over here. It says that there's a date on here "November 17th, 2023." I was like I didn't know if you needed, you know, another 16 months after you talked to DEP or if that was a misprint?

MR. HARPER: Yeah. No. Misprint. Thank you.

MR. DEMA: Is there an anticipated effective date?

MR. HARPER: For this Plan?

MR. DEMA: Yeah.

MR. HARPER: It would be after the State approves it in June.

MR. DEMA: Okay. Great. All right. Thanks.

MR. HARPER: Well, thank you. With that, I'm going to go ahead and turn it over to Pam, and she will do a walk-through of the Plan overview.

MS. LEASURE: Good morning. And I would like to thank you all for your participation as well. I know reading these plans can be very dry reading. So I really appreciate your help on this.

So we'll just go over the Plan overview. Steve has kind of already explained how the process will go. I will give you a little bit general information in natural and cultural resources, and then we'll get to

the meat of the plan, which are the Resource Management with its eight objectives, and we will talk about the goals.

The Public Recreation has one objective. We'll talk about the goals that are associated with that. And the Outreach and Education, one objective, and then we'll take a look at the Budget as well.

The preserve is 3,195 acres. Within that, 3,000 acres along the eastern shoreline of Pinellas County that borders Tampa Bay we have a couple of lease agreements attached to these properties. The ownership shows how these lease agreements work.

We have Pinellas County has 193.7 acres and that's in the lime green color.

Duke Energy, which we have a lease agreement to manage 385.1 acres. That's in the blue-green sort of color.

And with the State of Florida we have two lease agreements, the southern portion of the Preserve is the one that most people are familiar with. That one actually has not just uplands, but we have a submerged land lease attached to that. So we manage 400 feet out into the water from the mean high-water line. And then the northern portion does not have that same submerged lands lease, but north of Gandy Boulevard almost to the

Clearwater airport. So their total -- the total that we manage for the State of Florida is 2,616.5 acres.

With those lease agreements, and why we're here today, we're required to manage Weedon Island only for the conservation and protection of natural and historical resources, and for resource based public outdoor activities and education, which are compatible with the conservation and protection of these public lands.

A Management Plan must be submitted and approved by DEP. And we're here today to update that Plan. This is I think about the fourth or fifth update to this Management Plan that was done.

So this is sort of the existing conditions. I will just kind of briefly go over those. Weedon Island is rich in its natural and cultural resources, and that's seen in our natural resources in our 11 Florida natural areas inventory communities throughout the preserve. And those communities go from seagrasses to upland communities, with our tidal swamps or mangrove forests make up pretty much the largest portion of the Preserve.

These communities support very diverse plant and wildlife species. We have for plant species, we have over 289 identified. 50 of those are exotics, and 14

are from the Florida Invasive Species Council. They used to be the FLEPPC Council. Category 1 and 10 are Category 2. So these are listed by the State as highest priority that we need to target and make sure that we keep them from spreading and try to manage or -- I say eliminate, but we know that's not possible.

The last survey -- or the wildlife species that we have, we have a total of 388 species. Of those, we have 178 birds, 126 fish, 43 butterflies, 27 reptiles, 8 amphibians, and 8 mammals have all been identified and logged throughout the years in the preserve.

And some of the listed species that we have, the Florida goldenaster, which is in this picture, the gopher tortoise, the roseate spoonbill, but we also have eastern diamondback, and at one time there was a sighting of an indigo snake, eastern indigo snake.

The exotic plants that we've already mentioned, we have at least 300 acres in maintenance, that we consider in maintenance that we don't have to go out and spend a lot of time on, and that's been done by staff and volunteers. The Water Management District maintains 43 acres of a mitigation site. And as far as exotic wildlife, most of the documented species are amphibians and reptiles.

Cultural resources, we have in 2011 an 1,100 year

old canoe was excavated from the shoreline of the northern portion of the preserve. And what year was that displayed?

MS. KOLIANOS: In 2015.

MS. LEASURE: In 2015 it was displayed and is now at the Exhibit Hall in the Education Center, and it's complete with very detailed information and a video.

So that kind of wraps up the natural and historical resources since the last Plan.

Now, we'll go ahead and get into our goals and objectives in our Resource Management Section.

The first -- the first one we have, Habitat Restoration and Improvement. The objective is to provide resource management to restore and improve the natural communities of Weedon Island Preserve.

Under Restoration Projects, the first goal is: Monitor and evaluate effectiveness of Pilot Project by post-construction vegetation transects and photo points.

And Goal 2: Continue to implement restoration projects identified in the feasibility study to improve hydrology of the mosquito ditches and remove exotic vegetation.

Prescribed Fire: We need to increase the frequency of burning in the Preserve to restore these

natural communities.

Goal 4: Coordinate with the Florida Forest Service Regional Forest Area Supervisor for assistance when necessary.

Goal 5 for under Exotic Vegetation and Nuisance Wildlife Control: Continue to chemical treatment in established exotic control maintenance areas to keep invasive exotic vegetation from reinfestation.

Goal 6: Continue to identify and treat new areas of infestation as observed.

Goal 7: Continue trapping and removal efforts of nuisance wildlife from the Preserve.

Mechanical Thinning, Goal 8: Evaluate and conduct mechanical thinning of natural communities as necessary.

Reestablish Native Species, Goal 9: Complete restoration projects with reestablishment of vegetation through natural recruitment or by replanting as necessary.

MR. HARPER: Okay. So thanks, Pam. That was a very broad overview of what is happening in the Preserve. And so Pam covered a lot of topics in this first Section A. This is really the meat and potatoes of our land management activities at Weedon Island Preserve.

So it ranges from major restoration projects, including getting -- backfilling the ditches, the mosquito ditches, that were put in the '40s and '50s and have impacted the hydrology. So we will be working with our partner groups and SFWMD to do a major restoration project at Weedon Island Preserve, covered both prescribed burning and exotic control, two of the main techniques used to control invasive species and maintain healthy habitats.

And we also include mechanical thinning in that operation in order to reduce the fuel loads and prevent a catastrophic wildfire. We do reestablish native species on plant when appropriate. Otherwise we rely on sort of natural recruitment from the natural communities themselves.

So she's covered a lot of ground. I think at this point we'll turn it over to the Board rather than stepping through all of the topics in Section 3 at once. Let's go ahead and tick through them now for comments. So we'll open it up to the Board for anyone that has a question or comment about this. This covers pages 32 through 38 in the Management Plan.

Yes, sir.

MR. RAULERSON: Just a really quick comment. These are all extremely important relevant habitat

restoration maintenance activities. The only real comment that I have is on Goal 1 just within the title. I would suggest -- and I definitely understand that these sentences are supposed to be compact and providing that 30,000-foot level. But I'm thinking in Goal 1 instead of Pilot Project, specify the name of the project. Because is this the -- it's some of the channel -- mangrove channel filling?

MR. HARPER: Correct.

MR. RAULERSON: So I would put at least that specificity in there. Because when you are making just a presentation like this to general public or whoever they're not going to know from Pilot Project.

MR. HARPER: Thank you.

Yes, Mark.

MR. WALTON: With the title "Wetland Restoration," there is obviously a full feasibility that accompanies that in the appendixes, but I think it's good to put up front some of the drivers for that, particularly the black mangrove restoration. I don't know that the public would all be familiar with some of the issues there and what -- that is going to change a lot of ditches which good or bad are kind of associated with that property now. Some of them are going to be going away. So it's probably good just to reinforce what the

drivers were in terms of the hydrology and the ecology of why we need to do that project.

MR. HARPER: Thank you.

Yes, sir.

MR. DEMA: I have a question on the mitigation projects. And I don't know if maybe Mark can help understand that. Are these wetland mitigation projects there? I'm looking at Figure 14 and the two yellow polygons up in northwest portion of that.

MR. HARPER: Do you want to go ahead, Pam, and describe that. It's on page 37?

MR. DEMA: Yes.

MS. LEASURE: So those -- that one is the Feathersound -- or that's not Feathersound. That's the one that was the done for mitigation for the improvement to the interstate where you can come off of Roosevelt onto 9th -- onto MLK. That one was done in 2004.

MR. DEMA: Okay.

MS. LEASURE: Completed in 2004. And that was the same type of thing that we're targeting with the Pilot Project, the wetland restoration project, reestablishing flow in certain areas and filling in these mosquito ditches.

MR. DEMA: Okay. So this mitigation is more than

just exotic vegetation maintenance. There was a restoration of flow there to its natural state?

MS. LEASURE: Yes. That project they did a lot of -- they did hydro blasting and excavation and were doing fillings. And then because it's mitigation, there's a responsibility to maintain.

MR. DEMA: Absolutely. And now so that leads into kind of where I'm going here is with -- what are the plans, if any, for future mitigation for other agencies or maybe even private sector? Probably not private sector, but are there plans to have other mitigation projects in Weedon Island?

MS. LEASURE: We've not been approached. Even with the Franklin Templeton -- of the Howard Frankland Bridge. They're just doing along side the MLK and Fourth Street. We're always open to that, you know, to entertain that as helping us with our restoration projects. Yes.

MR. DEMA: Absolutely. That could be a creative way of funding this restoration of flow.

MS. LEASURE: Unfortunately, we're not getting anything out of the --

MR. DEMA: Out of the bridge?

MS. LEASURE: -- out of the bridge. It is clearing the vegetation that's contributing into that

northern portion of the Brazilian Pepper and stuff that's there. That's all gone. And so that's always been a seed source into our existing mitigation area. So it is a help. But as far as the southern part where we've had the feasibility study and hope to do future projects off of that, I don't have anybody yet knocking on the door.

MR. DEMA: Understood.

MR. HARPER: We historically evaluate those on a project by project basis. So it would be hard to plan for them in the Plan, but perhaps we could mention the opportunities that might exist. Like you said, it is a creative way. There are some consequences of accepting that as well, including the management and perpetuity of those sites.

Also, we're very cautious, not at Weedon Island necessarily, but some of our other preserves and management areas where we've been approached and want to introduce like stormwater retention ponds or other things. So we're not in support of converting uplands into wetland type feature as mitigation.

MR. DEMA: I agree with that. I guess I'm just looking at it for those portions that have been historically degraded by human activity if there's an opportunity for that, you know, that Delta, that value

add there for mitigation.

MR. HARPER: And then so as Mark alluded to earlier, in terms of the hydrologic improvements or the mosquito ditch removal type efforts, we see it as a two-prong approach to restoring the area, including hydrologic restoration. But also exotic control because typically the mounds that are formed from the canals, the dredge of the canal, are where the exotic species, Brazilian Pepper primarily, will establish.

So by getting rid of the mounds and reintroducing a natural hydrology sort of we restore the hydrology but also as a consequence we restore the ecology of the area by removing and keeping out the exotic species.

MR. DEMA: Excellent. Thank you.

MR. HARPER: Other questions? Yes.

MR. EDWARDS: I had some comments for the natural resources.

MR. HARPER: Sure.

MR. EDWARDS: So as far as timber management, I submitted a timber assessment in 2017 I think it was. And I didn't find like any commercial timber resources. You may need to do mechanical treatments for maybe oak species that are invading areas. But as far as like a commercial timber sale, I didn't really see anything. Especially with access being a big part too.

You may need some reforestation. I think the last plan management review I read that forestry's comments, and I think it was maybe the scrubby flatwoods, he suggested maybe some reforestation.

And then for the cultural historical resources, when I was here at the land management review in 2015 and 2016 there was someone talking about needing to store like the cultural resources that you don't have displayed and that there should be some kind of better storage in case of a hurricane or something. The way they were stored is maybe in a low area. I didn't really see mention of that in the plan.

MR. HARPER: Do you remember the year of that assessment, Mike? Because --

MR. EDWARDS: It wasn't -- it was two management reviews ago.

MR. HARPER: Yeah. So I think maybe it's been addressed subsequent to that time.

MS. KOLIANOS: Yes. We do have that worked into our plan that we have submitted. As far as any hurricanes or anything like that, we have a plan for that at the research station.

MR. EDWARDS: Okay. Yeah, I wasn't sure that --

MR. HARPER: Yeah. We could point that out. Thank you.

MR. EDWARDS: Sure. And then as far as if you needed assistance burning forestry, I would say contact the local FAS. I'm not sure who that is because I'm at a district north of here. But we also have a forestry mitigation team that does burning and fuel treatments in urban areas. And I can give you that contact. I believe they're based out of Bunnell, but they cover this area.

MR. HARPER: And thanks for that, that's a very good comment. We -- I think we have worked with that strike team at Booker Creek Preserve in the past. So very helpful to have access to those state resources for sure.

MR. EDWARDS: Okay. And then if I could just have one more final comment. With the -- you have really good goals and objectives, but maybe tie them into the natural communities a little bit better, as far as, you know, what these goals and objectives and restorations what natural communities those are going to be in. Because during land management reviews it's kind of evaluated by the community type and so it would be a little easier --

MR. HARPER: Right. I see what you're saying. We can work to include more detail. Most -- you know, most of the restoration type activities are going to be

done in the mangrove areas. But in some of the upland restoration areas we can identify I guess better in the plan.

MR. EDWARDS: Very good. Oh, and then I don't know if it's in this time to talk about it now, but there's two areas where it talks adjacent landowner concerns. And like one -- I forget what sections they are, so it's maybe not real helpful. But one area it says there's no real issues and then another area it mentions like some encroachment or other activities. So, to me, it was kind of conflicting statements.

MR. HARPER: Maybe as we step through, if you find those sections, the specific areas of text that are conflicting or confusing maybe point those out as we go.

MR. EDWARDS: Yeah.

MR. HARPER: Would that be an option? We'll look for that. That doesn't ring a bell with me, but that's certainly something we want to be consistent about. And, again, some sections -- just for the general information, some sections of the plan are required by the State and so they may not be as germane and they may be very short.

Like surplus property is one that's always asked, and it's -- you know, our answer is always, yeah, we

don't have property in the Preserve that we would consider surplus and consider selling or conveying to someone else at anytime. So some sections are required by the State and others. But something like that we would want to make sure is consistent. So as we step through, maybe if you note those sections please let us know.

MR. EDWARDS: Okay. That's all I had.

MR. HARPER: Thank you. Yes, sir.

MR. FEHRING: Our comments by the Friends, our concern on the restoration is not so much what's proposed at this point, and we're very supportive of the Pilot Program and the feasibility study. The only recommendation we would make is perhaps the plan needs to assure the public of public review of the interim and final results of the Pilot Study.

Because once you begin to move equipment, particularly with the proposed walk in, you know, dig out type approach, I think it's going to be a -- there's the potential for a substantial negative public reaction to that going on.

And unless the public sees, you know, a clear explanation of the benefits, and how it's going to work, and what the final park is going to look like, there's going to be a lot of very surprised people who

are out there all the time, used to walking through the mangroves and all the sudden they've got a backhoe working next to them. So somebody who leads a lot of tours out there, I think it's going to take an education program. The plan might just note that -- I mean, the implementation and what you're proposing, but I think this is the time the way we're doing this meeting to work it out.

MR. HARPER: Right. So that's a very good point. The project -- a series of projects, a Pilot Project, and feasibility analysis, and then continuing effort to do that, those are major impactful projects that will be seen by the public. And there will be education and public outreach built into those projects. So that's a partnership with SFWMD and our Capital Improvement Program. And so built into that will be public hearings and meetings to try to convey the purpose and the benefit of the project going forward.

MR. FEHRING: With the very effective public outreach that comes out of Weedon now for its events and so forth, you've got a very easy -- and out of the Friends we have our own to communicate that ahead of time. And I think that's something that's going to need to be done ahead of time so it doesn't catch people by surprise and you get public support.

MS. LEASURE: Bill, Liz and her staff have been -- and I have been talking, and we're planning. They wanted to be here like next month, but I don't think I'm going to have time next month. So in March we'll start educating people and getting the word out on at least the Pilot Project and whatnot.

I know a lot of people have heard we're going to do these restoration projects for a long time and we're finally getting started on this. So Liz is doing a great job in bringing me in and we'll talk about that and go into more detail. And if the consultant is available, I'm sure Bruce would like to come in and speak as well at one of these talks. But, yeah, we are aware of that because we've talked about it for so long again, and we're finally starting to move. So that's a good point.

MR. HARPER: Other questions regarding Section A, Habitat Restoration and Improvements under Resource Management?

Yes, sir.

MR. RAULERSON: Taking it back to the mitigation conversation, I'm not sure if this is appropriate to go in the Management Plan. But just as a quick FYI on the funding side, the estuary program is going to be getting a significant slug of money over the next five

years. I think on the order of $900,000 a year for -- what the EPA is looking for or the Federal Government is looking for is essentially shovel ready projects. I mean, like think back to the time of the Restore Act. For this year we've actually built that capacity into the Tampa Bay Environmental Restoration Fund. That's our annual grant application process. It just opened out on the street.

And so we -- I think some of the habitat restoration that's proposed for Weedon Island will be highly appropriate either through TBERF or we can have an internal side-bar conversation to put that either in the work plan or use some of these dollars from the Building Back Better funds.

MR. HARPER: Very good information. Thank you. Yes, sir.

MR. EDWARDS: I did find those two areas. It might just be me thinking about it different. But on page 6, Adjacent Land Use, it says -- it mentions what the adjacent land use is, like commercial and residential, and then it says, no conflicting plan -- or no conflicting use with plans of the Preserve. And then on page 34 when you're talking about prescribed burning, it mentions the adjacent lands are an issue in prescribed burning.

So I don't know if that needs to be --

MR. HARPER: Yeah. We can try to clarify that.

MR. EDWARDS: Like you said, I know there's certain things that the State requires like kind of blanket statements and then. . .

MR. HARPER: That's a good point for sure. I think both of those statements are true. So we'll try to work at alleviating the confusion for those. Thank you.

Yes, sir.

MR. FITZROY: I'm all for increasing prescribed fire for sure. I would recommend that there be kind of like a public workshop or something. Sometimes when prescribed fire is increased in a community and there isn't education beforehand people are confused or every emotional spectrum thing that you can think of. So that's what I would recommend, to set up some kind of public outreach before it's increased.

MR. HARPER: Thank you. Good suggestion. And as Bill said, we have, you know, top-notch education and outreach opportunities right there in-house at the ed center.

Yes.

MR. WALTON: I think what Jake said, doing a public outreach. The prescribed burns, I think it's

probably a few things need to be conveyed at various time points in there. I think what your target conditions are going to be for prescribed burns I think is important, so folks know when and what season they may expect to see these burns occurring. Because they do have issues, you know, like smoke and perhaps road access that goes along with those.

I'd also recommend that there's public information sort leading up to that burn event during -- and basically you can't have too much public information during doing prescribed burns is probably the take-home message.

The other point -- the other comment that I had on the burn, and perhaps more to initiate some conversation, is, again, I'm all for increasing the frequency of burning, but in reality it can be hard to do with resourcing and shrinking windows to do those burns in. So it may be best to tailor that to those communities that need the burns more frequent, rather than sort of the goal to burn the whole -- whole reserve or the whole uplands in a particular frequency.

You know, some areas may need to be burned every three years. Other areas may be able to go out to 10 years. So I think to tone that to the individual communities is important.

MR. HARPER: Absolutely. And that's our approach so we'll try to make sure that gets conveyed in the management plan.

Other comments? If not, let's go -- and there will be an opportunity again at the end of the overview and public comments section to revisit topics that maybe don't get addressed enough. So if you have additional questions we can hold those for the roundtable.

We'll go ahead and move on, Pam, to Section B of the Resource Management and Natural Communities.

MS. LEASURE: Those sections found on pages 38 and 39.

The objective: Minimize impacts to protect and maintain natural communities.

And our goal is to continue to maintain and minimize impacts to the natural areas by providing public access via boardwalks and trails and protection with the aquatic use zones.

MR. HARPER: Okay. So this is a pretty short section, but a pretty important section in the Plan. It's focused on securing the natural resources and the cultural resources found at the Preserve.

We covered most of the restoration and what I would consider active management techniques in Section

A. So this extends it to more of a protection element. We do have rangers at Weedon Island now and that is helpful to have an on-site presence beyond ed center.

So we'll get into that a little bit more with security a little later in the Plan. But that's the focus, is to protect the natural resources. And as the Plan notes we have some aquatic use zones that also help in that. So we focused a lot on the terrestrial communities, but we don't want to lose sight of the aquatic communities as well.

Questions regarding the protection of natural communities?

All right. Let's go to Section C.

MS. LEASURE: Okay. Imperiled Species Protection, and that's pages 39 through 41 of the Plan.

Objective is to minimize impacts to protect those imperiled species utilizing the Weedon Island Preserve.

Gopher Tortoise: Minimize loss of gopher tortoises through protection and education.

Goal 2: Roseate Spoonbill, continue to provide protection and education regarding the roseate spoonbill.

Goal 3: Manatee Protection, annually, minimize impacts to manatees and other aquatic species through posting and enforcement of established aquatic use

zones.

The Florida Goldenaster, Goal 4: Continue to protect and manage the Florida goldenaster site through exotic vegetation control and prescribed fire.

MR. HARPER: All right. So as you saw in Section A, most of our management activities are directed at a higher community level or holistic approach to active land management. But we do know the presence of these four species and other imperiled species as well that do require additional targeted protection, and so we do incorporate these in the Management Plan as well.

If anyone has questions regarding imperiled species please raise them now.

All right. If not, we'll go on to Section D, Forest Management.

MS. LEASURE: Wait. Gary has one.

MR. HARPER: Sorry. Yes, sir.

MR. RAULERSON: The one thing that I think might be missing from this -- and forgive me, it might be in the text. But either an annual or some sort of regular assessment of new imperiled species that show up on the site and ensuring that the documentation of that exists as well.

MR. HARPER: Yeah. We may cover that in the monitoring section coming up, but that's certainly a

fair and valid point.

MR. RAULERSON: Thank you.

MR. FITZROY: I want to give a shout out real quick to the management team there. The rocks that they inputted on all of side areas where the gopher tortoise frequent are very effective in minimizing -- it's not in the Plan, but I want to give a shout out to that move.

MR. HARPER: Thank you.

MS. LEASURE: Section D, Forest Management. This is one of those sections where we have to put it in -- in the Plan. It's on page 41.

Utilize forest management techniques, specifically prescribed fire, to maintain natural communities at Weedon Island Preserve and will increase the frequency of prescribed fire in the scrubby flatwoods communities and utilize mechanical reduction where necessary.

I know that we've already talked about it, but we have to put that there's no timbering so. . .

MR. HARPER: All right. Questions on forest management? And we certainly appreciate the support that we get from the Florida Forest Service in our forest management activities. You know, obviously a nature preserve we're not doing a lot of timbering, but it is important to maintain, as Mike pointed out

earlier, the scrubby flatwoods to keep some of the oaks from encroaching into the area.

Let's go ahead and move on then to Section E, Monitoring.

MS. LEASURE: Monitoring is on pages 41 through 47.

The objective: Conduct surveys and support the work of others to monitor the natural resources of Weedon Island Preserve.

Under Species Inventory, Goal 1: As needed, update lists of species utilizing the Preserve.

Fisheries Independent Monitoring: Annually support monitoring of fisheries by the Florida Fish and Wildlife Conservation Commission, FWRI, fisheries and review data summary reports.

Water Quality, Goal 3: Annually support monitoring of water quality by Pinellas County's Department of Public Works Environmental Management Division and review the data summary report.

Seagrasses: As needed, support analyses of seagrass distribution by Pinellas County's Department of Public Works Environmental Management Division and review data summary report.

MR. HARPER: All right. Thanks, Pam.

So obviously the approach to monitoring has

changed significantly over the years. And our approach, while the goal remains the same, is to keep an active inventory and understanding and including endangered or imperiled species that were brought up earlier. So instead of having dedicated staff that do that type of monitoring and research activities, we rely on our partnering agencies to help keep things up to date, as well as Preserve volunteers as well.

So we rely on Pinellas County Public Works Environmental Management for the water quality, ongoing water quality, and seagrass assessments and that's done in partnership with SFWMD I believe. And then the fisheries monitoring has been long and successful partnership with FWRI with the FWC.

So are there any questions or comments on this section? Yes, sir.

MR. EDWARDS: I have a question about the water quality. Do you guys have -- are you impacted by like red tide or algae blooms?

MS. LEASURE: Yeah. I mean, if it's out there, yes, we are being impacted. As far as the deed fish go, they eventually -- I think this last one we were having some dead fish getting caught up in the mangroves. If it's in Tampa Bay, it's everywhere.

MR. HARPER: Our Public Works Department

spearheads the response. So the Parks Department manages a number of marine parks that are adjacent to either the bay or the gulf, and so we partner with our Public Works Department to try to keep the fish from washing ashore where most of the visual and aesthetic impacts are. Obviously, there are impacts, respiratory impacts and things from red tide that we can't really control. But, yeah, we certainly are affected just like the rest of the Tampa Bay area.

Yes.

MR. WALTON: I didn't pick up on it before, but for the Pilot Project some of those ditches are going to be desiltered and then dredged. It would be good to see some water quality monitoring in those ditches as well.

MR. HARPER: That's part of the project.

MR. WALTON: Yeah. It's part of that project and then followup.

MR. HARPER: Okay. Yes, sir.

MR. DEMA: This relates to seagrass and the data that are being looked at here. I like this transect data particularly because it gets to a species level trend analysis, but I also think we're missing out on any opportunity to include SFWMD's biennial aerial seagrass data.

And that would give us a good picture of just, you know, overall trends and coverage every two years for the preserve and paint a broader picture. Especially over the last year or two as seagrasses have shown us their vulnerability again despite 20 great years. I think it's a hot topic and that data is readily available and paints a broader picture I think.

MR. HARPER: Yeah. Your last statement is exactly how I was going to respond. We walk a delicate balance between, you know, we are all concerned as environmental professionals about the status of the Bay itself and as the whole, and we've really tried to focus on the Preserve here. So that's kind of the information that's presented, but I do understand what you're saying from the context. Maybe we can make it more clear that those data are available through other sources through SFWMD.

MS. LEASURE: I think I got that same comment from Bill. And I spoke with our Public Works' folks and the information they gave us is from the Estuary Program's overall analysis of the seagrass data. So it wasn't clear in there.

And I will clarify that in the -- that these data are from all these sources. I just need to put that in there. So I've already spoken with our folks to say

that, you know, this isn't just those particular spots, these are the analysis from the Estuary Program.

MR. HARPER: Yes, sir.

MR. RAULERSON: I was going to tell you one of the things on our list to do is we're talking about building a new -- a seagrass reporting dashboard that sort of combines both the transect data and the SFWMD biennial report. that's going to be a longer term project. Maybe in the two to three year timeline, but we have shiny apps out there right now that show -- there's one that does the transects and one that provides all the SFWMD data.

MR. HARPER: Thank you. Other questions or comments for Section E, Monitoring?

Okay. Let's go on to Section F, Research.

MS. LEASURE: Okay. Under Research is under page 48.

The objective: Coordinate and support scientific studies conducted at Weedon Island Preserve by researchers from partnering agencies and other institutions, and use information provided to support management decisions.

We have a Site Use Application Process. So under Site Use Applications, Goal 1: As needed, review Site Use applications submitted by researchers interested in

conducting studies at the Preserve.

MR. HARPER: All right. Also a topic that has sort of evolved and changed over the years from in-house research to along with partners that we've long supported through this Site Use application process to more focus solely on external researchers from other agencies and organizations that want to partner with us in order to gain access to a unique resource and facility found at the Weedon Island Preserve. And then we gain the expertise of these external researchers that can complete studies that would be well beyond the scope of what we could do within local government. So it really is a positive partnership. And I think as that Plan notes we've had 55 such projects in the last 10 years so -- yeah, since 2012.

Any questions on the approach to Research?

All right. If not, we'll go on to Section G, Cultural Resource Management.

MS. LEASURE: The Cultural Resource Management can be found on pages 48 through 50.

The objective: In collaboration with AWIARE, map locations of mound sites and other significant features and integrate this information into existing archeological databases.

The first goal: Continue to support educational programs that promote the important cultural resources throughout the Preserve.

And Goal 2: Continue to support research opportunities that identify and protect archeological sites at the Preserve.

MR. HARPER: And Goal 3: Maintain strong partnerships with AWIARE and other agencies and organizations to provide sound stewardship of cultural resources.

So we left one off in the presentation. But, obviously, we partner closely with AWIARE. These are research professionals from local universities and volunteers that provide a level of expertise to our cultural resource management that we sincerely appreciate.

Questions or comments regarding Cultural Resource Management?

MS. KOLIANOS: I would just like to comment that annually we submit a report of what we have done throughout the year, so you're abreast of what all has been happening.

MR. HARPER: Correct. AWIARE also does in addition to their research activities they do promote a number of educational opportunities to the general

public as well which certainly is -- fits very closely with our mission in terms of getting information out to the public concerning these cultural resources.

Yes, Mark.

MR. WALTON: One interesting thing to keep in mind would be how vulnerable these shell mounds are to future sea level rise. I think that's probably seeing target now and what management implications arise from that.

MR. HARPER: Good point. Other questions or comments on Cultural?

Okay. Let's go on to Section H, Security.

MS. LEASURE: Security is on pages 50,51.

The Objective: Enforce rules and regulations as detailed in Pinellas County Code of Ordinances Chapter 90 to protect the natural and cultural resources supported by the preserve.

First goal is: As funding allows, increase the number of patrols completed by rangers to provide coverage from opening to closing of the Preserve seven days a week.

Goal 2: As funding allows, contract Pinellas County Sheriff's Officers for law enforcement officers dedicated to patrolling Weedon Island Preserve and other environmental lands.

MR. HARPER: So just so everyone is aware of the recent changes that have taken place, Pam, will you describe how the staffing has changed in the recent history at the Preserve?

MS. LEASURE: In September we put two rangers back into the Preserve. One is from opening, 6:30 to 4:30 from Sunday through Wednesday. And then on Wednesday through Saturday there's a ranger from -- in that same timeframe. So we have double coverage on Wednesdays, but we don't have rangers closing the preserve at this time.

MR. HARPER: Dedicated rangers, right?

MS. LEASURE: Dedicated rangers.

MR. HARPER: We have roving rangers that will visit the site from other nearby places, such as Sawgrass Lake.

MS. LEASURE: And it has helped us out from a land management perspective, just having somebody there relaying information to us.

MR. HARPER: And so the proposal is as funding allows to increase that to provide more continuous coverage while the Preserve is open to have coverage in the opening shift and the closing shift for seven days of the week. So when that exactly will happen is subject to budgetary constraints and justifications.

So that is the plan as I understand it.

Paul, would you like to address any of the security issues?

MR. COZZIE: No. I would just mention, you know, as Steve said, we underwent a level of service review earlier this year and went through a whole staffing issue. And one of the areas that was high priority was to get park rangers at Weedon Island Preserve. So we have started with the two mentioned, and we have an implementation plan that hopefully will allow us to add two additional rangers in the Fiscal Year '23.

MR. HARPER: Yes, Commissioner.

COMMISSIONER JUSTICE: What's the severity of the issues? I mean, are we seeing weekly, daily, monthly? Is it a couple times a year? I mean, what's the severity of any kind of security issues that we've had over the past?

MR. COZZIE: I think probably the most severe issue is the ordinance infractions, particularly with pets and those types of things going on. Of course, we always -- at any of our cultural sites we have to be concerned about looting of artifacts and those types of things. We've had incidences where gopher tortoises have been harassed and those types of issues. So that's primarily the job of the park rangers to enforce

that.

In addition, you know, it's also very helpful for the number of visitors we have who've never been to the Preserve because the education center is only open a few days a week, having the rangers there does provide a lot of public information to people and helps them keep from getting lost out there.

COMMISSIONER JUSTICE: Very good. Thank you.

MR. HARPER: And in terms of frequency, it's obviously busier on the weekends and the holidays are especially heavily used.

COMMISSIONER JUSTICE: Yeah. I didn't know if we were seeing after-hour type activities and those kind of -- you know, trespassing, vandalism, anything like that.

MR. COZZIE: I would mention that, you know, over the last few years I know we've had a lot more incidences of homeless camps showing up in different parts of the Preserve. And, of course, that's something we primarily rely on our Environmental Lands Unit Deputies to effect, but also with the additional rangers on site that works as a deterrent.

MS. LEASURE: I think the main thing is we have people dumping trash and things just outside the entrance station after hours. Or not even after hours,

just when nobody is around. People bringing in pets and dropping them off, bunnies, chickens, that kind of thing. And we did have -- actually, Duke Energy found -- saw somebody picking up two gopher tortoises, putting them in black bags, putting them in their trunk. They did actually go to the fishing pier. They were then going to go fishing. And called law enforcement, and law enforcement asked them to open up their trunk, and there were two gopher tortoises that they were going to take home. So, you know, it's just -- it helps to have staff on site.

MR. HARPER: Bill.

MR. FEHRING: You know, the Friends have called for the reintroduction of the rangers for many, many years. And with the pandemic, with the tremendous growth in visitation that happened when nobody could go anyplace except Weedon Island, and Weedon Island suddenly become a central recreation facility because it sits between two major population centers. We saw all kinds of problems.

I've got some wonderful photographs of a kid on a motorized bicycle going up to the tower, coming up, and then he saw me with the camera, he turned around and went back. And the tire marks are still on the boardwalk. The -- but people fishing, all kinds of

things, because signs didn't really -- the signs weren't adequate. There were no rangers to enforce it. The best enforcement was an old guy like me leading people with my volunteer badge on around for many months. And it has been tremendous to see the impact the two rangers have made on the weekends and so forth.

Yeah, we still have a lot of people and other problems, but we're not having that kind of problem there. You know, the pets are being taken out and so forth. And we strongly support the move to extend that and bring additional rangers in so that there is ranger coverage all hours that it's open to the public.

MR. HARPER: Thank you. And we'll cover these topics as well under the public use section.

But, yes, Jake.

MR. FITZROY: Just wanted to say as a former park ranger, Andy and Anthony are doing an awesome job. I've been out there it's going on six years and it's really changed just having some presence out there. The first week they were out there they caught a dude spearfishing off the pier. So, like, you know, that stuff would have gone unnoticed. So I second what Bill said.

MR. HARPER: Thank you. Other questions? Yes.

MR. RAULERSON: Wondering -- I will make the

assumption that it's probably easier to contract with Pinellas County Sheriff's Office for any work. But I wondering, A, if they have the capacity that you envision; or if there's opportunities to partner with other law enforcement agencies, specifically FWC? You know, somebody who that in their skill set.

MR. HARPER: Right. Well, that's a good point. FWC does have jurisdiction. I think they're spread even more thin than maybe our contracted deputies are. We've had a very long and successful relationship with the Sheriff's Office in providing these deputies. They're trained. They've recently merged. It was formerly known as the Environmental Lands Unit and then there was a Marine Patrol Unit, and they've recently merged together into one. But they bring a level of expertise and understanding of resources and enforcement that I think is pretty top notch. It's just they can't be all places at all times.

We manage as a department we manage close to 20,000 acres throughout Pinellas County. So we do partner with -- we do have efforts to try to educate and partner with other groups. Especially not only Weedon Island, but like Shell Key Preserve, other places that are incredibly popular through both municipalities, so the City of St. Petersburg, but also

with FWC and other agencies. So, yeah, I think all the help we can get, we certainly look to those other agencies.

All right. Let's go ahead and move on then. I think we're ready to move to a new section now. So we're moving out of Resource Management into Public Recreation starting on page 53.

MS. LEASURE: Okay. Public Access, the objective: Provide 363 days of public access for resource based outdoor recreation which is compatible with the conservation and protection of the natural and cultural resources.

Public Recreation Infrastructure, Goal 1: Patrol the Preserve from 7:00 a.m. to the posted closing time for visitor services.

Goal 2: Continue to offer kayak, canoe and paddle board rentals through a contracted vendor.

Maintenance, Goal 3: Conduct routine inspections of boardwalks, hiking trails, observation tower, and fishing pier daily.

Goal 4: Conduct inspections of the South Paddling Trail each month.

And then Carrying Capacity: Continue to provide 363 days of public access from 7:00 a.m. to posted closing time.

Goal 6: Enforce the carrying capacity of the Preserve to protect the natural and cultural resources.

MR. HARPER: All right. Question and comments? This covered a lot of the whole section on public use. So any questions or comments related to public use?

Yes, sir.

MR. FEHRING: This is an area where the friends have right now particular -- we've had particular concerns right now about the capacity issue. The number of visitors based on numbers that are in the Plan of visitors between 2019 and 2021 increased by 88 percent. And that was the impact of the pandemic.

And, you know, we're up to almost what 800 -- over 800,000 they're calculating in 2021. And the capacity issue of the parking out there is a concern because we have goals, and we'll speak to these later, of expanding the education program at the center from where it is now back to at least where it was a couple years ago and beyond. And there is very obviously on holidays and particularly on weekends a conflict. Because you can go out there now -- if you were to have any of our former type programs -- the outdoor recreation has just exploded.

And I'm sure the kayak rental where it is, those people park in the parking lot because of the location

and then walk over to it. And that adds to the people who are overflow from the parking down at the pier. And so we have a concern and we think the county really needs to -- it needs to be addressed. And I think clearly in the Plan should include a goal to address this. I'm not sure what the solution is, but it certainly needs to be recognized. Because the best kept secret in Pinellas County used to be Weedon Island. It's not by any stretch of the imagination anymore.

MR. HARPER: Thank you. Other questions, comments? Yeah, Jake.

MR. FITZROY: With the increase of recreation there's especially a lot more paddlers, whether they're rentals or first time or they went and bought a boat and they're going to go out there. The literature does do a good job of talking mid to high tide being the time to go on that awesome canoe trail. Like that's the best kept secret part of Weedon in my opinion, 4-mile canoe trail.

But there's a lot of people that I and others have seen just in like dead low tide just dragging kayaks through there. So it's not the end of the world, but if there can be some kind of signage or even installation of a tide clock. I think that would go a

long way to help education the next generation of paddlers.

MR. HARPER: Thank you. Yes.

MR. WALTON: I've only had the option to do the southern paddle route. There is a northern one I understand that goes up sort of up around Masters Bayou and around that way. Don't really see that promoted that much or --

MR. HARPER: Yeah. That was closed. So we've discontinued as a designated paddling trail. Your memory exceeds the span of the Plan.

All right. Let's go ahead and move on to the next section, Outreach and Education.

MS. LEASURE: Weedon Island Preserve Cultural and Natural History Center, pages 60 through 61.

The objective: Provide education and outreach programs describing the cultural and natural resources of coastal ecosystems and the benefits of preserving and enhancing these cultural and natural resources.

Goal 1: Continue to provide outreach and educational programs addressing the cultural and natural resources of the Preserve.

Goal 2: Continue to provide programs through virtual programming and social media to expand audience outside of Pinellas County.

Weedon Island Preserve Visitors Guide is on page 62 to 63.

As needed, update the Weedon Island Preserve brochure and make available online; as resources allow, provide hard copy brochures for distribution to visitors at County offices.

MR. HARPER: All right. Thanks, Pam.

So at this time, we'll take any comments or questions regarding outreach and education.

Yeah, Bill.

MR. FEHRING: This is another area of particular concern to the Friends in that we have supported financially for many years summer camps, the Title One school programs, field trips that go out there, and we have supported the majority of the online programs that over the past two years has expanded.

And the staff has done an absolutely marvelous job of not only presenting educational information, but it's been done in a very economically beneficial way, and it has expanded the knowledge of Weedon Island and the Center and its value to the general public just exponentially.

And the visitors that we get coming in now that are from out of town, they've had all kinds of information because of the linkages of the social media

has created between visitor guide type programs, trip aware, those kinds of things, you come in -- you go on there and you get stuff on Weedon Island. And so these programs have -- the public interest in programs out there, when I'm leading a hike I get lots of questions now about what else are you doing. And some of these people are aware of prior programs we've had.

So we are very, very interested in the expansion and the reintroduction of the programs we had two or three years ago, but also the expansion of the program. We think there's a great public interest in capacity for it to do public good. We would like to see the center open an additional day each week, Wednesday through Sunday, which it was at one time. And also the presence of county staff seven days a week in the Preserve building so that it can be open for the summer camps, the school programs.

Right now, we are looking this summer at a concern, and I know JP is working with legal and so forth for mechanisms to do it. But, ultimately, the solution of that is expansion of the staff. More man hour, larger man hour budget at the center so that you could cover with the staff someone at the center seven days a week, and the center being open to the public five days a week. And that's one of things we would

like to very strongly support.

MR. HARPER: Thank you. JP, would you like to address that comment?

MR. GELLERMANN: Yes. JP Gellermann, UF/IFAS Extension. I'm the supervisor/director for the Weedon Island Educational Center. And I would like mirror Bill's comments that we do have an exceptional staff out there and that the number of programs and participation continuously increases. It is not a well-kept secret anymore.

There's really high quality programs that are available that are presented, but additional staffing always helps in that and providing coverage for summer camps and things of that such. So we're working with administration to figure out ways to provide extra -- provide extra assistance in that capacity.

MR. HARPER: Thank you. Yes.

MR. WALTON: Just talking as a parent of two elementary school age kids, I think it's a really valuable resource we've got here in Pinellas County, Weedon Island. And to this I'm somewhat surprised that every school doesn't have a field trip there. It's something that -- I know when I went to school field trips were something that were kind of built in into our curriculum. And coming from down under we don't

have the same school system here. It doesn't seem to be the case here.

I do really think there's an opportunity to parter with Pinellas County Schools, work out what elements of the curriculum could be serviced by field trips out to Weedon Island. It's -- I think education will be all the better for it.

I take Bill's approach that someone has got run those trips, someone has to do coordination. But, yeah, I think it's something that, yeah, we should get out there in a structured educational way.

MR. HARPER: Thank you. Yes.

MR. FITZROY: Yeah, I support everything about expanding educational opportunities. Like I mentioned when I introduced myself, we just celebrated 10 years of partnership with FYCCN. And because of Weedon and the County and the partnership, you've given us a hub to serve thousands and thousands of kids and about 60 plus partners. So thank you for that.

Sensing Nature is one of the partners that we partnered with that are doing a lot of the education programs right now. So I fully support them in helping them increase their outreach. But they've been doing a fantastic job with the support of the Friends to do the good work that they're doing. So thank you.

MR. HARPER: Thank you. Other comments or questions on Section 5, Outreach and Education?

MS. KOLIANOS: I just have one comment. We used to have monthly programs. They were at night, archeological, different, you know, talks from different researchers and of course with COVID all of that stopped. But we would have upwards of 100 people each time. So it was very popular. I mean, now we're doing the Webinars, which, you know, has its advantages actually, but it would be nice sometime when we can look to the future where we might be able to return to those programs also.

MR. HARPER: Thank you.

MR. DEMA: I have one more thing.

MR. HARPER: Sure.

MR. DEMA: I thought it was interesting Bill brought up social media and if there's any opportunities to tell Weedon's story. And, you know, in the media vehicle of our time here, I know nothing about social media. But I know -- the only thing I know about it is everybody else is on it. And to the extent that Weedon's story could be told a little bit through that, I think that's also beneficial.

MR. HARPER: Yeah. I guess I would look to JP for that, as well part of the education mission.

MR. DEMA: Now, part of me is also thinking back to the last section in carrying capacity and, you know, if we -- question there, do we know the carrying capacity?

MR. HARPER: Well, we have defined as part of the Management Plan the carrying capacity is the capacity of the vehicles in the existing parking lot.

MR. DEMA: Okay. So just based on the parking lot?

MR. HARPER: Correct.

MR. DEMA: There's not some number out there that --

MR. HARPER: No. So it's obviously a function of the number of people per vehicle. So the more that we can do, you know, ride sharing or carpooling would certainly -- especially for those events that like Bill was bringing up earlier, that might be more compatible to that versus something like kayaking. But, yeah, I think we're going to have to get creative. The resources is super popular but also limited in capacity.

MR. DEMA: I feel like Saturday if you're there by 9:00 you're okay. 10:00, you might not be okay.

MR. HARPER: Correct.

MR. DEMA: So that that's magical hour there.

MR. HARPER: Correct.

MR. DEMA: And I don't know if there's any other more creative ways to help people get in there, parking remotely and --

MR. FEHRING: That actually -- you know we've got a new contractor coming on board with the kayak concession. And, you know, since that creates a lot of the parking situation out there, one thought would be to have a remote parking someplace just outside the Preserve or at some more remote portion of it and have those people shuttled to their facility to launch. So they're not right there in the parking lot walking across the street, which is what happens now.

And over the holidays, this past holiday season, I was out there on a Thursday with my daughter to do the tour and ended up parking behind the Center and having to walk back down because there wasn't any space in the parking lot. We were there midday and it was full. But most of the people parking there were in this flotilla of 40 kayaks that went out of the existing concession all at one time.

And, you know, there is a place where you could creatively think about maybe some way to park those people up on the dog track property or something, you know, and then shuttle them in to save the spaces for

the people that are actually coming down to use it or using it for other purposes. It needs to be creative. It is a problem. You know, we're just saying it needs to be addressed and the Plan could perhaps more strongly recognize it.

MR. DEMA: I like linking that to the commercial endeavor as well. So we're prioritizing access for the average citizen user while also acknowledging that that -- that service is very valuable to the park no doubt. And I've used it many times in the past before I had my kayak. But I think that it is appropriate maybe to link that to the commercial vendor, the remote parking idea.

MR. HARPER: Thank you. Yes.

MR. FITZROY: If the remote parking is a possibility, if you go back to, let's say, twice a month programs and you can anticipate having those people show up, on a weekend I do know that it does fill up on a regular basis now.

You might experiment with having busing provided to shuttle those participants. So get them all -- it's one collective cohort. So the 30 people that are going to go on this hike, park here, we're going to shuttle you in. And that way you don't have people signing up, showing up, and not parking. But you can anticipate

because it's scheduled. That's my thought.

MR. HARPER: Thank you. Well, we've stepped through the Management Plan.

Sorry. Go ahead.

MR. RAULERSON: The flip side of this whole equation thinking about carrying capacity is -- I know a lot of the state parks utilize the number of parking spaces to maintain that level of enjoyment for the attendees and that's one of those balancing acts.

I mean, we need to get as many people on the water enjoying the resources we have here as possible, but we want to make sure that those kayaks aren't banging into each other. You know, that the group in front of you isn't scaring off the birds so you'll never see them.

It's definitely something that needs to be considered within the whole frame that we're talking about. So, you know, it is one of those huge balancing acts to try to understand what -- where -- if there is a sweet spot. What the -- where that balance is where you're not disturbing the manatees, you're not having the -- being able to have the outdoor -- this outdoor natural experience.

MR. HARPER: Absolutely. And then you layer in the long-term protection of the natural resources as well.

All right. Well, we have one more section. I was prematurely going to say we were done going through the Plan, but there is Section 6, The Budget. Pam, if you'd like to step through that.

MS. LEASURE: The last part is just the Budget. And other than 22, 23, right now we have our expected budget in the future based on our resources, 697,000. In 22 and 23 we have the Restoration Project and the Exhibit Hall updates from our Capital Program, Capital Improvement, the Penny for Pinellas funding. So that increases it a little bit.

I don't have the anticipated costs for any of the future restoration projects. That will have to come as we go -- after we complete the Pilot Project then we'll start asking for Penny for Pinellas, and SFWMD, and Estuary Program, and whoever else wants to contribute to those restoration projects.

MR. HARPER: All right. Thanks, Pam. Any questions on the budget? Obviously, we did not build in inflation or any future projections. It does show a good allocation of the current funding and where the money goes for running the Preserve with the addition of the two Capital Projects that Pam mentioned.

All right.

MR. DEMA: I have a question with the revenue

sources. Are we there yet?

MR. HARPER: Yeah.

MR. DEMA: With the vendor, and why those monies generated there go into the general fund versus being earmarked for going back into the Preserve?

MR. HARPER: Yeah. That's a common question and that's the way the budget structure is set up. It goes back to the general fund and then, obviously, having that revenue source helps offset our expenditures as a program, but it also helps leverage our opportunities to ask the board for additional funds to do specific projects either through capital or our operating budget.

MR. DEMA: And so with the annual budget development and the requests for those kind of earmarks and allocations, is that part of the thought process annually or is it --

MR. HARPER: I can speak from my level is, yes, of course. We think that, yeah. We feel like we're bringing in this money to do that, but, you know, it goes through multiple layers of review, including the Board of County Commissioners.

MR. DEMA: Of course, yeah.

COMMISSIONER JUSTICE: Of course the Weedon Island Preserve, just like our other parks, are all funded

through the general fund. So from the standpoint we look to offset -- you know, one of our performance measures is what our return is as a department with revenues. I think we're somewhere between 35 to 40 percent of our overall budget. We recover through revenues so as revenues go up, of course, it offsets or provides a measure of requesting additional resources if we find those are necessary because they are being offset by revenues recovered, but we don't operate as an enterprise in any of our park facilities. We're a general fund department and so --

MR. DEMA: That all makes sense. Knowing that it is part of the thought process has answered my question Thanks.

MR. HARPER: Thank you. All right. Any other budget related questions?

All right. So now we've managed to step through the entire Plan. At this time we'd like to go ahead and open it up for public comment. So I know there are a number of people here. If you weren't here at the beginning of the meeting, I pointed out that we'll do this like a standard public comment public meeting in Pinellas County where you'll have three minutes to speak. We'll recognize you through the comment card process.

If you have filled out a card already, Eric has those. If you have not filled out a card yet and would like to speak or even if you would like to not speak but pass your comments along to us, please fill out a comment card and just note that you do not need to speak. Otherwise we'll call you up one by one. You'll have three minutes approximately to go ahead and make your public comments to the Advisory Group. And you can step up to the podium here.

It looks like the microphone is already on. If you would just leave it on. We're going to forego the use of the stop light timer and I'll just give you a signal when you're at your three minutes. So, Eric, do you have the cards?

MR. TEITELBAUM: There were none.

MR. HARPER: There were none?

MR. TEITELBAUM: Yes. No one had any.

MR. HARPER: Okay. So at this point if we forego the card process, would anyone like to speak to the Advisory Group at this time?

Well, thank you very much for your attendance even without stepping forward. We appreciate your support and are glad that you were able to attend and learn a little bit more about the management of Weedon Island Preserve. So thank you for your attendance.

We do have one person that would like to speak -- not speak. So we will just receive your comments.

And I want to point out again, that the entire Management Plan is available online at our website if you go to Pinellas County dot org slash parks and look for the Weedon Island Preserve page you will find the entire Management Plan, as well as all the appendixes that support the Management Plan.

So we would welcome comments through that forum as well if you'd like to send us an email, we'd be happy to hear your comments or suggestions for improvement to the Plan or the management of the Preserve. So thank you again for that.

So with that said, we'll pull it back to the Advisory Group and we'll open it up for a roundtable discussion at this point. Feel free to bring up any other questions, comments, concerns throughout the Plan. Or if topics that span multiple sections of the Plan, now would be a great time to bring them up, and we'll just go ahead and open it up to the Advisory Group. Yeah, Mark.

MR. WALTON: I'd like to revisit that question about the Northern Kayak Trail. With that balance of trying to increase public use of the reserve and balancing the quality of that experience, has there

been any thought to dispersing those recreational opportunities? It seems like having a different part of the park that these open to recreation could be one mechanism of doing that. Another -- another sort of focus. Take the focus off that one area.

You know, it's -- there's issues with that. Obviously, there's benefits in concentrating the public impact to one part of the reserve, but I guess raises that conundrum of -- just have to comment of if that's been considered or what the rationale has been.

MR. HARPER: Yeah. I don't know that that has been considered for the future. It would involve a major upgrade in infrastructure I think at whatever that satellite location would be, which has not been discussed. My partner, Lyle Fowler is conveniently -- oh, there's Lyle. Okay. Go ahead, Lyle. Please respond.

MR. FOWLER: Well, with the North Trail we did close it a number of years ago. I forget how many now. But the parking, ironically enough, was also an issue there because people were parking right off the road right-of-way.

One of the other influences that hasn't come up yet, but it is impacting attendance and participation is the popularity of the sand bar that is immediately

off of the Preserve. So you've got a lot of attendees who are meeting up with boaters, people who have water access, and then they park at the Preserve. And they board at the hand launch there at the fishing pier.

So I think there's already some of those pressures that are occurring, and it's not necessarily taking people to other areas of the Preserve. It's actually bringing them there. So I believe that the sand bar is technically outside of the 400 feet, but it's so close.

MR. FEHRING: There is -- just as far as the kayaking goes there's another concern that we've seen. The dock that's down there at the launch right now was designed for canoes basically. You can hold a canoe on the side on the gunnel and someone just step in. And when we had the program with the Weedon Warriors, we had to be very careful because we had these semi-disabled veterans from Bay Pines and getting them into canoes and so forth, which we were able to do off that dock.

But most of the kayakers that come in go around the side of the dock and in off the little ramp. I have to and my wife does because getting into a kayak, which is much more unstable, off the dock, I saw two people go over the day I was there. You know, they step in, and all the sudden they lose it, and now

they're in the drink.

You know, one improvement out there that might work would to be to look at there are some alternative ways for kayak launches. Some of the other parks -- Upper Tampa Bay has the rolling ramp one. I don't know if it increases or decreases the capacity because you're one at a time, but you're very quickly in the water.

But I've looked into some other where you could put one on each side of the dock, you know, keep it to get in and increase the speed at which people -- and the safety particularly that people get into the kayaks. Because I think the pressure is going to remain. I don't think it's going to go away. Everybody bought kayaks. They all have an investment. So now they've bought kayak racks, and they're going to want to use them. And it's a wonderful facility.

Once you get on the water, there's nothing really like it around the area. But you might look at -- you might want to consider a more efficient up to date launch facility designed for kayaks as opposed to the canoes which we've used for years out there for the Weedon Warriors.

MR. HARPER: Thank you. Yes.

MR. FITZROY: I've taken adaptive paddling

workshops and things like that through my kayak training, and there's room to handicap accessible to a lot of people that happen to use a wheelchair and things like that get a lot of benefits from paddling. And there is a current way for them to access that boat ramp that I can see, so I think that would go hand-in-hand.

And while we're talking about kayak stuff, if we get one more kayak spray off spot that would be great. This is like some dude with his fancy kayak is like scrubbing every little thing. Like, come on guy it's Saturday, it's 3:00, get out of there. So one more I think would go a long way. Thank you.

MR. HARPER: Noted. Thank you. Other general comments or concerns?

MR. DEMA: Still thinking about the carrying capacity issue and trying to balance. I appreciate what Gary said, you know, that just finding that balance. I don't know if there's some way to -- I don't know. Almost like create like times for the commercial kayak and canoe launch or some way to create a predictability.

I think that sometimes folks show up to the park and then there's -- you came all the way out. I know it's common problem here in Tampa Bay whenever we're

going to the beaches or any of our awesome amenities here. And I'm just thinking out loud. But if there was some way to create a predictability for visitors that doesn't increase stress, that honors the carrying capacity that's there now. That's where my head is at here. And I don't know if that's the -- if there's a way to do it via contract with -- I guess there's a new vendor coming?

MR. HARPER: New vendor, yes.

MR. DEMA: And if there's a way to do that via contract and being able to manage those expectations at that phase of the negotiation up front, there's a way to think about it there I don't know.

The first thing that comes to mind is some kind of like hourly or however -- whatever timing increment that is, and then, hey, that's your time. X amount of boats go out at that time. Show up 15 minutes beforehand. I know it feels more like an amusement park or something, but I'm also just trying think about -- just a way to create that predictability.

MR. HARPER: Those are good ideas. I appreciate that. There certainly have been discussions along similar lines. Not from a commercial vendor aspect, but staff have discussed things like with programs at the Education Center to try to avoid those peak times,

if at all possible, to try to help alleviate some of the parking concerns because it is driven largely by the kayak community. But it is also a function of just the Ed Center and popularity of the Center and the exhibits.

And we're building multi-million dollar exhibits that people want to come and see, and they may have never kayaked in their life but they would like to get close enough to the Ed Center so that it's convenient for them to see the Exhibit Hall.

MR. DEMA: Yeah. And that's maybe another pinch point that could be staggered time.

MR. HARPER: For sure. That's true.

Lyle, do you have any comment?

MR. FOWLER: If somebody could remind me what the total number of parking spaces is there so we can have some context to the discussion. I want to say it's 125.

MS. LEASURE: It's 136 and seven of which are handicap -- slated for handicap.

MR. FOWLER: So just to kind of frame the discussion. On some of these Saturdays and Sundays somebody had cited 9 -- between 9 and 10. If you're not in the Preserve and on the water by 9:30, you're probably not going to find available parking.

We are exploring some new technologies that can provide the public information, more in the way of expectation setting so that you're not disappointed when you get there. We saw some of it along at the time of the height with COVID with beach closures and dashboards that talked about green, yellow, and red, orange. So that you knew when you left if you were going to be sitting in traffic and battling congestion, that, you know, the park or the Preserve may be closed by the time you get there because it's at capacity. So we are exploring some of those, but it's really just to manage the expectation and not really shift the demand.

In reference to the parking 136 spots, we're seeing 100 cars every 30 minutes on some Saturdays and Sundays. So I think, you know, there would be challenges in spreading the demand around because the steady stream of the public. And like was mentioned, there's two large population centers. We're seeing a lot of people coming across the bridge from the Hillsborough County side. And folks when they're fully committed, they're not getting there and turning around. You know, they're staying.

So the two rangers are actively busy enforcing parking and trying -- the rocks were mentioned. We're trying to set up deterrents and so forth. So I'm not

sure what the answer is. We're remaining openminded about it and trying to protect and preserve everyone's experience when they're there because crowding and the perceptions of crowding are certainly important. You want to have a high quality recreation experience when you're there. You don't want it to be bow to stern kayaks or paddleboards throughout the length of the trail.

MR. DEMA: And I agree, that managing expectations is a more realistic goal than a distribution of the demand for the park. So what you were saying there with the beach closures, I think some of our beach communities have like a stop light kind of thing with respect to the public parking at their beaches.

I don't know if that's something -- if I'm overthinking this just, you know -- but from a management of expectation standpoint, that goes hand-in-hand with social media and real time what it looks like there. Maybe I'm overthinking this. But that's just -- I definitely agree with the most we could do there is to say, hey, this is what it's like right now.

MR. FOWLER: You know, I think you are right on target. We are looking to some of the beach communities as it relates to the parking. We've looked

at it for the boat ramps in all honesty because our boat ramps are under some of the same pressures with public access to the water. So you don't want to hook up and trail your boat all the way to War Veterans only to find that it's been full for the last hour or so.

There are these -- they're pods or disks or whatever. They're installed in the hard scape in the parking in the pavement. And they can sense when a vehicle is there, and then they report real time, you know, either on an app or a URL web based destination, and it will tell you, you know, there's two parking spaces right now in real time and those types of things.

So we are looking at them. Some of them though are quite expensive, and they do require a lot of maintenance and administration. Because the last thing you want to be doing is peddling bad information. So if you've got these technologies, they do have to be maintained. I think -- it's not science fiction I guess I would say.

MR. HARPER: Thank you. Other comments or questions?

Well, if not, I would like to go ahead and close the advisory group meeting and thank the general public for attending, but also thank the board members for

attending and giving your time, donating your time to try to help improve the Management Plan.

Your concerns and comments have all been taken down. Annemarie is in the back, she's a reporter -- a recorder who will transcribe the minutes of this meeting for us.

And I wanted to go ahead and thank Dan from our Communications Department who is sort of behind the scenes, but he helped us set up all of the technology and make sure the supporting infrastructure was in place to go ahead and host this meeting, certainly under some challenging times with reemergence of COVID as such a significant factor. So we appreciate all of his efforts and the Communication Department's help.

With that, I'll go ahead and close the meeting and thank you once again. Pam, if you don't mind going to the Plan timeline. So just as a reminder, we'll be incorporating your comments and suggestions over the next few weeks and presenting the updated Management Plan to the Board of County Commissioners hopefully in about mid-February.

Thank you.

(The meeting was concluded at 10:51 a.m.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA)

COUNTY OF PINELLAS)

I, Annemarie Christodoulou, Court Reporter, certify that I was authorized to and did stenographically report the foregoing proceedings of the Weedon Island Preserve Advisory Group Public Meeting, held on January 11, 2022; and that the transcript, pages numbered 1 through 76, inclusive, is a true and complete record of my stenographic notes.



ANNEMARIE CHRISTODOULOU
Court Reporter

APPENDIX 4
Florida Gas Transmission Line Easement

This Document Prepared By and Return To:
Sharma Eminent Domain Lawyers
7009 Dr. Phillips Blvd., Suite 130
Orlando, FL 32819

Grantee:
Florida Gas Transmission Company, LLC
1300 Main Street
Houston, Texas 77002

NATURAL GAS PIPELINE EASEMENT

TRACT NO: FL-PINE-018.001

The Undersigned, **PINELLAS COUNTY,** a political subdivision of the State of Florida ("Grantor," whether one or more), being the owner(s) of, or having an interest in, that certain tract of land situated in Pinellas County, Florida and more particularly described in Exhibit "A" attached hereto ("Lands"), for and in consideration of the sum of Ten and No/100 Dollars ($10.00), the receipt and sufficiency of which Grantor hereby acknowledges, does hereby grant and convey, the permanent easement and the temporary construction easement herein conveyed to **FLORIDA GAS TRANSMISSION COMPANY, LLC**, a Delaware limited liability company ("Grantee"), with its principal offices at 1300 Main Street, Houston, Texas 77002, and to Grantee's successors and assigns, along with the exclusive and perpetual right, privilege and easement for and to construct, install, maintain, operate, inspect, patrol, test, repair, alter, substitute, relocate, resize, replace and remove (collectively, the "Pipeline Operations") a single underground transmission pipeline system for the transportation of natural gas, subsurface appurtenances thereto and above-ground surface pipeline markers and monitoring/safety markers or electrical mitigation boxes (collectively, "Pipeline Markers"), as are reasonably necessary in connection with the transportation of natural gas by means of the pipeline (collectively, the "Pipeline Facilities") on, under, above, across, within and through a part and strip of the Lands, as described on Exhibit "A-1" attached hereto ("Permanent Easement"), together with the right to utilize Grantee's existing easement or easements as well as such additional portions of the Lands identified and described on Exhibit "A-1" as temporary construction easements for workspace, movement, storage and staging of personnel, materials, supplies and equipment, ingress and egress during the initial construction and installation of the Pipeline Facilities, except at road crossings, jurisdictional wetland crossings, tile crossings, river and stream crossings or areas with unusual construction problems where extra temporary construction easement(s) may be utilized (collectively the "Temporary Construction Easement").

TO HAVE AND TO HOLD unto Grantee, its successors and assigns, for the purpose of conducting the Pipeline Operations with respect to such Pipeline Facilities.

As further consideration for the payment made by Grantee hereunder, Grantor and Grantee further agree with respect to the Pipeline Facilities, the Permanent Easement and the Temporary Construction Easement that:

1. Exhibit "A" describes the Lands and Exhibit "A-1" describes the Permanent Easement and the Temporary Construction Easement. Exhibit "A" and Exhibit "A-1" are attached hereto and by this reference are made a part hereof for all purposes.

2. Grantor represents to Grantee that the Lands are not currently leased, rented or occupied by any lessee or tenant.

3. Grantee shall have the right of ingress to and egress from the Permanent Easement and the Temporary Construction Easement (during the length of its term) by means of the Permanent Easement, the Temporary Construction Easement (during the length of its term), and adjacent public or private roadways, easements or rights-of-way owned, held or lawfully available to Grantee, for the purposes of Pipeline Operations and performed at the will of the Grantee.

4. The thirty (30) foot width Permanent Easement as described on the attached Exhibit "A-1" is hereby segregated into two separate and distinct areas, each with its own specific rights and restrictions. The two separate permanent easement areas are as follows:

- Permanent Easement Area with No Surface Disturbance ("Section A"); and
- Permanent Easement Area with Surface Disturbance ("Section B").

A sketch depicting these two areas is attached hereto and made a part hereof as Exhibit "B".

5. Grantee shall construct and install by guided boring, directional drilling and/or other trenchless technology, and thereafter replace by guided boring, directional drilling and/or other trenchless technology and maintain, abandon in place, operate, inspect, test, and repair an underground pipeline and subsurface appurtenances thereto solely for the transportation of natural gas in Section A of the Permanent Easement. The subsurface easement component of Section A shall be the exclusive right to enter upon the surface of Section A and the airspace immediately above it to conduct Pipeline Operations for the Pipeline Facilities on the Lands shown in Section A. No activity undertaken by Grantee pursuant to this Agreement shall excavate or clear the surface of the lands within Section A, but Grantee shall have the right to place and maintain Pipeline Markers within and on the surface of Section A as required by applicable laws and regulations (including future laws and regulations).

6. Grantee shall construct and install by traditional open cut methods, and thereafter replace by traditional open cut methods, and maintain, abandon in place, operate, inspect, test, and repair an underground pipeline and subsurface appurtenances thereto solely for the transportation of natural gas in Section B of the Permanent Easement. The surface easement component shall consist of the privilege and non-exclusive easement to enter upon the surface of Section B and the airspace immediately above it for the purpose of the construction of the Pipeline Facilities within this area by traditional open cut methods along with the right, privilege and easement to enter upon the Surface Easement Area and airspace immediately above it at any time for the purpose of maintenance, operation, inspection, and/or testing of the aforementioned underground Pipeline Facilities. Grantee shall also utilize Section B as work space for purposes of staging or storage of equipment, supplies or materials, and ingress and egress, and for the movement of personnel, supplies and equipment related to the initial pipeline construction in connection with Grantee's Pipeline Facilities. Furthermore, Grantee shall

have the right to place Pipeline Markers within and on the surface of Section B as required by applicable laws and regulations (including future laws and regulations).

7. Grantee shall have use of the Temporary Construction Easement ("Section C") as depicted on Exhibit "B", attached hereto and by this reference made a part hereof, as work space for purposes of staging or storage of equipment, supplies or materials, and ingress and egress, and for the movement of personnel, supplies and equipment related to the initial pipeline construction in connection with Grantee's Pipeline Facilities located on the Permanent Easement and on other lands. The rights of Grantee with respect to the Temporary Construction Easement shall commence on the date this easement is acquired by Florida Gas and shall terminate and expire upon **the earlier of** the passage of **twelve (12)** months after the date of this easement or the date on which Grantee completes the initial construction and installation of the Pipeline Facilities. Notwithstanding this provision, however, Grantee shall have the right to the continued use of the portions of the Temporary Construction Easement that are determined to be jurisdictional wetlands, if any, for an additional five (5) years, for the limited and sole purpose of Grantee's mitigation, restoration, maintenance and monitoring activities conducted in satisfaction of Grantee's governmental permit(s) requirements.

8. Grantor retains the right and may continue to use the Permanent Easement and Temporary Construction Easement for any lawful purposes that do not directly interfere with Grantee's rights acquired hereunder; provided, however, that Grantor shall not construct nor permit to be constructed any building, structure, excavation or other improvement or obstruction, on, over, under, above, across, within or through the Permanent Easement or Temporary Construction Easement (for as long as it shall exist) which would directly interfere with the exercise by Grantee of the rights hereby conveyed, including ingress to and egress from the Permanent Easement and Temporary Construction Easement (for as long as it shall exist), and the safe and efficient conduct of the Pipeline Operations relating to the Pipeline Facilities. Grantee agrees to provide Grantor, either upon Grantor's request or at Grantee's option, a prior written determination that any particular exercise of the right to use the Permanent Easement, or Temporary Construction Easement by Grantor does not directly interfere with the safe and efficient exercise of Grantee's rights, which determination shall not be arbitrarily or unreasonably withheld, delayed, or conditioned.

9. The consideration Grantee paid for the Permanent Easement and the Temporary Construction Easement, includes compensation for all merchantable timber, natural and decorative trees, landscaping, grasses, shrubbery, growing crops, improvements and Grantor's other property items which are compensable according to applicable Florida law (including but not necessarily limited to fences, roads, driveways, sidewalks, parking areas) that Grantee might remove from the Permanent Easement and the Temporary Construction Easement.

10. During construction, Grantee will bury the pipeline to provide a minimum cover of thirty-six inches (36"), except in rock where a minimum cover of twenty-four inches (24") will be provided. Grantor shall not reduce the post-construction depth of cover over the pipeline.

11. Grantee may displace any gopher tortoises found within the Permanent Easement or the Temporary Construction Easement to another location on the Permanent Easement or Temporary Construction Easement, or off the Lands of Grantor

(e.g., to a temporary holding pen), and return them as near to their original location on the Permanent Easement or Temporary Construction Easement as practicable after initial construction of the Pipeline Facilities is completed.

12. To the extent that Grantee may engage in excavation in Section B of the Permanent Easement, Grantee shall remove from the surface of Section B of the Permanent Easement all three-inch (3") or greater diameter rock excavated from the trench across tillable portions of Section B of the Permanent Easement.

13. Subject to Grantee's rights hereunder and to the extent not inconsistent therewith, Grantee will restore the surface of all disturbed areas within and outside of the boundaries of the Permanent Easement and Temporary Construction Easement to original contour and condition, as near as is reasonably practicable, to the extent the damage or disturbance of results from the Pipeline Operations. Grantee will also restore the surface of all disturbed areas of any existing access roads to its original contour and condition, as near as is reasonably practicable, to the extent utilized by Grantee and the damage or disturbance to which results from use by Grantee or its agents. Grantee shall plant grass seed on all other land surfaces disturbed by the Pipeline Operations.

14. Subject to Grantee's rights hereunder and to the extent not inconsistent therewith, Grantee will replace and/or mitigate, as may be required by law and/or permit, any mangroves disturbed and/or removed by Grantee from the Permanent Easement or Temporary Construction Easement areas.

15. Restoration Area Success Criteria –Wetland restoration areas will be considered successful when the following criteria are met:

a. The restoration areas can reasonably be expected to develop into the pre-construction community type as determined by the Florida Land Use and Cover and Forms Classification System (third edition; January 1999).

b. Topography, water depth and water level fluctuation in the restoration area are characteristic of the wetlands/surface water type specified in criterion "a."

c. Species composition of recruiting wetland vegetation is indicative of the wetland type specified in criterion "a."

d. At least 80 percent of the planted or recruited individuals in each stratum are indicative wetland species for the soil type and have survived throughout the monitoring period and are showing signs of normal growth, based upon standard growth parameters such as height and base diameter, or canopy circumference; and,

e. Percent cover by appropriate wetland species meets or exceeds percent cover in the adjacent wetland areas that were not disturbed by construction; and,

f. Coverage by nuisance or exotic species does not exceed the percent in the adjacent wetland areas that were not disturbed by construction.

g. The wetland restoration area can be determined to be a wetland or other surface water according to Chapter 62-340, F.A.C.

16. In the event that Grantor changes the existing use of the property, which is currently for preservation purposes, Grantee reserves the right, but not the obligation, (without liability for damages) from time to time to reclear the Permanent Easement by cutting and removing therefrom trees, brush and other obstructions that may, in the

reasonable judgment of Grantee or pursuant to regulatory requirements, injure, endanger or interfere with Grantee's use of the Permanent Easement.

17. Grantee may assign its rights acquired under the provisions of this Natural Gas Pipeline Easement in whole or in part, and Grantee shall have the right and option to operate the Pipeline Facilities for its own use or to lease, sell or assign any or all of the capacity of the Pipeline Facilities or the rights thereto.

18. This Natural Gas Pipeline Easement incorporates and describes all of the grants, undertakings, conditions and consideration of the parties. Grantor, in executing and delivering this Natural Gas Pipeline Easement, represents that Grantor has not relied upon any promises, inducements or representations of Grantee or its agents or employees, except as are expressly set forth herein.

19. Nothing contained herein shall be deemed or construed to be a merger, release, waiver, modification or amendment of any rights Grantee presently owns or holds, as reflected in the official records of the county where the Permanent Easement, Temporary Construction Easement and Temporary Access Easement(s), if any, are located, including but not limited to easements encumbering other portions of Grantor's property.

20. This Natural Gas Pipeline Easement may be executed in counterparts, all of which together shall constitute a single document.

21. The rights, benefits, burdens and obligations acquired or assumed under the provisions of this Natural Gas Pipeline Easement shall inure to, benefit, bind and oblige Grantor, Grantee and his, hers, its or their heirs, executors, administrators, personal representatives, and successors and assigns.

DATED THIS 2nd day of November, 2015.

WITNESSES:

Della King
(Signature)

Name: Della King
(Printed Name)

Address: 315 Court Street

Clearwater, FL 33756

Kevin Baxter
(Signature)

Name: Kevin Baxter
(Printed Name)

Address: 315 Court Street

Clearwater, FL 33756

GRANTOR:

PINELLAS COUNTY, a political subdivision of the State of Florida

By: Mark S. Woodard (PS) 11/2/15
(Signature)

Mark S. Woodard
(Printed Name)

Title: County Administrator

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

By: _____
Attorney

ACKNOWLEDGEMENT

STATE OF Florida)(
COUNTY OF Pinellas)(

The foregoing instrument was acknowledged before me this 2nd day of November, 2015, by Mark S. Woodard, as County Administrator of **PINELLAS COUNTY,** a political subdivision of the State of Florida. He/she is personally known to me or has produced _____ (type of identification) as identification.

Alexis Sergeant
Notary Public
Name (Printed): Alexis Sergeant

My Commission Expires: July 14, 2019

DATED THIS 2nd day of November, 2015.

ALEXIS SERGEANT
MY COMMISSION # FF899785
EXPIRES July 14, 2019

DATED THIS 15 day of October, 2015.

WITNESSES:

(Signature)

Name: Elizabeth J. Porter
(Printed Name)

Address: 2166 Sheridan Rd
Mt Dora, FL 32757

(Signature)

Name: Jim Johnson
(Printed Name)

Address: 2405 Lucien Way Ste 200
Maitland FL 32751

GRANTEE: FLORIDA GAS TRANSMISSION COMPANY, LLC, a Delaware limited liability company

By: _____
(Signature)

Name: David Shellhouse
(Printed Name)

Title: Vice President

ACKNOWLEDGEMENT

STATE OF FLORIDA)
COUNTY OF Orange)

The foregoing instrument was acknowledged before me this 15th day of October, 2015, by David Shellhouse, as VP-Operations of **FLORIDA GAS TRANSMISSION COMPANY, LLC, a Delaware limited liability company**. He/~~she~~ is personally known to me or has produced ____ (type of identification) as identification.

Notary Public
Name (Printed): James W. Johnson

My Commission Expires: 2-18-19

NOTARY PUBLIC STATE OF FLORIDA
JAMES W. JOHNSON
MY COMMISSION # FF 188034
EXPIRES: February 18, 2019
Bonded Thru Budget Notary Services

EXHIBIT "A"

FL-PINE-018.001

Attached to and made a part of that certain
NATURAL GAS PIPELINE EASEMENT dated _____, 20__
by and between PINELLAS COUNTY, a political subdivision of the State of Florida, as Grantor, and
FLORIDA GAS TRANSMISSION COMPANY, LLC, as Grantee

DESCRIPTION OF THE LANDS

All those parts of the East 3/4 of the Northeast 1/4 of the Northwest 1/4 of Section 20, Township 30 South, Range 17 East, and of the Southeast 1/4 of the Northwest 1/4 of Section 20, Township 30 South, Range 17 East, lying Southerly and Easterly of the right-of-way of County Road #258 (as set forth in Deed Book 1561, Page 391) together with any and all riparian rights and whatever interest the parties of the first part have in and to the above mentioned County Road #258, 94th Avenue and any other roadways lying within the area conveyed; including lands conveyed to Leo Hofmeister and Eileen Hofmeister, his wife, by Pinellas County, Florida (O.R. Book 130, Page 440), BUT LESS the following:
a) Lands of Lewis Z. Kent, as described in O. R. Book 209, Pages 34 and 36, Pinellas County Records,
b) South 40 feet for right-of-way of 94th Avenue,
c) Lands conveyed by Deed to Florida Power Corporation, as described in O.R. Book 1254, Page 459, Public Records of Pinellas County, Florida.

Including all the lots in TAMPETE SHORES, according to the plat thereof, recorded in Plat Book 29, Page 101, Public Records of Pinellas County, Florida.

Being the same tract of land acquired by Grantor on the 24th day of June, 1993, in O.R. Book 8323, Page 1619, Official Records of Pinellas County, Florida.

EXHIBIT "A-1"

FL-PINE-018.001

Attached to and made a part of that certain
NATURAL GAS PIPELINE EASEMENT dated Oct. 15, 2015
by and between PINELLAS COUNTY, a political subdivision of the State of Florida, as Grantor, and
FLORIDA GAS TRANSMISSION COMPANY, LLC, as Grantee

DESCRIPTION AND SKETCH OF THE EASEMENTS TO BE ACQUIRED

EXHIBIT "B"

FL-PINE-018.001

Attached to and made a part of that certain
NATURAL GAS PIPELINE EASEMENT dated Oct. 15, 2015
by and between PINELLAS COUNTY, a political subdivision of the State of Florida, as Grantor, and
FLORIDA GAS TRANSMISSION COMPANY, LLC, as Grantee

SKETCH DEPICTING EASEMENT SECTIONS

4821-0248-8873, v. 1

PINELLAS COUNTY, FLORIDA
SECTION 20, TWP. 30 S, RNG. 17 E

EXHIBIT "A-1"

DESCRIPTION

PERMANENT EASEMENT

A PARCEL OF LAND, LYING IN AND BEING A PART OF THE NORTHWEST 1/4 OF SECTION 20, TOWNSHIP 30 SOUTH, RANGE 17 EAST, PINELLAS COUNTY, FLORIDA, BEING A PORTION OF THAT PROPERTY DESCRIBED IN OFFICIAL RECORDS BOOK 8323, PAGE 1619, PUBLIC RECORDS OF SAID COUNTY AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF SAID NORTHWEST 1/4 OF SECTION 20; THENCE, ALONG THE EAST BOUNDARY THEREOF, THE FOLLOWING TWO (2) COURSES: 1) S 00°07'24" E 2485.17 FEET TO THE POINT OF BEGINNING; 2) CONTINUE S 00°07'24" E 31.11 FEET TO A POINT ON A CURVE ON THE NORTHEASTERLY BOUNDARY OF DUKE ENERGY FLORIDA, INC. RIGHT OF WAY AS RECORDED IN OFFICIAL RECORDS BOOK 1254, PAGE 459, PUBLIC RECORDS OF SAID COUNTY, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 200.00 FEET, A DELTA OF 16°38'50" AND A CHORD OF N 67°39'08" W 57.91 FEET; THENCE ALONG SAID NORTHEASTERLY BOUNDARY, THE FOLLOWING TWO (2) COURSES: 1) ALONG THE ARC OF SAID CURVE, 58.11 FEET; 2) N 59°19'56" W 1383.34 FEET TO A POINT ON A CURVE ON THE EASTERLY RIGHT OF WAY LINE OF SAN MARTIN BOULEVARD NORTHEAST, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 895.37 FEET, A DELTA OF 02°00'16" AND A CHORD OF N 13°57'21" E 31.32 FEET; THENCE, ALONG THE ARC OF SAID CURVE, 31.32 FEET; THENCE S 59°19'56" E, ALONG A LINE LYING 30.00 FEET NORTH OF AND PARALLEL WITH SAID NORTHEASTERLY BOUNDARY, 1392.35 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET, A DELTA OF 14°05'01" AND A CHORD OF S 66°22'13" E 41.68 FEET; THENCE, ALONG THE ARC OF SAID CURVE, LYING 30.00 FEET NORTH OF AND CONCENTRIC WITH SAID NORTHEASTERLY BOUNDARY, 41.79 FEET TO THE POINT OF BEGINNING.
CONTAINING 0.990 ACRE (43,137 SQUARE FEET), MORE OR LESS.

TEMPORARY CONSTRUCTION EASEMENT

BEING AN ADDITIONAL PARCEL DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF SAID NORTHWEST 1/4 OF SECTION 20; THENCE, ALONG THE EAST BOUNDARY THEREOF, THE FOLLOWING TWO (2) COURSES: 1) S 00°07'24" E 2458.86 FEET TO A POINT THE POINT OF BEGINNING; 2) CONTINUE S 00°07'24" E 26.31 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 170.00 FEET, A DELTA OF 14°05'01" AND A CHORD OF N 66°22'13" W 41.68 FEET; THENCE, ALONG THE ARC OF SAID CURVE, LYING 30.00 FEET NORTH OF AND CONCENTRIC WITH NORTHEASTERLY BOUNDARY OF SAID DUKE ENERGY FLORIDA, INC. RIGHT OF WAY, 41.79 FEET; THENCE N 59°19'56" W, ALONG A LINE LYING 30.00 FEET NORTH OF AND PARALLEL WITH SAID NORTHEASTERLY BOUNDARY, 207.80 FEET; THENCE N 30°40'04" E 25.00 FEET; THENCE S 59°19'56" E, ALONG A LINE LYING 55.00 FEET NORTH OF AND PARALLEL WITH SAID NORTHEASTERLY BOUNDARY, 207.81 FEET TO A POINT ON A CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 145.00 FEET, A DELTA OF 11°05'29" AND A CHORD OF S 64°52'33" E 28.03 FEET; THENCE, ALONG THE ARC OF SAID CURVE, LYING 55.00 FEET NORTH OF AND CONCENTRIC WITH SAID NORTHEASTERLY BOUNDARY, 28.07 FEET TO THE POINT OF BEGINNING.
CONTAINING 0.139 ACRE (6,069 SQUARE FEET), MORE OR LESS.

NOTES:

1. *BEARINGS SHOWN HEREON ARE BASED ON THE EAST BOUNDARY OF THE NORTHWEST 1/4 OF SECTION 20, TOWNSHIP 30 SOUTH, RANGE 17 EAST, BEING S 00°07'24" E.*
2. *THIS IS NOT A BOUNDARY SURVEY.*
3. *SEE SHEET 4 (EXHIBIT B) FOR ADDITIONAL INFORMATION AS TO THE NATURE OF DISTURBANCE OF LANDS DESCRIBED IN THIS SKETCH.*

Reviewed by: CH SBC
Date: 10-20-15
SFN # 1332-355

SAM J. COOPER III
PROFESSIONAL LAND SURVEYOR
FLORIDA REGISTRATION NUMBER 4900
NOT VALID WITHOUT SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

PREPARED BY

UNIVERSAL ENSCO, INC.
3104 CHERRY PALM DRIVE SUITE 240 – TAMPA, FLORIDA 33619
PHONE: (813) 643-7032
PHONE: (713) 354-2481
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER 6186

PIPELINE, STATION, OR ACCOUNT NUMBER	SCALE 1"=100'	CONST. YR.
FILE NUMBER	CADD FILENAME	DRAWN RM / DATE 08/2014

REV. NO.	DESCRIPTION	BY	DATE	APP.
0	ISSUE FOR ACQUISITION	SJC	10/09/14	
1	ADD SIGNATURE	SJC	02/18/15	
2	CHANGE SHEET SIZE	SJC	02/24/15	
3	REVISED PER COUNTY COMMENTS	SJC	09/11/15	
4	ADD ADDITIONAL NOTE	SJC	10/06/15	

Florida Gas Transmission Company
An Energy Transfer/Kinder Morgan Affiliate

DESCRIPTIVE SKETCH OF EASEMENT ON THE PROPERTY OF PINELLAS COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA PINELLAS COUNTY, FLORIDA

PROJECT NO.
AFE NO. 537000919611

PREVIOUS DWG. NO.

SHT. OF

DWG. NO.
FL-PINE-018.001
SHT. 1 OF 4

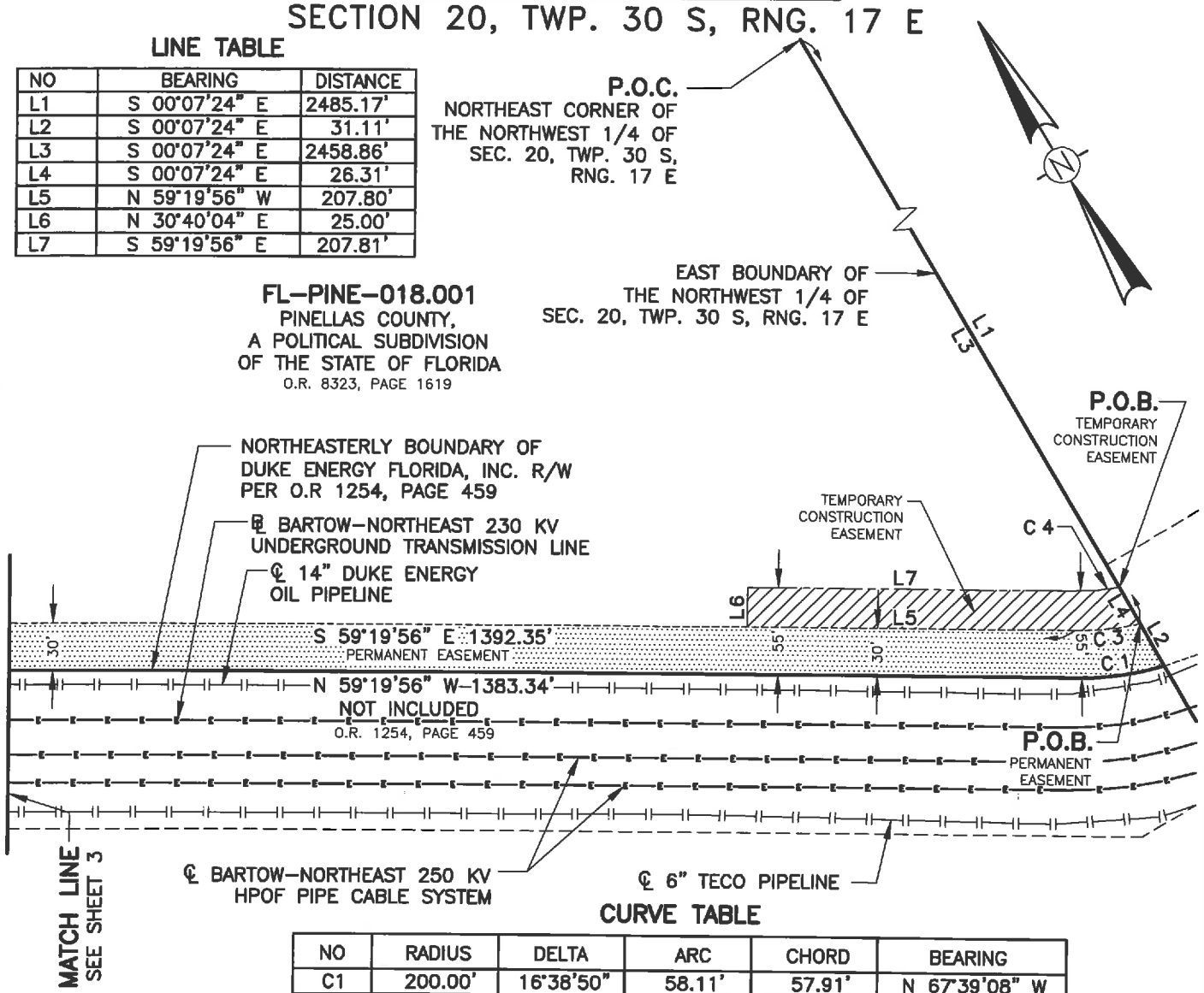
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PINELLAS COUNTY, FLORIDA

SECTION 20, TWP. 30 S, RNG. 17 E

LINE TABLE

NO	BEARING	DISTANCE
L1	S 00°07'24" E	2485.17'
L2	S 00°07'24" E	31.11'
L3	S 00°07'24" E	2458.86'
L4	S 00°07'24" E	26.31'
L5	N 59°19'56" W	207.80'
L6	N 30°40'04" E	25.00'
L7	S 59°19'56" E	207.81'



CURVE TABLE

NO	RADIUS	DELTA	ARC	CHORD	BEARING
C1	200.00'	16°38'50"	58.11'	57.91'	N 67°39'08" W
C2	895.37'	02°00'16"	31.32'	31.32'	N 13°57'21" E
C3	170.00'	14°05'01"	41.79'	41.68'	S 66°22'13" E
C4	145.00'	11°05'29"	28.07'	28.03	S 64°52'33" E

LEGEND

℄ = BASELINE
℄ = CENTERLINE
FGT = FLORIDA GAS TRANSMISSION COMPANY, LLC
O.R. = OFFICIAL RECORDS
P.O.B. = POINT OF BEGINNING
P.O.C. = POINT OF COMMENCEMENT
SEC. = SECTION
TWP. = TOWNSHIP
RNG. = RANGE
R/W = RIGHT OF WAY
N.T.S. = NOT TO SCALE
= PERMANENT EASEMENT
= TEMPORARY CONSTRUCTION EASEMENT

SEE NOTE 3 ON SHEET 1 OF 4

PREPARED BY
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PINELLAS COUNTY, FLORIDA

PROJECT NO.
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PREVIOUS DWG. NO.

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DWG. NO.
FL-PINE-018.001
SHT. 2 OF 4

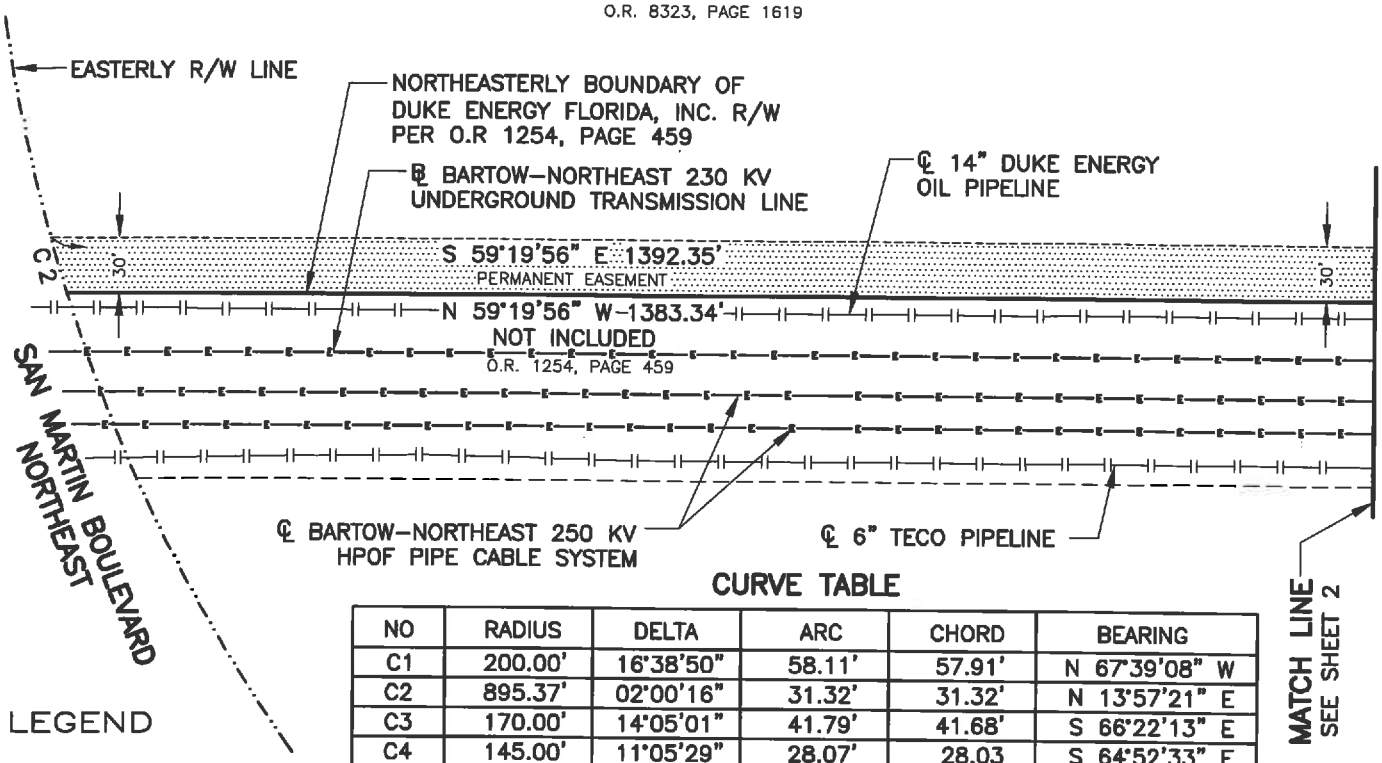
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PINELLAS COUNTY, FLORIDA
SECTION 20, TWP. 30 S, RNG. 17 E

LINE TABLE

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FL-PINE-018.001
PINELLAS COUNTY,
A POLITICAL SUBDIVISION
OF THE STATE OF FLORIDA
O.R. 8323, PAGE 1619



CURVE TABLE

NO	RADIUS	DELTA	ARC	CHORD	BEARING
C1	200.00'	16°38'50"	58.11'	57.91'	N 67°39'08" W
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C3	170.00'	14°05'01"	41.79'	41.68'	S 66°22'13" E
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= TEMPORARY CONSTRUCTION EASEMENT

SEE NOTE 3 ON SHEET 1 OF 4

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Florida Gas Transmission Company
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DESCRIPTIVE SKETCH OF EASEMENT
ON THE PROPERTY OF
PINELLAS COUNTY, A POLITICAL
SUBDIVISION OF THE STATE OF FLORIDA
PINELLAS COUNTY, FLORIDA

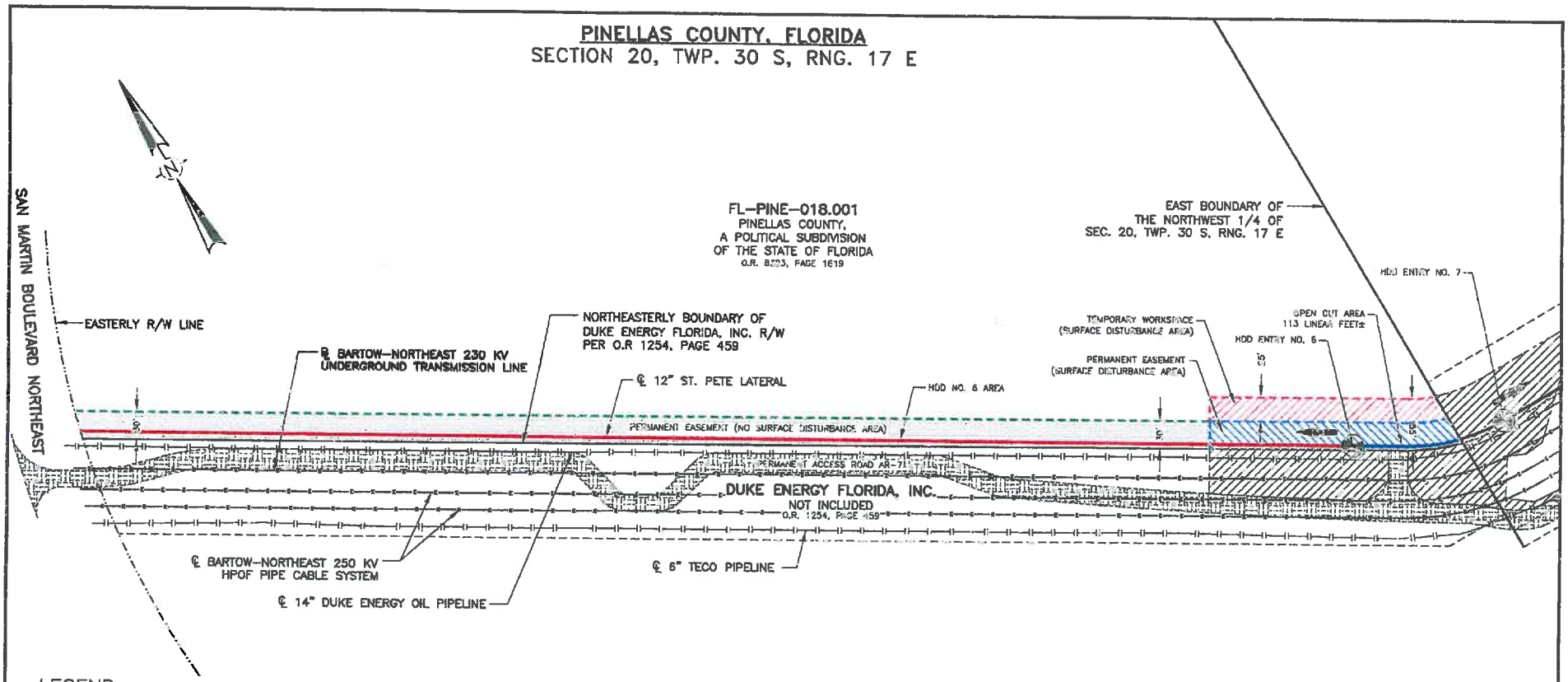
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DWG. NO.
FL-PINE-018.001
SHT. 3 OF 4

4



PREPARED BY

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3	REVISED PER COUNTY COMMENTS	SJC	09/11/15	
4	ADD ADDITIONAL NOTE	SJC	10/06/15	

DWG. STATUS	CHECKED BY	CHECKED DATE	APPROVED BY	APPROVED DATE
PRELIM				
BID				
CONST.				
PLOT DATE				
FILE NAME				

P.I. /STA.
ACCT. NO.

CONSTRUCTION YR	BY	DATE
SURVEY	WC	03/2013
DRAWN	FGS	09/2015
ASBUILT		

FILE NO.:
SCALE: 1"=100'

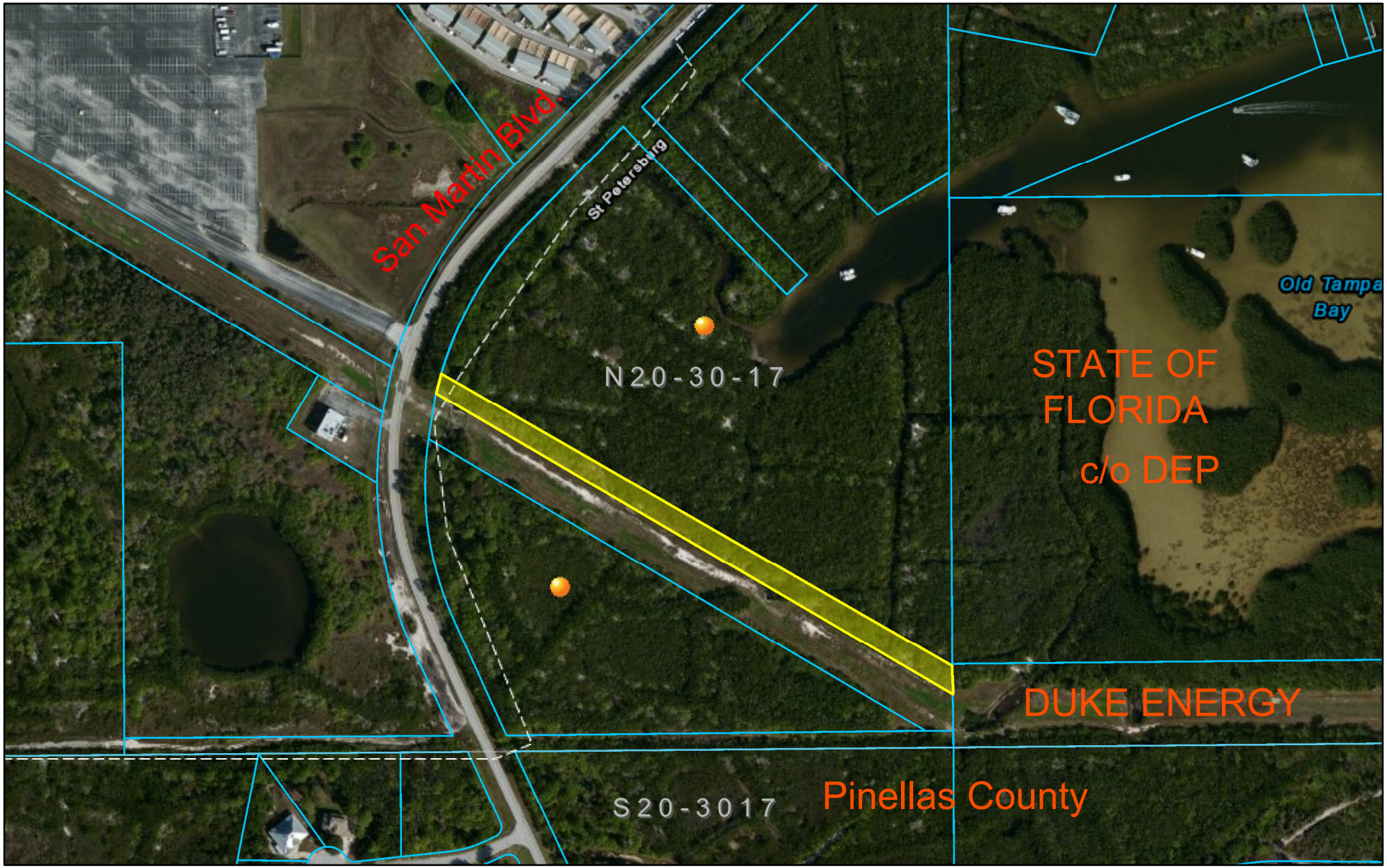
Florida Gas Transmission Company
An Energy Transfer/Kinder Morgan Affiliate
MAITLAND, FLORIDA

EASEMENT EXHIBIT FOR
FLORIDA GAS TRANSMISSION COMPANY
ON THE PROPERTY OF
PINELLAS COUNTY, A POLITICAL
SUBDIVISION OF THE STATE OF FLORIDA
PINELLAS COUNTY, FLORIDA

PROJECT NO.
AFE NO. 537000919611
PREVIOUS DWG. NO.
SHT. OF
DWG. NO.
FL-PINE-018.001
SHT. 4 OF 4
4

Exhibit B

Location Map



February 17, 2015

Parcels

Sections

County Owned Property

Half Section-Township-Range

Parcels

1:4,514

0 0.0375 0.075 0.15 mi

0 0.05 0.1 0.2 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and

Web AppBuilder for ArcGIS
Pinellas eGIS

APPENDIX 5
Land Management Review Responses, 2016 and 2020

2016 Land Management Review Team Report for Weedon Island Preserve

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1. Introduction

Section 259.036, F.S. requires a periodic on-site review of conservation and recreation lands titled in the name of the Board of Trustees to determine (1) whether the lands are being managed for the purposes for which they were acquired and (2) whether they are being managed in accordance with their land management plan adopted pursuant to s. 259.032, F.S. In cases where the managed areas exceed 1,000 acres in size, such a review must be scheduled at least every five years. In conducting this review, a statutorily constructed review team "shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan."

The land management review teams are coordinated by the Division of State Lands and consist of representatives from the Division of Recreation and Parks (DEP), the Florida Forest Service (DACS), the Fish and Wildlife Conservation Commission, the local government in which the property is located, the DEP District in which the parcel is located, the local soil and water conservation district, a conservation organization member, and a local private land manager.

Each land management review report is divided into three sections. Section 1 provides the details of the property being reviewed as well as the overall results of the report. Section 2 provides details of the field review, in which the review team inspects the results of management actions on the site. Section 3 provides details of the land management plan review, in which the team determines the extent to which the management plan provides for and documents adequate natural and recreational resource protection.

Finally, each report may also contain an Appendix that lists individual team member comments. This Appendix is a compilation of feedback, concerns or other thoughts provided by individual team members. It is not necessarily indicative of the final consensus reached by the land management review team.

1.1. Property Reviewed in this Report

Name of Site: Weedon Island Preserve

Managed by: Pinellas County Parks and Conservation Resources

Acres: 3,164 (TIITF) **County:** Pinellas

Purpose(s) for Acquisition: For the conservation and protection of natural and historical resources and for resource-based public outdoor recreation which is compatible with the conservation and protection of these public lands.

Acquisition Program(s): EEL, P2000/CARL **Year Originally Acquired:** 1974

Area Reviewed: TIITF owned portions **Last Management Plan Approval Date:** 1/28/2012

Review Date: 3/21/2016

Agency Manager and Key Staff Present:

- Pamela Leasure
- Steve Harper

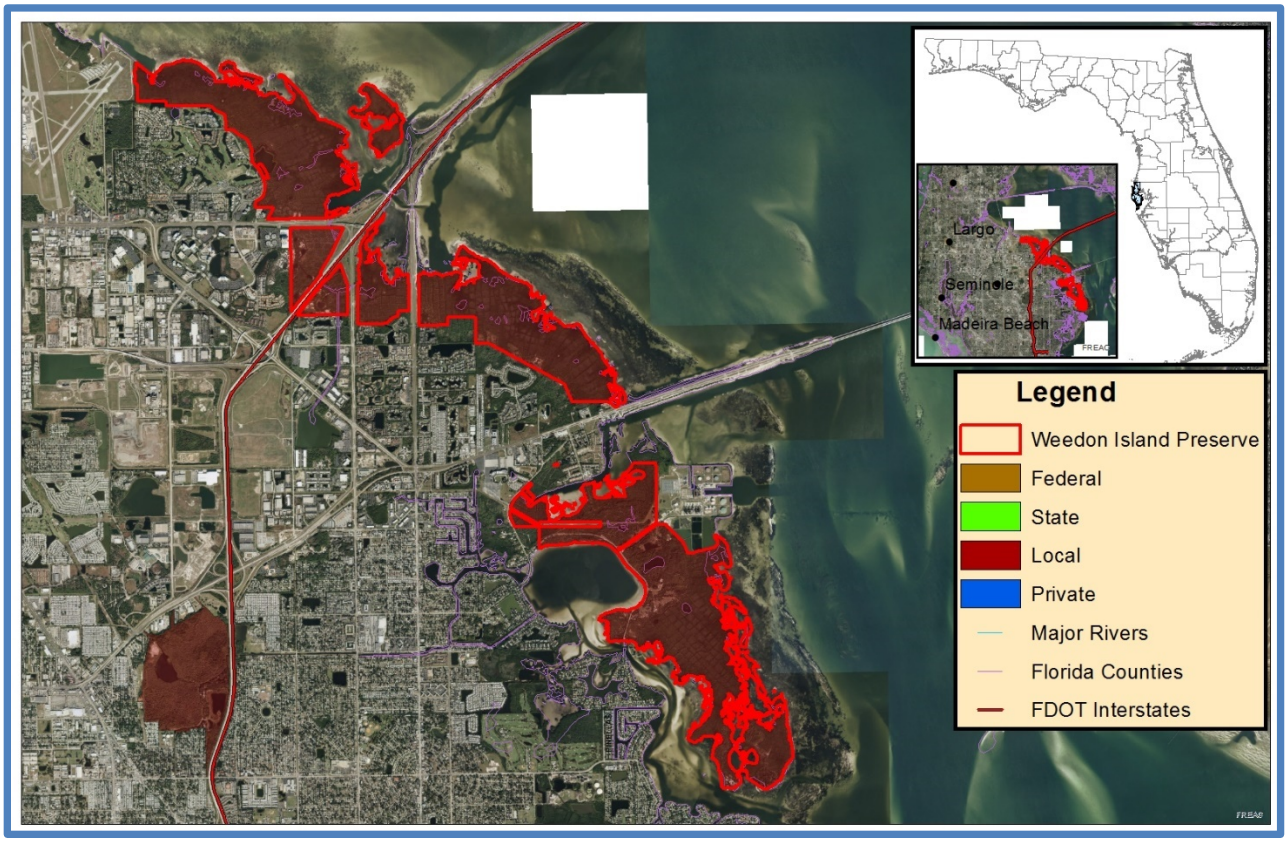
Review Team Members Present (voting)

- DRP: Tracy Telatycki
- FWC: Jennifer Myers
- FFS: Michael Edwards
- DEP: Kevin MacLachlan
- SWCD:
- Local gov't: Lisa Baltus
- Conservation organization: Katy Roberts
- Private land manager:

Other Non-Team Members Present (attending)

- Aric Larson, DEP/DSL
- Mike Sowinski, FWC IPM

1.2 Property Map



1.3. Overview of Land Management Review Results

Is the property managed in accordance with the purposes for which it was acquired?

Yes = 5, No = 0

Are the management practices, including public access, in compliance with the management plan?

Yes = 5, No = 0

Table 1 shows the average scores received for each applicable category of review. *Field Review* scores refer to the adequacy of management actions in the field, while *Management Plan Review* scores refer to adequacy of discussion of these topics in the management plan. Scores range from 1 to 5 with 5 signifying excellence. For a more detailed key to the scores, please see *Appendix A*.

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	2.73	2.15
Prescribed Fire / Habitat Restoration	2.99	3.83
Hydrology	4.17	3.63
Imperiled Species	3.63	2.98
Exotic / Invasive Species	3.92	4.03
Cultural Resources	4.83	4.50
Public Access / Education / Law Enforcement	4.35	4.18
Infrastructure / Equipment / Staffing	3.50	N/A

Color Code (See Appendix A for detail)

1.3.1 Consensus Commendations for the Managing Agency

The following commendations resulted from discussion and vote of the review team members:

1. The review team commends Pinellas County for outstanding cultural resource management and protection, particularly through a successful partnership with the local Citizen Support Organization (CSO). (5+, 0-)

2. The review team commends Pinellas County for partnering with Bok Tower Gardens on the Florida golden aster project. (5+, 0-)

3. The review team commends Pinellas County for aggressive efforts in invasive exotic plant control, resulting in "maintenance conditions" throughout the majority of the property. (5+, 0-)

4. The review team commends Pinellas County for overall good management of upland habitats, especially considering staff and budget limitations. (5+, 0-)

5. The review team commends Pinellas County for innovative approaches to restoring salt terns and addressing hydrologic issues within the mangrove swamp communities. 5+, 0-)

1.3.2. Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of the review team members. The next management plan update should include information about how these recommendations have been addressed:

1. The review team recommends that Pinellas County seek additional funding and land management staff to better achieve resource management goals. Long term sustainability of resource management at the current staffing and funding levels appears d to not be feasible. (5+, 0-)

   Managing Agency Response: We continue to look for opportunities to expand resources to meet the needs of management plan. The County budget is developed and evaluated to address the many demands facing the county. Financial assistance provided by the Bureau of State Lands would be beneficial to the management of the preserve.

2. The review team recommends that Pinellas County assess current protocols for storage of artifacts and other cultural resources to ensure that adequate precautions are in place in the event of natural disasters (hurricanes). (5+, 0-)

   Managing Agency Response: We are in the process of working with the AWIARE group to come up with a plan and will be incorporated into our Emergency Response Plan. The details will also be included in the plan update of the Weedon Island Preserve Management Plan.

3. The review team recommends that Pinellas County coordinate with the local Florida Forest Service mitigation team and PFAT team for prescribed fire assistance. (5+, 0-)

   Managing Agency Response: We agree coordination would be helpful and will work with our Regional Forest Area Supervisor.

4. The review team recommends that Pinellas County consider developing a strategy for pre and post monitoring of the hydro-blasting project to better quantify results. (5+, 0-)

   Managing Agency Response: Pending the availability of additional funding, we will add the pre and post monitoring efforts to the project contract.

2. Field Review Details

2.1. Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

1. **Natural Communities, specifically xeric hammock, marine unconsolidated substrate, coastal berm, salt marsh, salt flat, seagrass beds, and mollusk reef:**
2. **Listed Species Protection and Preservation, specifically for Florida golden aster.**

3. **Cultural Resources, specifically cultural resource survey, and protection and preservation**:
4. **Restoration of the Feather Sound area and Weedon Island area**:
5. **Non-Native, Invasive & Problem Species, specifically prevention of plants, and control of plants, animals, and pests/pathogens:**
6. **Hydrologic/geologic function, specifically ditches and hydro-period alteration**:
7. **Resource Protection, specifically boundary survey, gates and fencing, signage, and law enforcement presence:**
8. **Public Access, specifically roads, parking, and access by boat:**
9. **Environmental Education and Outreach, specifically pertaining to wildlife, Invasive species, habitat management activities, interpretive facilities and signs, and management of visitor impacts**:
10. **Management Resources, specifically waste disposal, sanitary facilities, buildings, and equipment:**

2.2. Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 3.0 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. **The management plan update should include information on how these items have been addressed**:

1. **Natural resources survey/monitoring, specifically fire effects monitoring and other habitat management effects monitoring, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether survey/monitoring efforts are sufficient on the property.**

   Managing Agency Response: Survey/monitoring efforts by staff were eliminated in 2008 due to budget constraints. We have and will continue to utilize volunteers and visiting scientists where available and appropriate.

Prescribed Fire (natural community maintenance), specifically area being burned, fire frequency, and quality, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, to what degree prescribed fire is accomplished according to the objectives for prescribed fire management. The scores range from 1 to 5, with 1 being 0-20% accomplished, 2 being 21-40%, 3 being 41-60%, 4 being 61-80% and 5 being 81-100%.

Managing Agency Response: We will continue to make prescribed fire a priority for managing the fire-adapted communities in the Preserve as determined by available resources. Working with our Regional Forest Area Supervisor should help to increase the frequency of prescribed fire in the preserve.

2. **Forest management, specifically timber assessment, received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether the management of forest resources is sufficient on the property.**

   Managing Agency Response: Timber harvesting is not an option within the Weedon Island Preserve. This discussion will be included in the plan update.

3. **Management Resources, specifically staff and funding, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether management resources are sufficient.**

   Managing Agency Response: We remain committed to managing the preserve to the best of our ability with the resources provided. We will continue look for funding opportunities to improve our staffing needs.

2.3. Field Review Checklist and Scores

Field Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Xeric Hammock (83.5 acres)	I.A.1	5	4	4	5	5	4			4.50
Scrubby Flatwoods (94.6 acres)	I.A.3	3	3	3	3	3	3			3.00
Marine Unconsolidated Substrate (4.9 acres)	I.A.4	5	4	X	X	5	5			4.75
Coastal Berm (10.4 acres)	I.A.5	4	5	4	X	5	5			4.60
Mangrove Swamps (2,188.6 acres)	I.A.6	3	4	4	4	4	3			3.67
Salt Marsh (71.4 acres)	I.A.7	5	4	4	X	5	3			4.20
Salt Flat (9.8 acres)	I.A.8	5	5	X	4	5	3			4.40
Seagrass (214 acres)	I.A.9	5	4	X	X	5	5			4.75
Mollusk Reef (1.9 acres)	I.A.10	5	3	X	X	5	5			4.50
									Natural Communities Average Score	4.26
Listed Species: Protection & Preservation (I.B)										
Animals	I.B.1	3	4	4	3	3	3			3.33
Gopher Tortoise	I.B.1.a	3	4	5	3	3	3			3.50
Plants	I.B.2	3	5	4	3	3	3			3.50
Golden Aster	I.B.2.a	3	X	5	4	5	4			4.20
									Listed Species Average Score	3.63
Natural Resources Survey/Management Resources (I.C)										
Sport fish or their habitat monitoring	I.C.1	4	4	4	4	3	3			3.67
Listed species or their habitat monitoring	I.C.2	3	3	3	4	3	2			3.00
Other non-game species or their habitat monitoring	I.C.3	3	5	3	4	3	3			3.50

Fire effects monitoring	I.C.4	2	2	1	2	3	3			2.17
Other habitat management effects monitoring	I.C.5	3	2	2	3	3	2			2.50
Invasive species survey / monitoring	I.C.6	4	4	4	2	4	3			3.50
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	5	5	5	5	4			4.83
Protection and preservation	II.B	5	5	5	5	5	4			4.83
								Cultural Resources Average Score		4.83
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A1	1	2	1	2	1	2			1.50
Frequency	III.A.2	1	2	1	1	1	2			1.33
Quality	III.A.3	1	4	1	2	2	4			2.33
								Resource Management, Prescribed Fire Average Score		1.72
Restoration (III.B)										
Feather Sound	III.B.1	4	4	5	4	5	4			4.33
Weedon Island	III.B.2	4	4	5	3	5	4			4.17
								Restoration Average Score		4.25
Forest Management (III.C)										
Timber Assessment	III.C.1	1	X	1	2	1	1			1.20
								Forest Management Average Score		1.20
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1. a	5	4	3	4	4	4			4.00
prevention - animals	III.D.1. b	5	4	2	3	4	4			3.67
prevention - pests/pathogens	III.D.1. c	5	4	2	3	4	4			3.67
Control										
control - plants	III.D.2. a	4	4	4	4	5	3			4.00
control - animals	III.D.2. b	X	4	4	4	5	3			4.00
control - pest/pathogens	III.D.2. c	5	4	4	4	5	3			4.17
								Non-Native, Invasive & Problem Species Average Score		3.92
Hydrologic/Geologic function Hydro-Alteration (III.E.1)										
Ditches	III.E.1. b	4	5	5	4	5	4			4.50
Hydro-period Alteration	III.E.1. c	4	5	5	4	5	4			4.50
								Hydrologic/Geologic function, Hydro-Alteration Average Score		4.50
Ground Water Monitoring (III.E.2)										
								Ground Water Monitoring Average Score		NA
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3. a	4	4	3	4	4	4			3.83
Surface water quantity	III.E.3. b	4	4	3	5	3	4			3.83
								Surface Water Monitoring Average Score		3.83
Resource Protection (III.F)										
Boundary survey	III.F.1	3	5	3	4	5	5			4.17
Gates & fencing	III.F.2	3	5	3	4	5	5			4.17

Signage	III.F.3	3	4	3	4	5	5			4.00
Law enforcement presence	III.F.4	3	5	4	X	4	4			4.00
							Resource Protection Average Score			4.08
Adjacent Property Concerns (III.G)										
Land Use										
Development Impacts to Prescribe Burning	III.G.1. a	3	X	X	3	3	5			3.50
Inholdings/additions	III.G.2	3	4	3	3	5				3.60
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1. a	5	4	5	4	5				4.60
Parking	IV.1. b	5	4	5	4	5				4.60
Boat Access	IV.1. c	5	4	5	4	4	4			4.33
Environmental Education & Outreach										
Wildlife	IV.2. a	4	5	5	5	4	5			4.67
Invasive Species	IV.2. b	4	5	4	5	4	5			4.50
Habitat Management Activities	IV.2. c	4	5	4	5	4	5			4.50
Interpretive facilities and signs	IV.3	4	5	5	5	5	5			4.83
Recreational Opportunities	IV.4	4	5	5	5	5	5			4.83
Management of Visitor Impacts	IV.5	4	5	5	4	5	5			4.67
							Public Access & Education Average Score			4.61
Management Resources (V.1, V.2, V.3. V.4)										
Maintenance										
Waste disposal	V.1.a	4	4	4	X	5	5			4.40
Sanitary facilities	V.1.b	4	5	4	X	5	5			4.60
Infrastructure										
Buildings	V.2.a	4	4	4	5	5	5			4.50
Equipment	V.2.b	4	3	4	4	4	5			4.00
Staff	V.3	2	1	2	2	1	2			1.67
Funding	V.4	2	1	2	2	1	3			1.83
							Management Resources Average Score			3.50

Color Code:	Excellent	Above Average	Below Average	Poor	See Appendix A for detail
		Missing Vote	Insufficient Information		

3. Land Management Plan Review Details

3.1 Items Requiring Improvements in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than 3.0 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team

requiring remediation. The next management plan update should address the checklist items identified below:

1. **Listed species protection and preservation, for listed animal species in general and specifically for gopher tortoise, received below average scores. This is an indication that the management plan does not sufficiently address protection and preservation of listed species.**

   Managing Agency Response: We will discuss the protection and preservation of listed animal species in the resource management portion of the plan update.

2. **Natural Resources Survey and Monitoring Resources, specifically fire effects monitoring and other habitat management effects monitoring, received below average scores. This is an indication that the management plan does not sufficiently address survey or monitoring.**

   Managing Agency Response: Survey/monitoring activities by staff were eliminated in 2008 due to budget constraints. We have and will continue to utilize volunteers where available and appropriate and include our accomplishments in the plan update.

3. **Forest Management, specifically timber assessment, received a below average score. This is an indication that the management plan does not sufficiently address management of forest resources.**

   Managing Agency Response: Timber harvesting is not an option within the Weedon Island Preserve. This discussion will be included in the plan update.

4. **Adjacent Property Concerns, specifically adjacent development impacts to prescribed burning, received a below average score. This is an indication that the management plan does not sufficiently address adjacent property concerns.**

   Managing Agency Response: We will include in the plan update a discussion of any impacts or concerns with the adjacent properties in relation to prescribed burning.

3.2 Management Plan Review Checklist and Scores

Plan Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Xeric Hammock (83.5 acres)	I.A.1	4	3	4	3	2	2			3.00
Scrubby Flatwoods (94.6 acres)	I.A.3	4	3	4	3	4	2			3.33
Marine Unconsolidated Substrate (4.9 acres)	I.A.4	4	4	4	3	2	2			3.17
Coastal Berm (10.4 acres)	I.A.5	4		4	3	2	2			3.00
Mangrove Swamps (2,188.6 acres)	I.A.6	4	3	4	3	5	3			3.67
Salt Marsh (71.4 acres)	I.A.7	5	4	4	3	3	2			3.50
Salt Flat (9.8 acres)	I.A.8	5	4	4	3	5	2			3.83

Seagrass (214 acres)	I.A.9	4	3	4	3	2	2			3.00
Mollusk Reef (1.9 acres)	I.A.10	4	4	3	3	3	2			3.17
									Natural Communities Average Score	3.30
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	2	5	3	2	3	2			2.83
Gopher Tortoise	I.B.1.a	1	4	3	2	2	3			2.50
Plants	I.B.2	2	5	4	2	3	2			3.00
Golden Aster	I.B.2.a	3		5	3	5	2			3.60
										2.98
Natural Resources Survey/Management Resources (I.C)										
Sport fish or their habitat monitoring	I.C.1	4		4	2	3	3			3.20
Listed species or their habitat monitoring	I.C.2	2	5	4	2	3	3			3.17
Other non-game species or their habitat monitoring	I.C.3	4	3	4	2	2	3			3.00
Fire effects monitoring	I.C.4	2	4	4	2	2	3			2.83
Other habitat management effects monitoring	I.C.5	4		4	2	2	2			2.80
Invasive species survey / monitoring	I.C.6	4	5	4	2	5	3			3.83
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	4	5	3	5	5			4.50
Protection and preservation	II.B	5	5	5	2	5	5			4.50
									Cultural Resources Average Score	4.50
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	4	4	4	3	3	4			3.67
Frequency	III.A.2	4	4	4	3	2	4			3.50
Quality	III.A.3	4	4	4	3	2	3			3.33
									Resource Management, Prescribed Fire Average Score	3.50
Restoration (III.B)										
Feather Sound	III.B.1	4	5	4	2	5	5			4.17
Weedon Island	III.B.2	4	5	4	2	5	5			4.17
									Restoration Average Score	4.17
Forest Management (III.C)										
Timber Assessment	III.C.1	1		1	1	1	1			1.00
									Forest Management Average Score	1.00
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1. a	5	5	5	2	4	4			4.17
prevention - animals	III.D.1. b	5	4	5	1	4	3			3.67
prevention - pests/pathogens	III.D.1. c	5	4	5	2	4	4			4.00
Control										
control - plants	III.D.2. a	5	5	5	2	5	4			4.33
control - animals	III.D.2. b	5	5	5	2	5	4			4.33
control - pest/pathogens	III.D.2. c	2	5	5	1	5	4			3.67
									Non-Native, Invasive & Problem Species Average Score	4.03

Hydrologic/Geologic function, Hydro-Alteration (III.E.1)										
Ditches	III.E.1. b	5	2	4	2	5	4			3.67
Hydro-period Alteration	III.E.1. c	4	5	4	2	5	4			4.00
								Hydrologic/Geologic function, Hydro-Alteration Average Score		3.83
Ground Water Monitoring (III.E.2)										
								Ground Water Monitoring Average Score		NA
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3. a	3	5	4	2	3	4			3.50
Surface water quantity	III.E.3. b	3	5	4	2	2	4			3.33
								Surface Water Monitoring Average Score		3.42
Resource Protection (III.F)										
Boundary survey	III.F.1	3	5	3	1	5	5			3.67
Gates & fencing	III.F.2	3	5	3	2	5	5			3.83
Signage	III.F.3	3	4	3	2	5	5			3.67
Law enforcement presence	III.F.4	3	4	4	5	5	5			4.33
								Resource Protection Average Score		3.88
Adjacent Property Concerns (III.G)										
Land Use										
Development Impacts to Prescribe Burning	III.G.1. a	1			1	3	3			2.00
Inholdings/additions	III.G.2	3	3	4	4	5				3.80
Discussion of Potential Surplus Land Determination	III.G.3	2	5	4	4	5	5			4.17
Surplus Lands Identified?	III.G.4	2	5	4	4	5	5			4.17
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1. a	5	4	5	3	5	5			4.50
Parking	IV.1. b	5	5	5	3	5	5			4.67
Boat Access	IV.1.c	5	4	5	3	5	5			4.50
Environmental Education & Outreach										
Wildlife	IV.2. a	4	5	5	3	2	5			4.00
Invasive Species	IV.2. b	4	5	5	3	2	5			4.00
Habitat Management Activities	IV.2. c	4	4	5	3	5	5			4.33
Interpretive facilities and signs	IV.3	5	5	5	3	5	5			4.67
Recreational Opportunities	IV.4	5	5	5	3	5	5			4.67
Management of Visitor Impacts	IV.5	5	5	5	5	5	5			5.00
								Public Access & Education Average Score		4.48
Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Wildlife Viewing	VI.A.1	5	5	4	4	5	5			4.67
Hiking	VI.A.2	5	5	5	4	5	5			4.83
Padding	VI.A.3	5	5	5	5	5	5			5.00
Fishing	VI.A.4	5	4	4	5	5	5			4.67
Camping	VI.A.5	4	4	5	2	5	4			4.00
Environmental Education / Cultural Resources	VI.A.6	5	5	5	5	5	5			5.00

Bicycling	VI.A.7	5	5	5	4	5	4			4.67
Boating	VI.A.8	5	5	5	4	5	5			4.83
External Research	VI.A.9	5	5	5	4	5	5			4.83
Proposed Uses										

Color Code:	Excellent	Above Average	Below Average	Poor	See Appendix A for detail
		Missing Vote	Insufficient Information		

Appendix A: Scoring System Detail

Explanation of Consensus Commendations:

Often, the exceptional condition of some of the property's attributes impress review team members. In those instances, team members are encouraged to offer positive feedback to the managing agency in the form of a commendation. The teams develop commendations generally by standard consensus processes or by majority vote if they cannot obtain a true consensus.

Explanation of Consensus Recommendations:

Subsection 259.036(2), F.S., specifically states that the managing entity shall consider the findings and recommendations of the land management review. We ask team members to provide general recommendations for improving the management or public access and use of the property. The teams discuss these recommendations and develop consensus recommendations as described above. We provide these recommendations to the managing agency to consider when finalizing the required ten-year management plan update. We encourage the manager to respond directly to these recommendations and include their responses in the final report when received in a timely manner.

Explanation of Field Review Checklist and Scores, and Management Plan Review Checklist and Scores:

We provide team members with a checklist to fill out during the evaluation workshop phase of the Land Management Review. The checklist is the uniform tool used to evaluate both the management actions and condition of the managed area, and the sufficiency of the management plan elements. During the evaluation workshop, team members individually provide scores on each issue on the checklist, from their individual perspective. Team members also base their evaluations on information provided by the managing agency staff as well as other team member discussions. Staff averages these scores to evaluate the overall conditions on the ground, and how the management plan addresses the issues. Team members must score each management issue 1 to 5: 1 being the management practices are clearly insufficient, and 5 being that the management practices are excellent. Members may choose to abstain if they have inadequate expertise or information to make a cardinal numeric choice, as indicated by an "X" on the checklist scores, or they may not provide a vote for other unknown reasons, as indicated by a blank. If a majority of members failed to vote on any issue, that issue is determined to be irrelevant to management of that property or it was inadequately reviewed by the team to make an intelligent choice. In either case staff eliminated the issue from the report to the manager.

Average scores are interpreted as follows:

Scores 4.0 to 5.0 are *Excellent*

Scores 3.0 to 3.99 are *Above Average*

Scores 2.0 to 2.99 are *Below Average*

Scores 1.0 to 1.99 are considered *Poor*

2020 Land Management Review Team Report for Weedon Island Preserve

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Introduction

Section 259.036, F.S. requires a periodic on-site review of conservation and recreation lands titled in the name of the Board of Trustees to determine (1) whether the lands are being managed for the purposes for which they were acquired and (2) whether they are being managed in accordance with their land management plan adopted pursuant to s. 259.032, F.S. In cases where the managed areas exceed 1,000 acres in size, such a review must be scheduled at least every five years. In conducting this review, a statutorily constructed review team "shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan."

The land management review teams are coordinated by the Division of State Lands and consist of representatives from the Division of Recreation and Parks (DEP), the Florida Forest Service (DACS), the Fish and Wildlife Conservation Commission, the local government in which the property is located, the DEP District in which the parcel is located, the local soil and water conservation district or jurisdictional water management district, a conservation organization member, and a local private land manager.

Each Land Management Review Report is divided into three sections. Section 1 provides the details of the property being reviewed as well as the overall results of the report. Section 2 provides details of the Field Review, in which the Review Team inspects the results of management actions on the site. Section 3 provides details of the Land Management Plan Review, in which the team determines the extent to which the Management Plan provides for and documents adequate natural and recreational resource protection.

Finally, each report may also contain an Appendix that lists individual team member comments. This is a compilation of feedback, concerns or other thoughts raised by individual team members, but not necessarily indicative of the final consensus reached by the Land Management Review Team.

Property Reviewed in this Report

Name of Site: Weedon Island Preserve
Managed by: Pinellas County
Acres: 3,164 **County:** Pinellas
Purpose(s) for Acquisition: For the conservation and protection of natural and historical resources and for resource-based public outdoor recreation which is compatible with the conservation and protection of these public lands.
Acquisition Program(s): EEL, P2000/CARL **Original Acquisition Date:** 1974
Area Reviewed: TIITF owned portions **Last Management Plan Approval Date:** 1/28/2012
Review Date: 11/17/20

Agency Manager and Key Staff:

- Pam Leasure, Manager

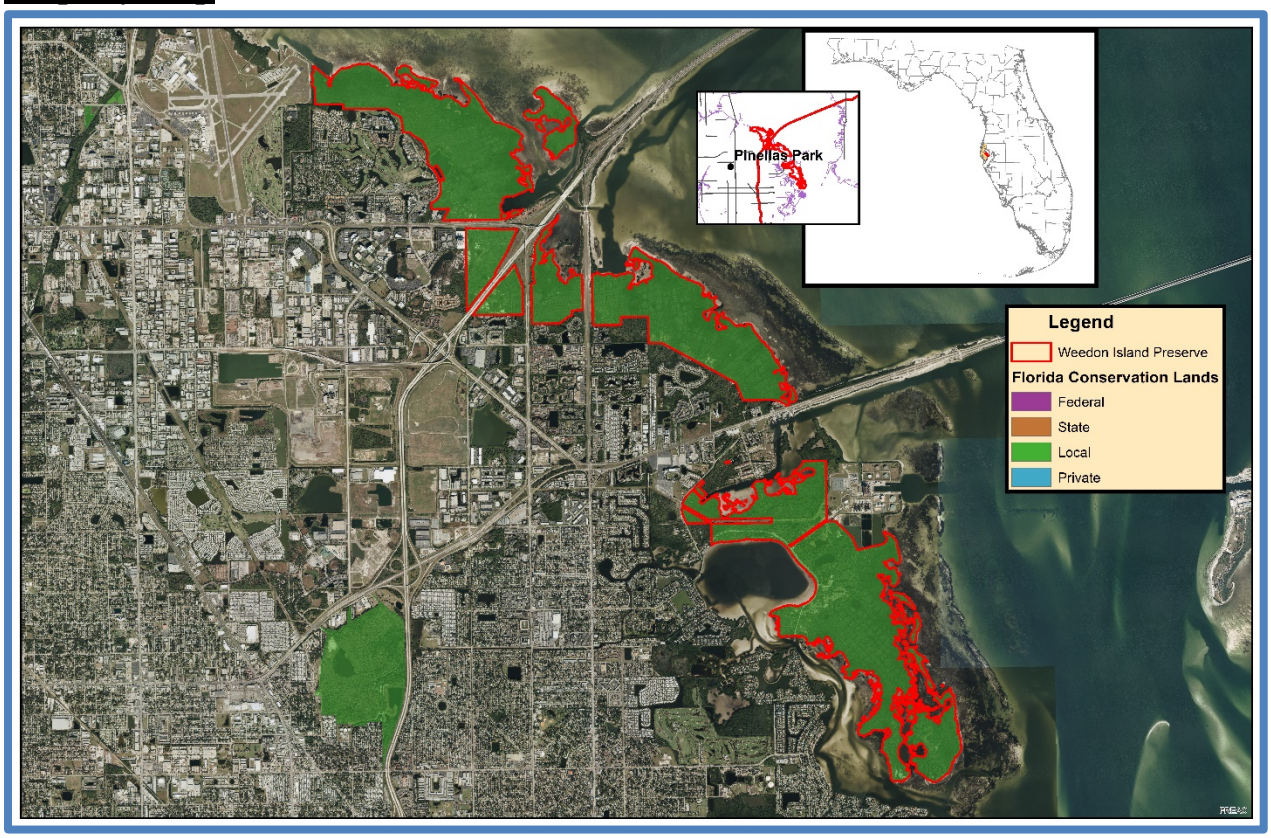
Review Team Members (voting)

- Tracey Muzyczka, DRP District
- Lisa Baltus, Local Gov't.
- Mike Jennings, FWC
- Alexander Pacelko, DEP District
- Corey Walk, FFS
- NWFWMD, None
- Dave Perkey, Conservation Org.
- Private Land Manager, None

Non-Team Members (attending)

- Keith Singleton, DEP/DSL

Property Map



Overview of Land Management Review Results

Is the property managed for purposes that are compatible with conservation, preservation, or recreation?

Yes = 6, No = 0

Are the management practices, including public access, in compliance with the management plan?

Yes = 6, No = 0

Table 1 shows the average scores received for each applicable category of review. *Field Review* scores refer to the adequacy of management actions in the field, while *Management Plan Review* scores refer to adequacy of discussion of these topics in the management plan. Scores range from 1 to 5 with 5 signifying excellence. For a more detailed key to the scores, please see *Appendix A*.

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	3.55	2.98
Prescribed Fire / Habitat Restoration	2.61	3.91
Hydrology	4.25	4.19
Imperiled Species	3.85	3.33
Exotic / Invasive Species	4.03	4.03
Cultural Resources	4.80	5.00
Public Access / Education / Law Enforcement	4.27	4.35
Infrastructure / Equipment / Staffing	3.58	N/A

Color Code (See Appendix A for detail)

Excellent	Above Average	Below Average	Poor

Consensus Commendations for the Managing Agency

The following commendations resulted from discussion and vote of the review team members:

1. The team commends the Pinellas County staff for the outstanding control of invasive species at the preserve. (6+, 0-)

2. The team commends the Pinellas County staff recruitment and use of volunteers in the absence of adequate staffing. (6+, 0-)

Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The next management plan update should include information about how these recommendations have been addressed:

1. The team recommends the Pinellas County recruit a full time ranger for the preserve to conduct trail maintenance, education, exotic species removal and site security. (6+, 0-)

   Managing Agency Response: We remain committed to managing the preserve to the best of our ability with the resources provided. We continue to look for opportunities to expand resources to meet the needs of management plan. The County budget is developed and evaluated to address the many demands facing the county. Financial assistance provided by the Bureau of State Lands would be beneficial to the management of the preserve.

2. The team recommends the Pinellas County staff conduct more prescribed fire, as described in the management plan. (6+, 0-)

   Managing Agency Response: We will continue to make prescribed fire a priority for managing the fire-adapted communities in the Preserve as determined by available resources. The last prescribed fire was in 2013. Working with our Regional Forest Area Supervisor should help to increase the frequency of prescribed fire in the preserve.

3. The team recommends the Pinellas County establish a carrying capacity at the preserve. (6+, 0-)

   Managing Agency Response: We recognize a carrying capacity needs to be considered. Enforcement of an established carrying capacity would require full time staff for the preserve. We will continue to look for funding opportunities to address capacity concerns.

Field Review Details

Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

1. **Natural communities, xeric hammock, marine unconsolidated substrate, coastal berm, salt marsh, salt flat, seagrass beds, and mollusk reef.**
2. **Listed species, animals and plants in general, and specifically gopher tortoise, manatee, and golden aster.**
3. **Cultural Resources, specifically cultural resource survey, and protection and preservation.**
4. **Restoration, specifically Feather Sound, and Weedon Island.**
5. **Non-native, invasive, and problem species, specifically prevention and control of pests/pathogens, and control of plants, and animals,**
6. **Hydro-alteration, specifically ditches and hydroperiod alterations.**
7. **Surface Water Monitoring, specifically quality, and quantity.**
8. **Resource protection, specifically gates and fencing, and signage.**
9. **Public access, specifically roads, parking, and boat access.**
10. **Environmental education and outreach, specifically wildlife, invasive species, interpretive facilities and signs, recreational opportunities, and management of visitor impacts.**
11. **Management resources, specifically waste disposal, sanitary facilities, buildings, and equipment**.

Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 3.0 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan update should include information on how these items have been addressed:

1. ***Natural Resources Survey, specifically fire effects monitoring, received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether survey and monitoring of the resources or their habitats are sufficient.***

   Managing Agency Response: Survey/monitoring activities (annual/bi-annual photo points) by staff were eliminated in 2008 due to budget constraints. Current monitoring is pre/post burn evaluations for quality of burns. We have and will continue to utilize volunteers where available and appropriate to survey and monitor natural communities. All updates to species lists will be provided in the management plan update.

2. ***Resource Management, Prescribed Fire, specifically area being burned, frequency, and quality received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, to what degree prescribed fire is accomplished according to the objectives for prescribed fire management. The scores range from 1 to 5, with 1 being 0-20% accomplished, 2 being 21-40%, 3 being 41-60%, 4 being 61-80% and 5 being 81-100%.***

   Managing Agency Response: We will continue to make prescribed fire a priority for managing fire-adapged communities in the Preserve. The frequency at which burns can be completed, as dictated by available staff and resources as well as environmental constraints, will be discussed in more detail in the plan update.

3. ***Forest Management, specifically timber inventory, received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether forest management is sufficient.***

   Managing Agency Response: Based on review team comments, we will include reforestation with native longleaf pine and South Florida slash pine in our restoration plan. The 2018 Weedon Island Tidal Restoration Plan includes upland restoration as well. This discussion will be included in the plan update.

4. ***Management Resources, specifically staff, and funding, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether management resources are sufficient.***

   Managing Agency Response: We will describe and discuss if staffing resources for management of the preserve are sufficient. We will discuss County's budget, the only source of funding for staffing the preserve.

Field Review Checklist and Scores

Field Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Xeric Hammock	I.A.1	5	5	4	5	5	5			4.83

Scrubby Flatwoods	I.A.2	4	3	3	2	4	4			3.33
Marine Unconsolidated Substrate	I.A.3	X	5	4	5	4	X			4.50
Coastal Berm	I.A.4	4	4	4	4	4	5			4.17
Mangrove Swamps	I.A.5	5	5	5	5	5	4			4.83
Salt Marsh	I.A.6	X	4	4	4	4	X			4.00
Salt Flat	I.A.7	X	4	5	4	4	X			4.25
Seagrass	I.A.8	5	4	5	5	3	X			4.40
Mollusk Reef	I.A.9	5	4	4	5	4	4			4.33
									Natural Communities Average Score	4.29
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1		4	3	4	4	4			3.80
Gopher Tortoise	I.B.1.a		3	3	4	4	5			3.80
Manatee	I.B.1.b		5		4	4	4			4.25
Plants	I.B.2		4	2	4	4	4			3.60
Golden Aster	I.B.2.a		5	4	4	4	2			3.80
									Listed Species Average Score	3.85
Natural Resources Survey/Management Resources (I.C)										
Sport fish or their habitat monitoring	I.C.1	X	3	4	4	4	4			3.80
Listed species or their habitat monitoring	I.C.2	5	3	3	2	3	3			3.17
Other non-game species or their habitat monitoring	I.C.3	X	4	3	2	3	3			3.00
Fire effects monitoring	I.C.4	1	2	1	1	3	4			2.00
Other habitat management effects monitoring	I.C.5	5	3	2	2	3	3			3.00
Invasive species survey / monitoring	I.C.6	5	3	4	3	4	3			3.67
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	X	5	5	4	5	5			4.80
Protection and preservation	II.B	X	5	4	5	5	5			4.80
									Cultural Resources Average Score	4.80
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	1	1	1	1	1	2			1.17
Frequency	III.A.2	1	1	1	1	1	2			1.17
Quality	III.A.3	1	1	1	1	1	x			1.00
									Resource Management, Prescribed Fire Average Score	1.11
Restoration (III.B)										
Feather Sound	III.B.1	X	4	4	4	4	4			4.00
Weedon Island	III.B.2	X	5	4	4	4	4			4.20
									Restoration Average Score	4.10
Forest Management (III.C)										
Timber Inventory	III.C.1	4	3	1	3	3	x			2.80
									Forest Management Average Score	2.80
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1.a	4	3	4	2	5	3			3.50

prevention - animals	III.D.1.b	4	3	3	2	5	4			3.50
prevention - pests/pathogens	III.D.1.c	4	3	3	5	5	4			4.00
Control										
control - plants	III.D.2.a	5	5	4	5	5	5			4.83
control - animals	III.D.2.b	5	4	4	3	5	4			4.17
control - pest/pathogens	III.D.2.c	X	4	3	5	5	4			4.20
							Non-Native, Invasive & Problem Species Average Score			4.03
Hydrologic/Geologic function Hydro-Alteration (III.E.1)										
Ditches	III.E.1.b	X	4	4	4	4	4			4.00
Hydro-period Alteration	III.E.1.c	X		4	4	4	x			4.00
							Hydrologic/Geologic function, Hydro-Alteration Average Score			4.00
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3.a	X	5	4	5	4	5			4.60
Surface water quantity	III.F.3.b	X	5	4	5	4	4			4.40
							Surface Water Monitoring Average Score			4.50
Resource Protection (III.F)										
Boundary survey	III.F.1	X	3	3	4	4	x			3.50
Gates & fencing	III.F.2	4	5	4	5	4	5			4.50
Signage	III.F.3	4	5	4	5	4	4			4.33
Law enforcement presence	III.F.4	X	3	4	3	4	2			3.20
							Resource Protection Average Score			3.88
Adjacent Property Concerns (III.G)										
Land Use										
Development Impacts to Prescribed Burning	III.G.1.a	X	5	3	4	3	x			3.75
Inholdings/additions	III.G.2	X	4	3	4	X	x			3.67
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1.a	4	4	4	5	5	5			4.50
Parking	IV.1.b	3	4	5	5	5	4			4.33
Boat Access	IV.1.c	X	4	4	5	4	4			4.20
Environmental Education & Outreach										
Wildlife	IV.2.a	5	5	5	5	5	5			5.00
Invasive Species	IV.2.b	5	5	4	5	5	5			4.83
Habitat Management Activities	IV.2.c	5	5	4	5	5	5			4.83
Interpretive facilities and signs	IV.3	5	5	5	5	5	4			4.83
Recreational Opportunities	IV.4	5	5	5	5	5	5			5.00
Management of Visitor Impacts	IV.5	2	5	4	5	5	5			4.33
							Public Access & Education Average Score			4.65
Management Resources (V.1, V.2, V.3. V.4)										
Maintenance										
Waste disposal	V.1.a	5	5	4	5	4	4			4.50
Sanitary facilities	V.1.b	5	5	4	5	4	4			4.50
Infrastructure										
Buildings	V.2.a	5	4	5	5	4	5			4.67

Equipment	V.2.b	5	4	4	5	4	4			4.33
Staff	V.3	1	2	2	1	1	2			1.50
Funding	V.4	3	2	2	2	1	2			2.00
								Management Resources Average Score		3.58

Color Code:	Excellent	Above Average	Below Average	Poor	See Appendix A for detail
		Missing Vote	Insufficient Information		

Land Management Plan Review Details

Items Requiring Improvements in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than 3.0 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The next management plan update should address the checklist items identified below:

1. ***Natural Communities, specifically marine unconsolidated substrate, coastal berm and mollusk reef, received below average scores. This is an indication that the management plan does not sufficiently address current or desired condition and/or future management actions to protect or restore..***

   Managing Agency Response: We will discuss the current conditions and future management of all natural communities including; marine unconsolidated substrate, coastal berm and mollusk reef in the management plan update.

2. ***Listed Species protection and preservation, specifically gopher tortoise, received a below average score. This is an indication that the management plan does not sufficiently address protection and preservation of listed species.***

   Managing Agency Response: We will discuss the protection and preservation of listed animal species in the resource management portion of the plan update.

3. ***Forest Management, specifically timber inventory, received a below average score. This is an indication that the management plan does not sufficiently address forest management.***

   Managing Agency Response: Timber harvesting is not an option within the Weedon Island Preserve. This discussion will be included in the plan update.

4. ***Adjacent Property Concerns, specifically development impacts to prescribed burning, received a below average score. This is an indication that the management plan does not sufficiently address adjacent property.***

   Managing Agency Response: We will include in the plan update a discussion of any impacts or concerns with the adjacent properties in relation to prescribed burning.

5. ***Managed Area Uses, Existing Uses, specifically camping, received a below average score. This is an indication that the management plan does not sufficiently address managed area uses.***

   Managing Agency Response: We will include in the plan update a discussion of the camping usage and policy in the preserve.

Management Plan Review Checklist and Scores

Plan Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Xeric Hammock	I.A.1	2	3	3	3	3	5			3.17
Scrubby Flatwoods	I.A.2	2	3	3	5	3	4			3.33
Marine Unconsolidated Substrate	I.A.3	2	3	3	3	3	3			2.83
Coastal Berm	I.A.4	2	3	3	3	3	3			2.83
Mangrove Swamps	I.A.5	2	3	3	5	4	5			3.67
Salt Marsh	I.A.6	2	3	3	5	3	4			3.33
Salt Flat	I.A.7	2	3	3	5	3	4			3.33
Seagrass	I.A.8	2	3	3	3	3	5			3.17
Mollusk Reef	I.A.9	2	3	3	3	3	3			2.83
									Natural Communities Average Score	3.17
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	4	2	3	3	3	4			3.17
Gopher Tortoise	I.B.1.a	4	2	2	3	3	3			2.83
Manatee	I.B.1.b	4	2		3	3	3			3.00
Plants	I.B.2	4	4	3	3	4	4			3.67
Golden Aster	I.B.2.a	5	4	3	3	4	5			4.00
									Listed Species Average Score	3.33
Natural Resources Survey/Management Resources (I.C)										
Sport fish or their habitat monitoring	I.C.1	5	3	3	3	4	4			3.67
Listed species or their habitat monitoring	I.C.2	5	2	3	3	2	4			3.17
Other non-game species or their habitat monitoring	I.C.3	5	3	3	3	2	4			3.33
Fire effects monitoring	I.C.4	5	2	4	3	2	4			3.33
Other habitat management effects monitoring	I.C.5	5	3	4	3	3	4			3.67
Invasive species survey / monitoring	I.C.6	5	3	4	4	3	4			3.83
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	5	5	5	5	5			5.00
Protection and preservation	II.B	5	5	5	5	5	5			5.00
									Cultural Resources Average Score	5.00
Resource Management, Prescribed Fire (III.A)										

Area Being Burned (no. acres)	III.A.1	5	4	3	4	3	3			3.67
Frequency	III.A.2	5	4	3	4	3	3			3.67
Quality	III.A.3	1	2	3	3	3	x			2.40
									Resource Management, Prescribed Fire Average Score	3.24
Restoration (III.B)										
Feather Sound	III.B.1	5	5	4	5	4	5			4.67
Weedon Island	III.B.2	5	4	4	5	4	5			4.50
									Restoration Average Score	4.58
Forest Management (III.C)										
Timber Inventory	III.C.1	5	3	1	2	3	x			2.80
									Forest Management Average Score	2.80
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.E.1.a	4	3	4	4	4	3			3.67
prevention - animals	III.E.1.b	4	3	4	4	4	4			3.83
prevention - pests/pathogens	III.E.1.c	5	3	4	4	4	4			4.00
Control										
control - plants	III.E.2.a	4	4	5	5	4	5			4.50
control - animals	III.E.2.b	4		4	4	4	4			4.00
control - pest/pathogens	III.E.2.c	5		4	4	4	4			4.20
									Non-Native, Invasive & Problem Species Average Score	4.03
Hydrologic/Geologic function, Hydro-Alteration (III.E.1)										
Ditches	III.F.1.b	5	4	4	5	4	4			4.33
Hydro-period Alteration	III.F.1.c	5		4	4	4	x			4.25
									Hydrologic/Geologic function, Hydro-Alteration Average Score	4.29
Surface Water Monitoring (III.E.3)										
Surface water quality	III.F.3.a	5	4	3	4	4	5			4.17
Surface water quantity	III.F.3.b	5	4	2	4	4	5			4.00
									Surface Water Monitoring Average Score	4.08
Resource Protection (III.F)										
Boundary survey	III.G.1	5	3	3	3	4	x			3.60
Gates & fencing	III.G.2	5	4	3	5	4	5			4.33
Signage	III.G.3	5	4	4	5	4	4			4.33
Law enforcement presence	III.G.4	5	5	5	4	4	x			4.60
									Resource Protection Average Score	4.22
Adjacent Property Concerns (III.G)										
Land Use										
Development Impacts to Prescribed Burning	III.H.1.a	1	4	3	1	3	x			2.40
Inholdings/additions	III.H.2	3	3	4	5	X	x			3.75
Discussion of Potential Surplus Land Determination	III.H.3	3	5	4	5	X	x			4.25
Surplus Lands Identified?	III.H.4	5	5	4	5	X	x			4.75

Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1.a	5	4	5	5	5	4			4.67
Parking	IV.1.b	5	4	5	5	5	4			4.67
Boat Access	IV.1.c	5	4	4	5	4	4			4.33
Environmental Education & Outreach										
Wildlife	IV.2.a	5	4	4	4	5	4			4.33
Invasive Species	IV.2.b	5	4	4	4	5	4			4.33
Habitat Management Activities	IV.2.c	5	4	5	4	5	4			4.50
Interpretive facilities and signs	IV.3	5	4	5	4	5	4			4.50
Recreational Opportunities	IV.4	5	5	5	5	5	4			4.83
Management of Visitor Impacts	IV.5	2	4	5	5	5	4			4.17
								Public Access & Education Average Score		4.48
Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Wildlife Viewing	VI.A.1	5	5	5	5	5	5			5.00
Hiking	VI.A.2	5	5	5	5	5	5			5.00
Padding	VI.A.3	5	5	5	5	4	5			4.83
Fishing	VI.A.4	5	5	4	5	2	4			4.17
Camping	VI.A.5	1	3	3	3	2	x			2.40
Environmental Education / Cultural Resouces	VI.A.6	5	5	5	5	5	5			5.00
Bicycling	VI.A.7	3	4	4	4	3	4			3.67
Boating	VI.A.8	5	4	4	5	3	4			4.17
External Research	VI.A.9	5	5	5	5	3	x			4.60

Color Code:	Excellent	Above Average	Below Average	Poor	See Appendix A for detail
		Missing Vote	Insufficient Information		

Appendix A: Scoring System Detail

Explanation of Consensus Commendations:

Often, the exceptional condition of some of the property's attributes impress review team members. In those instances, team members are encouraged to offer positive feedback to the managing agency in the form of a commendation. The teams develop commendations generally by standard consensus processes or by majority vote if they cannot obtain a true consensus.

Explanation of Consensus Recommendations:

Subsection 259.036(2), F.S., specifically states that the managing entity shall consider the findings and recommendations of the land management review. We ask team members to provide general recommendations for improving the management or public access and use of the property. The teams discuss these recommendations and develop consensus recommendations as described above. We provide these recommendations to the managing agency to consider when finalizing the required ten-year management plan update. We encourage the manager to respond directly to these recommendations and include their responses in the final report when received in a timely manner.

Explanation of Field Review Checklist and Scores, and Management Plan Review Checklist and Scores:

We provide team members with a checklist to fill out during the evaluation workshop phase of the Land Management Review. The checklist is the uniform tool used to evaluate both the management actions and condition of the managed area, and the sufficiency of the management plan elements. During the evaluation workshop, team members individually provide scores on each issue on the checklist, from their individual perspective. Team members also base their evaluations on information provided by the managing agency staff as well as other team member discussions. Staff averages these scores to evaluate the overall conditions on the ground, and how the management plan addresses the issues. Team members must score each management issue 1 to 5: 1 being the management practices are clearly insufficient, and 5 being that the management practices are excellent. Members may choose to abstain if they have inadequate expertise or information to make a cardinal numeric choice, as indicated by an "X" on the checklist scores, or they may not provide a vote for other unknown reasons, as indicated by a blank. If a majority of members failed to vote on any issue, that issue is determined to be irrelevant to management of that property or it was inadequately reviewed by the team to make an intelligent choice. In either case staff eliminated the issue from the report to the manager.

Average scores are interpreted as follows:

Scores 4.0 to 5.0 are *Excellent*

Scores 3.0 to 3.99 are *Above Average*

Scores 2.0 to 2.99 are *Below Average*

Scores 1.0 to 1.99 are considered *Poor*

APPENDIX 6
Pinellas County Code of Ordinances, Chapter 90

Chapter 90 PARKS AND CONSERVATION RESOURCES[1]

ARTICLE I. IN GENERAL[2]

Sec. 90-1. Parks and conservation resources advisory board.

(a) *Establishment; appointment; qualification; organization.*

(1) *Establishment.* There is hereby established in and for the county a board to be known as the "Pinellas County Parks and Conservation Resources Advisory Board" consisting of ten members.

(2) *Appointment.* One member shall be a member of and nominated by the county youth advisory committee and appointed by the board of county commissioners. Of the nine remaining members, each county commissioner shall nominate one member without regard to political affiliation, and the members shall be appointed by the board of county commissioners and two members with experience in environmental science and/or policy shall be appointed by the board of county commissioners. The term of office shall be one year and shall run concurrently with the term of the nominating commissioner, or, in the case of the county youth advisory committee and environmental science/policy nominees, from August 1 through July 31. Except in order to maintain concurrency of term, no member of the parks and conservation resources advisory board may be removed prior to the expiration of the member's term except by the board of county commissioners. The parks and conservation resources advisory board may request that the board of county commissioners remove a member of the parks and conservation resources advisory board who misses 50 percent or more of the meetings scheduled in a year.

(3) *Qualification.* Each member's background, education and experience shall be such as to qualify said member to carry out the duties and responsibilities vested in the parks and conservation resources advisory board by this article. Members shall be appointed from the county at large. In selecting a new member of the parks and conservation resources advisory board, the board of county commissioners of the county shall consider the interest and knowledge of such prospective member in parks, environmental lands, and natural resources, including the ecological and economic benefits thereof.

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[1]Charter reference(s)—General powers of county, § 2.01.

Cross reference(s)—Amusements and entertainments, ch. 10; game and fish, § 14-86 et seq.; aquatic preserves, § 58-366 et seq.; equine riding and seagrass damage, 58-400 et seq.; greater Seminole area special recreation district, § 114-171 et seq.; waterways, ch. 130.

State law reference(s)—General powers of chartered counties, Fla. Const. art. VIII, § 1(g); authority of board of county commissioners to provide for parks, F.S. § 125.01(1)(f).

[2]Editor's note(s)—Ord. No. 16-40, §§ 1—20, adopted July 19, 2016, amended art. I, §§ 90-1—90-116, in its entirety to read as herein set out, including the removal of several reserved sections and renumbering and amendment of existing sections. Prior legislative history has been retained in the history notes following sections. Former § 90-105, pertaining to signage, was repealed entirely by § 13 of said ordinance, and derived from Ord. No. 10-44, § 1, adopted Sept. 28, 2010. See the Code Comparative Table for complete derivation.

(4) *Organization.* The parks and conservation resources advisory board shall elect annually one of its members as chair and one as vice-chair of the board, and may adopt rules and procedures for the conduct of its meetings. The parks and conservation resources advisory board shall meet at least quarterly to conduct the business of the board, unless notified that there is no business to conduct as determined by the chair.

(b) *Duties.* It shall be the duty of the parks and conservation resources advisory board to assist the board of county commissioners, administrator, and department by:

(1) Reviewing and commenting on park or environmental lands plans and design.

(2) Reviewing and commenting on park or environmental lands operations and procedures.

(3) Participating in public education and ceremonial activities.

(4) Hearing citizen comment on park or environmental lands related activities.

(5) Formulating proposals and suggestions with the goal of improving the parks and environmental lands of the county.

(6) Reviewing specific issues referred to the parks and conservation resources advisory board from the board of county commissioners.

(7) Reviewing specific issues referred to the parks and conservation resources advisory board from the county administrator.

(8) Communicating with the county administrator and the board of county commissioners on issues related to the duties of the parks and conservation resources advisory board.

(c) *Selection of director.* The chair of the parks and conservation resources advisory board or designee may participate in the selection process for the director, including the interviews of director candidates with county staff.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 1, 7-19-16)

Sec. 90-2. Legislative purpose.

The department has been established primarily for the management and protection of the county's parks, preserves, ecological management areas, special purpose areas and other designated department lands and waterways. It is desirous to acquire and protect such lands and waterways for their natural resources, biological diversity, hydrological benefits, and open space significance to the county. Such lands and waterways also offer scenic beauty, recreational value, and the potential for educating citizens and visitors. The objective of this article is to permit public use of parks and certain environmental lands and waterways consistent with their protection and management as set forth in the county comprehensive plan and various management plans, as same may be amended from time to time.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 2, 7-19-16)

Sec. 90-3. Definitions.

When used herein, the following definitions shall apply:

Activity means the doing of any act or the failure to do any act by a person.

Administrator means the county administrator for Pinellas County.

Adverse impact means actual or potential harm or injury to any property, wildlife or plant life or other natural resource within county-owned or managed lands.

Beach means the zone of unconsolidated material that extends landward from the mean high-water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation, usually the effective limit of storm waves.

Bicycle means a transportation device composed of a single frame and wheels usually propelled by pedals and steered with handlebars, including passenger bicycles; for purposes of this article, "bicycle" does not include a motorized bicycle regardless of speed capabilities.

Board means the Pinellas County Board of County Commissioners.

Boardwalk means an elevated walkway structure across sand or marshy ground.

Bounce house means a temporarily inflatable structure of any size that people jump in or on.

Citizen support organization means a not-for-profit corporation incorporated pursuant to the provisions of F.S. ch. 617, as may be amended, and approved by the department of state that is organized and operated to conduct programs and activities; raise funds; request and receive grants, gifts, and bequests of money; and make expenditures for the benefit of the department and/or any county-owned or managed land.

Code means the Pinellas County Code and the Pinellas County Land Development Code.

Commercial activity means a transaction for the sale, barter, or other exchange of value; for goods, items, services, entertainment, or amusement, where any part of the transaction, including but not limited to the offer of sale, negotiation, agreement to sell, transfer of consideration, or the transfer, delivery, or performance of the goods, items, service, entertainment, or amusement occurs in any county-owned or managed land. Exchange of consideration for performance of a commercial activity, such as a payment, fee, coupon, or ticket, does not need to occur in a county-owned or managed land if any part of the activity is performed in a county-owned or managed land.

County means Pinellas County.

County-owned or managed lands means all parks, environmental lands, department-managed facilities, and public marinas owned by the county or managed by the department. County-owned or managed lands include all submerged lands owned by the county and waters managed by the department located within the boundaries of county-owned or managed lands.

Cultural resource means any prehistoric or historic site, structure, object, or other real or personal property of historical, architectural, or archaeological value as determined through criteria for designation contained in chapter 146 of the Code.

Department means the department of parks and conservation resources.

Department-managed facilities means all facilities other than parks, environmental lands, and public marinas managed by the department including, but not limited to neighborhood parks, community parks, and other facilities managed by the department.

Director means the director of the department.

Environmental lands means all preserves and management areas, including but not limited to the county-owned real property identified as environmental lands in section 90-14 of this article, and any real property leased, subleased, or licensed to the county and identified as environmental lands in the management plan for the individual preserve or management area.

Historic or prehistoric artifact means material remains of past human life of archaeological interest over 50 years old, including but not limited to pottery, basketry, bottles, weapons, and tools.

Large group means a gathering of a group exceeding 50 people that does not include a special event permit and/or an accompanying picnic shelter reservation.

Law enforcement officer means any person who is elected, appointed, or employed full or part time by the state, the county, or municipality who is vested with the authority to bear arms and make arrests; and whose primary responsibility is the detection and prevention of crime, or the enforcement of the penal, criminal, traffic, or highway laws of the state or county.

Live-aboard means the occupancy or use of a watercraft by one or more persons, as a place of habitation, residence, living quarters or for dwelling purposes, temporarily or permanently, continuously or transiently.

Management area means all environmental lands, including waterways, not designated as "preserve." Such lands shall be as referenced in the latest resolution of the board describing the legal boundaries of the particular management area. Properties designated as "management areas" generally do not have a public use component, depending upon the ecological impacts of such use.

Management plan means the management plan developed by the department, unique to an individual county-owned or managed land, as each such plan may be amended from time to time.

Nude, or any derivative thereof, means to display or expose:

(1) The human male or female genitals or pubic area with less than fully-opaque covering;

(2) The portion of the human female breast directly or laterally below a point immediately above the top of the areola with less than a fully opaque covering. This definition shall include the entire lower portion of the human female breast, including the areola and nipple, but shall not include any portion of the cleavage of the human female breast exhibited by a dress, blouse, shirt, leotard, bathing suit, or other clothing, provided the areola is not exposed; and

(3) For purposes of this definition, body paint, body dye, a tattoo, latex, or any similar substances shall not be considered an opaque covering.

Parking area means any part of any county-owned or managed land road, or area contiguous thereto, specifically designated for the standing or stationing of any vehicle with appropriate signage.

Parks means regional parks and special purpose parks owned, operated, and maintained by the department, not including department-managed facilities and public marinas as defined herein, which are under the control of or assigned for upkeep, maintenance or operation by the department.

Person means any individual, including minors, firm, association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer, estate, trust, business trust, syndicate, fiduciary, public or private corporation, and all other groups or combinations of groups.

Pet means any domesticated animal typically kept for companionship, protection, transportation or amusement. "Pet" also includes domesticated species found in a feral, wild, or abandoned state, including but not limited to birds, ferrets, pot-bellied pigs, monkeys, and snakes. However, the term does not include service animals, as defined by the Americans with Disabilities Act, as may hereafter be amended, and F.S. § 413.08, as may be hereafter amended.

Pollution means the presence in the air, soil, or waters of any substance, noise, contaminant, or anthropogenic alteration of the chemical, physical, biological, or radiological integrity of the air, soil, or water in a quantity or at a level that is or may be potentially harmful or injurious to human health or welfare, animal or plant life, or property, or that unreasonably interferes with the enjoyment of life or property, including outdoor recreation.

Preserve means property managed by the department as referenced in the latest resolution of the board describing the legal boundaries of the particular preserve and includes all streams, canals, channels, lagoons,

waterways, water areas, submerged lands, shorelines and beaches, as well as all structures and other facilities located within such boundaries. All preserves shall have a board approved management plan.

Public marina means the Belle Harbour Marina, and any other county-owned facility, which provides public moorings or dry storage for vessels on a rental basis, and is designated as a public marina by resolution of the board.

Regional parks means A.L. Anderson Park, Boca Ciega Millennium Park, Eagle Lake Park, Fred Howard Park, Fort De Soto Park, John Chesnut, Sr. Park, John S. Taylor Park, Lake Seminole Park, Philippe Park, Ridgecrest Park, Sand Key Park, Sawgrass Lake Park, Wall Springs Park, Walsingham Park, War Veterans' Memorial Park, and any other facility designated as a regional park by resolution of the board.

Special event means any organized event or activity involving the use of or having a significant impact upon a county-owned or managed land, where the general public is invited to participate or be a spectator, including but not limited to races, tournaments, demonstrations, or festivals. A "musical or entertainment festival" as defined in section 10-26 of the Code involving the use of or having a significant impact upon a county-owned or managed land shall require separate permits under chapter 10, article II and this article.

Special purpose parks means Indian Rocks Beach Access Park, Madeira Beach Access Park, Redington Shores Beach Access Park, St. Pete Beach Access Park, Tiki Gardens/Indian Shores Beach Access Park, Belleair Causeway Boat Ramp, Park Blvd. Boat Ramp, Sutherland Bayou Boat Ramp, Fred Marquis Pinellas Trail, Duke Energy Trail, Florida Botanical Gardens, Heritage Village, Joe's Creek Greenway, Leach Park, Lealman Park, Live Oak Park, Ochs Park, Pinewood Cultural Park, and any other site or facility designated as a special purpose park by resolution of the board.

Vehicle means any passengered conveyance powered or drawn by motor for the transportation of persons or material, including but not limited to: automobiles, trucks, buses, motorcycles, motorized bicycles regardless of speed ability, scooters, minibikes, all-terrain vehicles, golf carts, or trail bikes, as well as trailers and vessel in tow of any size or description. "Vehicle" does not include an electric personal assistive mobility device as defined in F.S. § 316.003(83), as may be amended from time to time.

Vessel means every description of watercraft, barge, and airboat, other than a seaplane on the water, used or capable of being used as a means of transportation on water.

Volunteer means either an event volunteer, who agrees to participate either individually or as member of a group for a single event, or a long-term volunteer, who agrees to participate on an ongoing basis. An event volunteer registers and signs a county waiver of liability form; a long-term volunteer has passed a national background check, completed the county volunteer orientation, either in person or online, and has signed a county agreement to adhere to county policies and procedures for volunteering with the county.

Wildlife means any species living, growing, or occurring in a natural, non-domesticated state, including but not limited to animals.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 3, 7-19-16)

Sec. 90-4. Areas embraced.

All county-owned or managed lands, including areas in unincorporated and incorporated areas of the county, shall be embraced by the provisions of this article, except where otherwise provided herein.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 4, 7-19-16)

Sec. 90-5. Vehicles and traffic control.

(a) *Traffic control.* All persons, including those operating vehicles and bicycles as defined herein, shall observe and comply with posted traffic control devices and signs within all county-owned or managed lands.

(b) *Speed of vehicles.* Within any county-owned or managed land, no person shall operate a vehicle at a speed that is greater than reasonable or prudent, having due regard for the surface width and surface condition and the traffic thereon, particularly when near pedestrians, horses, bicyclists or other public-use trails. At no time shall speed exceed the posted speed limit or 25 miles per hour if no speed limit is posted.

(c) *Restriction to roads.* No person shall operate any vehicle within parks or environmental lands except on areas approved for vehicular use.

(d) *Parking.* All vehicles shall be parked only in designated parking areas or in such other areas and at such other times as may be authorized by appropriate signage. Oversized vehicles and trailer vehicles shall not exceed the limits of the parking space.

(e) *Bicycles.* Bicycles shall only be ridden on roads and trails designated for bicycle traffic within parks and environmental lands and are prohibited on boardwalks. Where provided, bicycle racks must be used for the parking of bicycles. Bicycles shall not be chained or locked to trees, any other plant life or structures, or placed so as to obstruct pedestrian or vehicular movement.

(f) *Entering county-owned or managed lands.* Any person entering or leaving a county-owned or managed land, whether by foot, vehicle, or bicycle, shall do so solely through designated entry and exit points. No vehicle, except as authorized by the department, shall enter or park in any county-owned or managed land until the required fee, if any, has been paid.

(g) *Vehicle emergencies.* In case of emergency requiring a vehicle to stop or park in an unauthorized location, the driver must immediately report to a county employee or volunteer to receive an exemption from this section. Commercial activities necessary to remove or repair a vehicle in the case of an emergency are permitted.

(h) *Soliciting rides or fares.* No pedestrian shall solicit rides from any driver nor shall any driver of any vehicle or bicycle solicit riders for money or fares, in any county-owned or managed land unless authorized by the department.

(i) *Washing and maintenance.* No person shall wash, grease, repair, or perform maintenance on a vehicle on any park roadway, parkway, driveway, parking lot, or other property, except in emergencies; provided that waxing and polishing is permitted if it is in an area open to vehicles and does not interfere with other activities or traffic flow.

(j) *Miscellaneous motorized vehicles.* No unauthorized person shall operate any motorized scooter, motorized skateboards, go-cart, all-terrain vehicle, golf cart or electric cart in any parks or environmental lands. No electric or motorized toy vehicles are allowed on county-owned or managed lands, except in prescribed areas. The prohibitions herein shall not apply to an electric personal assistive mobility device to the extent authorized by state law.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 5, 7-19-16)

Sec. 90-6. Protection of property, facilities, flora, and fauna.

(a) *Buildings and facilities.* No person shall engage in any of the following activities on any county-owned or managed land without prior written authorization from the administrator or designee:

(1) Willfully mark, deface, damage, displace, destroy, remove, or tamper with any buildings, facilities, bridges, piers, tables, benches, railings, paving or paving materials, water lines or other utilities, permanent or temporary signs, placards, notices, monuments, stakes, posts, gateways, locks, fencing, boundary markers, or other structures, equipment or county property;

(2) Use any county-owned or managed land or related facility, including but not limited to buildings, bridges, piers, tables, benches, or railings in a manner that precludes regular and customary usage to other patrons, unless such person has obtained the right to exclusive usage from the department;

(3) Construct, erect, or place any buildings, monuments, memorials, plaques, tributes, or structures of whatever kind, whether permanent or temporary in character, or run or string any public service utility into, upon, or across such lands;

(4) Use tacks, nails, staples, or other items that penetrate wood on shelters, signs, trees, boardwalks, or other structures;

(5) Enter, occupy, or use in any manner any lifeguard stand or station, lifeguard vessel or surfboard, or other lifesaving equipment at any time;

(6) Climb on or over any buildings, facilities, fences, benches, picnic tables, structures, historic ruins, or boardwalk and bridge railings; nor shall any person stand or sit on any structure not intended for such use;

(7) Dispose of trash or garbage generated outside county-owned or managed lands in any refuse facility within a county-owned or managed land, with the exception of disposing of recyclable materials in recycling containers provided by the county; or

(8) Possess food on or within any boardwalk, observation tower, or designated dog park.

(b) *Plant life.* All plant life, living or dead, terrestrial, aquatic, and epiphytic species, within any county-owned or managed land is either the property of the county or is property managed by the county. No person shall engage in any of the following activities on any county-owned or managed land without prior written authorization from the administrator or designee:

(1) Cut, carve, break off, nail into, or otherwise damage bark, limbs, or branches of any plant or tree, except within designated special use areas; nor shall any person harvest any flowers or seeds or otherwise mutilate a plant or tree, except within designated special use areas;

(2) Dig in, disturb, or in any other way impair the natural condition of any area, except within designated special use areas; nor shall any person place debris or materials of any kind on or about any tree or plant, or climb, or attach any rope, wire, wooden boards, or ladders thereto, except within designated special use areas; or

(3) Transplant, possess, or remove any plant or plant part from any county-owned or managed land; nor shall any person introduce any plant species by willful act, negligence, or for any other reason.

(c) *Sand, soil, and wood.* No person shall, without prior written authorization from the administrator or designee, on any county-owned or managed land:

(1) Move or remove any sand, clay, soil, rock, stones, timber, or other wood or natural materials, whether submerged or not;

(2) Make any search or excavation by tool, equipment, blasting, or other means or agency; or

(3) Perform any manner of turf or landscape maintenance activity unless duly authorized as a county employee, contractor, or volunteer.

(d) *Wildlife.* No person shall engage in any of the following activities on any county-owned or managed land without prior written authorization from the administrator or designee:

(1) Possess, molest, harm, frighten, kill, trap, hunt, chase, capture, shoot, or throw any object at any wildlife; remove the eggs, nest, or young of any wildlife; remove, possess, give away, sell or offer to sell, buy or offer to buy, or accept as a gift any specimen, dead or alive, of any wildlife, except by permit granted by the department or in accordance with a valid fishing permit issued by the state. Fishing, including the collection of shells containing living wildlife, is further restricted in section 90-7(e) of the Code. The collection of shells containing no living wildlife, however, is permitted, except at archaeological sites, on a county or state historic site, on a site listed with the National Registry of Historic Places, or other sites as designated by the administrator or designee;

(2) Feed or attempt to pet any wildlife; or

(3) Introduce any pet, plant or other wildlife into any county-owned or managed land by willful abandonment, negligence, or for any other reason.

(e) *Historic artifacts and remains.* No person shall:

(1) Without prior written authorization from the administrator or designee, willfully mark, deface, damage, displace, destroy, excavate, disturb, remove, or tamper with any cultural resource, historic artifact, or skeletal remains of any species, within any county-owned or managed land; or

(2) Without a permit for scientific research under section 90-9, dispose of or deposit the skeletal or cremated remains of any species within any county-owned or managed land.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 6, 7-19-16)

Sec. 90-7. Activities within county-owned or managed lands.

(a) *Hiking.* Walking, running, jogging, and/or hiking is permitted only along trails or pathways or areas specifically designated for such use or uses and during posted hours.

(b) *Horseback riding.* Horseback riding is permitted only along trails or areas specifically designated for such use. Horses shall be thoroughly broken, properly restrained, and ridden with due care. Horses shall not be allowed to graze or go unattended and must be on a lead at all times. Horses may only be hitched to hitching posts clearly identified for such use. No horse-drawn carriages, carts or wagons shall be allowed or used within any county-owned or managed land.

(c) *Fires.* No person shall ignite or attempt to ignite a fire, except in a grill, stove, fireplace, or designated fire circle.

(1) Campfires or any other open burning, even in approved areas, may be prohibited when deemed necessary by the department or by restrictions mandated by state or federal agencies. No person who starts or utilizes a fire shall leave the area without completely extinguishing the fire.

(2) No person shall use any type of gasoline, kerosene, or diesel fuel as an accelerant to start a fire in a grill, nor use a grill or other device in such a manner as to burn, char, or blemish any bench, table, or other county property. No person shall dispose of hot coals, burning matches, smoking materials, or other flammable materials except in designated areas or receptacles.

(3) Frying of any kind is prohibited, including but not limited to turkey fryers, deep fat fryers, skillets, and electric frying pans.

(4) Grilling on the beach is prohibited, except where expressly permitted under a special event permit.

(5) Possession of fireworks is prohibited, except where expressly permitted under a special event permit.

(6) Smoking is prohibited in environmental lands except in designated areas. The department may, in its sole discretion, prohibit smoking at other county-owned or managed lands by the department when necessary for fire prevention purposes.

(d) *Camping.*

(1) Camping is strictly prohibited at all times unless a camping permit and copy of the camping rules and regulations are obtained prior to camping. When permitted, camping shall be limited to those areas specifically designated for such use.

(2) Campers must have a valid permit and a valid picture identification card while camping. It shall be unlawful for any person to camp on any county-owned or managed land for a period of time in excess of 14 days in a 30-day period.

(3) All waste shall be placed in disposal containers where provided. Where no disposal containers are provided, or where the containers provided are full, all waste shall be carried away by the user of the camping area and properly disposed of outside of the county-owned or managed land.

(4) Tents shall be stand-alone type and may not be attached to trees or any other vegetation or structure with any guy wire, rope, extension brace, support, fastener or any other device.

(e) *Fishing.* Fishing is prohibited except in those public areas designated for such activity. Persons fishing shall obey all state and federal laws pertaining to fishing as well as any posted rules and regulations. Fishing is prohibited from beaches in any area where bathing and swimming are permitted. No person shall leave the area without disposing of unwanted fish and bait on piers, catwalks, or other areas where fishing is authorized. Excluding saltwater fish as defined in F.S. § 379.101 as may be amended, non-target organisms, including but not limited to turtles, birds and frogs, that are incidentally captured using standard techniques (i.e. bycatch) shall be released unharmed. Cast netting or use of traps within or from the bank of any freshwater body in any county-owned or managed land is prohibited.

(f) *Bathing and swimming.* Swimming, bathing, or wading is prohibited except in those public areas designated for such activity. Further, no person shall:

(1) Use soap or other cleansers in any swimming area or any other waters, including but not limited to beaches, lakes, streams, and stormwater facilities;

(2) Erect any tent, shelter, or structure on or in any beach, or bathing or wading area in such a manner that a guy wire, rope, extension, brace or support connected or fastened from any such tent, shelter, or structure to any other structure, stake, rock, or object is necessary; any tent, shelter, or other such structure must provide an unobstructed view of the interior from at least two sides; or

(3) Possess, carry, or transport any glassware, bottles, or any other potentially dangerous or sharp objects into any beach, or bathing, wading, or swimming area.

(g) *Picnicking.*

(1) Use of park and environmental lands property, including picnic shelters, tables, and benches generally follows the rule of first-come, first-served, unless reserved beforehand through the department's reservation program. Picnicking is permitted only in areas specifically designated for such use.

(2) All refuse, waste, and trash shall be placed in disposal containers where provided in all county-owned and managed lands. Where no disposal containers are provided, or where the containers provided are full, all refuse shall be carried away by the user of the picnic facility and properly disposed of outside of the county-owned or managed land.

(h) *Audio devices.* Radios, electronic musical players or instruments, and all other audio devices are permitted so long as they are played at volume levels that do not disturb, annoy, injure, or endanger the comfort, health, peace, or safety of the wildlife or reasonable persons of ordinary sensibilities or unnecessarily detract from a

peaceful atmosphere. Such noise shall not be heard within any county-owned or managed land from a location more than 50 feet from the source of the noise, unless a special event permit has been issued for such use.

(i) *Nudity.* It shall be unlawful for any person over the age of four years old to appear nude in any county-owned or managed land, provided that a person may appear nude:

(1) In a restroom, dressing, locker or shower facility, provided, however, that except as permitted by section 70-214 of the Code, no person over the age of six shall occupy or enter any such facility which is reserved or designated by the department for the exclusive use of the opposite sex without adult supervision;

(2) In a privately owned, fully enclosed, temporary dwelling used for camping at campsites;

(3) When the conduct of being nude cannot constitutionally be prohibited by county ordinance because it is otherwise protected pursuant to the United States Constitution or the Florida Constitution under existing judicial decisions; or

(4) When breastfeeding a baby, and then only the extent reasonably necessary to allow breastfeeding.

(j) *Hunting and weapons.*

(1) Firearms as defined in F.S. § 790.001 are exempt from this article and regulation is pre-empted to state law.

(2) No person shall carry, use, or possess weapons, toys, or instruments that discharge projectiles, including but not limited to air rifles, spring guns, bows and arrows, paint guns, water cannons, slingshots, and boomerangs except as a participant in a program approved by the board.

(3) Knives or other blades used exclusively for fishing, camping, and other authorized outdoor activities are permissible. All other melee weapons or instruments that pose a threat to human safety or wildlife are prohibited.

(4) Parents or guardians will be held strictly responsible and accountable for the actions of minors with regard to the prohibitions in this and other subsections of this article.

(k) *Alcoholic beverages.* Possession or consumption of alcoholic beverages within any county-owned or managed land is prohibited, except that, notwithstanding contrary provisions of the Code, possession is permitted at county boat ramp facilities and public marinas, and consumption is permitted onboard a vessel moored at a public marina. This prohibition may be waived if:

(1) The county has approved a contract or issued a permit, which by its terms allows the sale and/or consumption of alcoholic beverages in a specified area or place; or

(2) The board by resolution has temporarily waived the prohibition for a special event or activity in a specified area or place.

(l) *Pets.*

(1) No pets, except horses accessing and utilizing trails designated for horseback riding, are permitted in any environmental land.

(2) Within parks, department-managed facilities, and public marinas, pets, shall be caged or on an adequate leash not greater than six feet in length. Pets shall not be left unattended or off of a leash except in designated areas posted by signage.

(3) The owner or person in charge or in control of the pet shall immediately remove all feces deposited by such animal and dispose of same in a sanitary manner.

(4) The owner or person in charge or in control of the pet shall be held responsible for the pet's behavior and actions at all times.

(5) Except where expressly allowed, no pets are permitted in any playgrounds, swimming areas, beaches, boardwalks, bathrooms, showers, and dining areas. The department may designate further areas where pets are prohibited. Those persons in possession or control of pets within any county-owned or managed land shall obey all county ordinances including but not limited to chapter 14 of the Code except where chapter 14 is less restrictive than the provisions of this article.

(m) *Exotic wildlife and state licensed wild animals.*

(1) No livestock or class I, II, or III exotic wildlife, as defined by Florida Statute, shall be permitted in any county-owned or managed land unless expressly authorized by the administrator or designee.

(2) No wild animals for which a state license is required are permitted in any county-owned or managed land.

(n) *Gambling.* No person shall engage in any form of gambling as prohibited by state law.

(o) *Pollution.* Any act resulting in pollution is prohibited, including, but not limited to, the use of fountains, ponds, lakes, streams, bays or any other bodies of water adjacent to or within county-owned or managed lands, or the tributaries, storm sewers or drains flowing into them as dumping places for any substance, including fuel, which will or may result in the pollution of said waters.

(p) *Metal detectors.* The use of metal detectors is prohibited except on beaches in parks.

(q) *Aircraft.* No person operating, directing, or responsible for any airplane, helicopter, drone, glider, hang glider, hot air balloon, dirigible, parachute or other aerial apparatus, including those radio controlled or otherwise unmanned, shall take off from or land in or on any county-owned or managed land, except for purposes of public safety or where written permission has been obtained from the administrator or designee.

(r) *Bounce houses.* No person shall possess or erect a bounce house without a permit issued by the department. When permitted, bounce houses shall only be erected and used at areas designated for such use by the department.

(s) *Miscellaneous.* No person shall engage in any activity within any county-owned or managed land that is dangerous to the health, safety or welfare of any person or that could foreseeably damage private or county property, including but not limited to hitting golf balls, racing or speeding in a dangerous manner, and diving or jumping from bridges or catwalks. Nor shall any person engage in any activity within any county-owned or managed land that interferes with the use and enjoyment of the county-owned or managed land and its facilities by other patrons. No person shall possess helium-filled balloons in any county-owned or managed land, except in enclosed buildings, provided, however, that the helium balloons shall be properly secured when bringing balloons into and out of enclosed buildings. The department reserves the right, within the confines of applicable law, to limit other activities within any county-owned or managed land when, at the department's sole discretion, an area is deemed unable to support such activities.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 7, 7-19-16)

Sec. 90-8. Restrictions on the sale or conveyance of regional park property.

Except as otherwise permitted by this article, the county shall not sell, convey or transfer any fee simple interest in any county-owned regional park property, or portion thereof, or lease or license any regional park property for a period of longer than ten years, to any other person unless approved by resolution adopted by at least a majority vote plus one of the board at a public hearing advertised in accordance with the requirements of

F.S. § 125.66(2)(a); provided that the requirements for a public hearing and a super majority vote shall not apply to:

(1) The exchange of regional park property for reasonably equivalent regional park property when it is deemed to be in the best interests of the public as determined by board and the requirements of F.S. § 125.37 are satisfied; and

(2) The sale, transfer, conveyance, or dedication of regional park property to another governmental unit for a public purpose in accordance with the requirements of F.S. § 125.38.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 8, 7-19-16)

Sec. 90-9. Permits.

(a) *Permit required.* A department permit is required before a person may engage in the activities listed in subsection (b) in any county-owned or managed land. If a person may remain on site after operating hours or access areas closed to the public, the terms of the permit will so specify. Application forms may be obtained from the department; a fee may be required. A department permit does not relieve the applicant from the permit requirements of section 10-26 et seq. or any other sections in the Code.

(b) *Activities requiring a permit.* Activities for which permit applications must be submitted include but are not limited to the following:

(1) Scientific research including but not limited to biological assays, species identification or collection, species observation, archaeological survey, and hydrological, geological, or chemical studies. This does not include activities such as visual observation of wildlife or vegetation within public areas. A scientific research permit granted under this subsection constitutes prior written authorization from the administrator or designee for purposes of compliance with section 90-6.

(2) All commercial photography, television broadcasting, and private photography involving special settings or structures or the performance of any person. An additional film permit may be required as issued by the St. Petersburg/Clearwater film commission. Permits are not required for bona fide newspaper, press association, newsreel and/or television news department personnel, who are identified by accredited press passes. Such personnel are regarded as persons performing a task involving the freedom of the press as set forth in the constitution of the United States and accordingly, shall not be restricted by this subsection (b)(2).

(3) Camping.

(4) Bounce houses.

(5) Special events.

(6) Large groups.

(7) Commercial activity.

(c) *Transferability.* Permits are not transferable and may only be utilized by those persons to whom the permit was issued.

(d) *Revocation.* Any permit issued pursuant to this section may be revoked for failure to comply with any condition imposed on the permit.

(e) *No entitlement to permit.* Because of the proprietary nature of the county-owned and managed lands, this section does not create any right or entitlement to a permit.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 9, 7-19-16)

Sec. 90-10. Commercial activity, publicity, and signs.

(a) Commercial activity on county-owned or managed land that is not conducted by the department, or a county-approved concessionaire, licensee, or permittee, is prohibited. Nothing in this section shall be deemed to preclude the county from entering into a sponsorship agreement with commercial or noncommercial entities.

(b) No person shall place or affix any handbill, pamphlet, circular, placard, or any other printed matter upon a vehicle within any county-owned or managed land, except as provided by department permit.

(c) No person shall place any sign within any county-owned or managed land, unless the sign is placed in correlation to an event or gathering, for which a reservation through the department was made or permit from the department was obtained, and which is occurring within that specific county-owned or managed land on the day the sign is placed. Persons placing such signs must remove them from the premises before leaving the property. Any such sign placed pursuant to this provision shall be temporary in nature, no larger than 18 by 24 inches, and placed into the ground by small stakes designed so as to minimize damage to the landscaping.

(d) Any person wishing to distribute any handbills, pamphlets, circulars, placards, or other printed materials may not do so in a manner or location that interferes with the public's enjoyment of the park, or in such a manner as to result in littering or pollution.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 10, 7-19-16)

Editor's note(s)—Ord. No. 16-40, § 10, adopted July 19, 2016, amended the catchline of § 90-10 to read as herein set out. Said catchline formerly read "Advertising, publicity and signs."

Sec. 90-11. Resident personnel.

It is hereby acknowledged that it may be necessary for certain persons to have their primary residences within boundaries of county-owned or managed lands as authorized by the board or administrator or to receive temporary permission to reside within the same pursuant to written approval from the department. Such personnel and their families and guests are exempted from the regulations and prohibitions of sections 90-7, 90-9, and 90-10 while said persons are within the boundaries of the primary residence as defined by the residential lease or residential license agreement between said personnel and the county, or within the temporary residence. At all times, however, resident persons remain subject to all applicable state laws, other county ordinances, and the terms and conditions of the lease, license, or permit while within the residence.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 11, 7-19-16)

Sec. 90-12. Exemptions.

Any person performing duties authorized by the board or administrator or designee, while performing duties pursuant to this article or other law or within his or her official capacity, is hereby exempted from all prohibitions and restrictions of this article. However, all such persons shall comply with any and all other applicable federal, state or local laws.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 12, 7-19-16)

Sec. 90-13. Enforcement and penalties.

(a) It shall be a violation of this article for any person to fail to comply with any prohibition, mandate, restriction or other declaration set forth herein.

(b) All provisions of this article may be enforced by all authorized law enforcement officers and all personnel authorized by the administrator or designee.

(c) Except as otherwise provided by law or ordinance, a person convicted of a violation of this article shall be punished by a fine not to exceed $500.00. With respect to violations of this article that are continuous with respect to time, each day the violation continues is a separate offense.

(d) In addition to the penalties provided in subsection (c) of this section, a person who violates this article may also be liable under chapter 58 of the Code, including for civil penalties up to $10,000.00 per offense where each day the violation continues constitutes a separate offense.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 14, 7-19-16)

Sec. 90-14. Identification of county-owned environmental lands subject to Charter restrictions.

County-owned environmental lands in the following preserves and management areas are hereby designated as environmental lands subject to the provisions of Section 2.08, Pinellas County Charter, as further described in the maps appended to Ordinance No. 08-46 and as Appendix C to the Code:

(1) Allen's Creek Management Area.

(2) Alligator Lake Management Area.

(3) Anclote Islands Management Area.

(4) Brooker Creek Preserve.

(5) Cabbage Key Management Area.

(6) Cow Branch Management Area.

(7) East Lake Management Area.

(8) Joe's Creek Management Area.

(9) King Islands Management Area.

(10) Lake Seminole Management Area.

(11) Lake Tarpon Management Area.

(12) Lake Tarpon West Management Area.

(13) Long Branch Management Area.

(14) Mariner's Point Management Area.

(15) Mobbly Bayou Preserve.

(16) Ozona Management Area.

(17) Shell Key Preserve.

(18) Travatine Island Management Area.

(19) Weedon Island Preserve.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 15, 7-19-16)

Sec. 90-15. Group gatherings, performances, and speeches.

The board shall have the authority to designate certain county-owned or managed lands or portions of county-owned or managed lands for public demonstrations, gatherings, performances, and speeches which, due to the size of prospective groups, will interfere with the use of the county-owned or managed land by the general public. Groups intending to use such designated county-owned or managed land for public demonstrations, gatherings, performances, and speeches shall give advance notice to the department and may be required to obtain a special event or large group permit.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 16, 7-19-16)

Sec. 90-16. Boating, docks, and launching ramps.

(a) No person shall bring into or operate any vessel on any county-owned or managed lands other than those so designated for such use or purpose by the administrator or designee or applicable state law.

(b) All persons navigating or operating a vessel in county-owned or managed lands shall comply with the Florida Fish and Wildlife Conservation Committee Boating Regulations and U.S. Coast Guard Navigation Rules and Regulations as applicable. Said persons shall recognize marked manatee protection zones and boating safety zones, including but not limited to the vessel exclusion zones, combustion-motor exclusion zones, no wake zones, and minimum wake zones identified in chapter 130 of the Code.

(c) No vessel shall enter marked swim areas or zones, whether designated by the state or county.

(d) No person other than a concessionaire contracted by the county, shall be permitted to rent, hire, or operate for charge, any vessel on any county-owned or managed lands.

(e) To the extent authorized by state law, the department may regulate vessel type and motor size within county-owned or managed lands.

(f) Vessels shall not be operated in such a manner as to molest or harm wildlife or to cause damage to aquatic life, substrate or county property. No refuse, trash, oil or bilge water shall be thrown or pumped overboard within county-owned or managed lands. Sanitary facilities on vessels, which discharge overboard, must not be used while vessels are within the county-owned or managed lands.

(g) The following standards shall apply to the use of docks and boat ramps within county-owned or managed lands:

(1) All persons shall use designated boat ramps or launch areas when launching or landing motorized vessels.

(2) Docks and ramps shall be kept clear of all equipment or gear.

(3) Boat ramps are for active loading and unloading only.

(4) Overnight dwelling on vessels docked or moored is prohibited except in areas so designated.

(5) No person shall moor a vessel within any county-owned or managed land for a period of time in excess of 14 days in any 30-day period.

(6) Any defacement or damage of piers or of dock property shall be repaired or corrected at the expense of the person or persons responsible for such defacement or damage.

(7) Docking and mooring facilities shall not be used for commercial activity without prior authorization from the department. No person shall use or occupy any docking or mooring space to the exclusion of other park patrons for an unreasonable amount of time. Barring exigent circumstances, such period of time shall not exceed 30 minutes.

(8) Fuel containers shall only be used while refueling vessels, and no fuel containers of any type shall be left unattended.

(9) Storage of vessels and/or trailers is prohibited except in designated storage facilities.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 17, 7-19-16)

Sec. 90-17. Public access; hours; fees; regulations.

(a) The department reserves the right to limit public access to any county-owned or managed land when deemed necessary to protect the public welfare or inherent natural resources. No person shall loiter in or around any restroom, dressing room, locker room, shower facility, or parking lot in any county-owned or managed land.

(b) The hours of operation for all county-owned or managed lands are 7:00 a.m. to sunset unless otherwise posted or authorized by department permit.

(c) Upon resolution of the board, the department is authorized to charge fees, including parking, entrance, user, or other fees, for activities on or use of county-owned or managed lands.

(d) The department shall have the authority to adopt regulations relating to the use of county-owned or managed lands that are not in conflict with this article.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 18, 7-19-16)

Editor's note(s)—Ord. No. 16-40, § 10, adopted July 19, 2016, amended the catchline of § 90-17 to read as herein set out. Said catchline formerly read "Fees; regulations."

Sec. 90-18. Citizen support organizations.

(a) Prior to conducting any operations on county-owned or managed lands, a citizen support organization (CSO) shall enter into a written agreement with the county. The agreement shall establish duties of the department and the CSO, including but not limited to the requirements set forth in subsections (c) and (d) of this section. The agreement may grant a CSO certain permissions consistent with this article and the department's mission, such as artifact excavation and monument erection.

(b) The department and a CSO shall each have the authority to terminate a written agreement entered into pursuant to subsection (a) with and without cause. Upon termination or expiration of such written agreement, a CSO shall, within 15 days, cease operations on county-owned or managed lands and remove any reference to the department or county-owned or managed lands from its entity name.

(c) Between September 15 and September 30 of each year, each CSO shall provide the department with the following:

(1) A balance sheet and supporting financial statements for the ending current fiscal year;

(2) The CSO's budget for the upcoming fiscal year;

(3) The CSO's most recent federal Internal Revenue Service return of organization exempt from income tax form (Form 990);

(4) The CSO's annual goals and objectives;

(5) An evaluation of the CSO's operations and programs for the ending current fiscal year; and

(6) A list of the CSO's current officers.

(d) The department shall annually make the information obtained from each CSO pursuant to subsection (c) available on the department's website.

(e) The reporting requirements in subsection (c) apply equally to CSOs in existence before and after the effective date of this section 90-18. A CSO with a current, active written operating agreement with the county as of the effective date of this section, however, is not required to enter into a new agreement with the county and otherwise comply with this section to the extent such compliance is inconsistent with the CSO's current agreement until the current agreement expires or is terminated by the CSO or county.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 19, 7-19-16)

Sec. 90-19. Service animals.

(a) Service animals shall be maintained in accordance with the provisions of section 90-7 and individuals utilizing service animals must comply with all provisions of this article, except as follows:

(1) Service animals are permitted to accompany disabled patrons in all areas open to the public; and

(2) Notwithstanding any provision to the contrary contained in chapter 14 of this Code, if a leash of six feet would interfere with the service animal's ability to work or the disabled individual's disability prevents using a leash of six feet or less, the service animals must be otherwise harnessed, leashed, or tethered to the disabled individual, the individual's mobility device, or the animal's handler using the most reasonable restrictive length of leash, harness, or tether over six feet. If a harness, leash, or tether interferes with the service animal's work or the individual's disability prevents using these devices, the individual must maintain control of the animal through voice, signal, or other effective controls.

(b) An individual with a disability may be asked to remove a service animal from the premises if:

(1) The animal is out of control and the animal's handler does not take effective action to control it; or

(2) The animal is indoors or on a paved surface and is not housebroken.

(Ord. No. 10-44, § 1, 9-28-10; Ord. No. 16-40, § 20, 7-19-16)

Secs. 90-20—90-116. Reserved.

ARTICLE II. RESERVED[3]

Secs. 90-117—90-140. Reserved.

[3]Editor's note(s)—Ord. No. 10-44, § 2, adopted Sept. 28, 2010, repealed Art. II, §§ 90-101—90-112, which pertained to environmental lands. See the Code Comparative Table for full derivation.

ARTICLE III. COMMUNITY CULTURAL PROGRAMS[4]

Sec. 90-141. Purpose.

Pinellas County ("county") recognizes that arts, cultural, and heritage programs enhance the county's economic development and the quality of life for residents and visitors to the county. Designating and supporting a local arts agency, as defined in F.S. § 265.283, will stimulate governmental and public awareness and appreciation of the importance of cultural development within the county, will encourage and facilitate greater and more efficient use of governmental and private resources to maximize opportunities for the development and support of the arts, encourage and facilitate opportunities for county residents to participate in cultural activities, provide an informational resource for artists, cultural organizations and the public, and promote cultural activities, events or organizations. Further, subject to annual funding, retaining a public art and design program as provided herein will enhance the aesthetic quality of public and private buildings and spaces.

(Ord. No. 11-20, § 1, 6-14-11)

Sec. 90-142. Definitions.

For the purpose of this article, the definitions contained in this section shall apply unless otherwise specifically stated. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular, and words in singular number include the plural.

Annual public art and design program shall mean an itemized and prioritized list of anticipated art projects including the objectives, design approach, budgets and scheduling for the upcoming year. The annual public art and design program shall be developed by the public art and design committee in consultation with county agencies and the local arts agency and shall be presented to the board of county commissioners for approval.

Arts and cultural programs include, but are not limited to, music, dance, theater, creative writing, literature, architecture, painting, sculpture, folk arts, photography, crafts, media arts, visual arts, programs of museums, and other such allied, major art forms.

Artwork shall mean works in a variety of media produced by professional visual artists, encompassing a broad range of expression, media and materials. Works may be permanent, temporary, or functional.

Capital improvement project shall mean any facility or system funded for construction or renovation wholly or in part by the county, including buildings, parks, roads, bridges, or other above-ground project, but does not include major drainage, solid waste, emergency medical services, water or wastewater projects.

Committee shall mean the public arts and design committee.

County means Pinellas County, a political subdivision of the State of Florida.

Cultural grant programs shall mean grant programs established and/or administered by the local arts agency to enhance the stability and development of both well-established and emerging tax exempt arts and cultural

[4]Editor's note(s)—Ord. No. 11-20, § 1, adopted June 14, 2011, repealed the former Art. III, §§ 90-141—90-147, and enacted a new Art. III as set out herein. The former Art. III pertained to similar subject matter and derived from Ord. No. 06-70, § 2, adopted Sept. 7, 2006.

organizations operating in the county; support professional development for and special projects and/or recognition of arts teachers and artists; and provide such other grants programs as established by the local arts agency.

Eligible construction costs shall mean the total capital project appropriation, including engineering and design, but excluding costs of incidental equipment, real property acquisition, and environmental remediation.

Local arts agency means the public or private nonprofit organization in Pinellas County operating on a permanent basis for the primary purpose of strengthening, supporting, and stabilizing the activities of one or more county art and cultural constituencies, as designated by the board of county commissioners as provided in this article.

Public places shall mean all spaces owned by the county, indoor or outdoor, that are accessible and visible to the general public and located where residents and visitors live or congregate.

(Ord. No. 11-20, § 1, 6-14-11)

Sec. 90-143. Local arts agency.

(a) *Designation; appointment; qualification.*

(1) *Designation/appointment.* Creative Pinellas, Inc., a Florida nonprofit corporation, is designated and shall serve as the local arts agency in Pinellas County, as defined in F.S. § 265.283, and shall perform the duties as defined in subsection (b) herein. Creative Pinellas, Inc. shall serve as the local arts agency until another public or private nonprofit organization is designated to serve in that capacity by resolution of the board of county commissioners. The number, term, appointment, officers and replacement of directors or members of the Creative Pinellas, Inc., any other nonprofit organization, or the public organization designated as the local arts agency shall be as defined in the bylaws of the nonprofit organization, or the resolution, ordinance or statute establishing the public organization. The local arts agency shall adopt rules of procedure.

(2) *Qualification.* Each member of the local arts agency shall have the background, education and experience that qualifies said member to carry out the duties and responsibilities vested in the local arts agency. Members shall be charged with the responsibility of serving the best interests of the arts and cultural programs in the county on a community-wide basis, and no member or director shall represent the interests of any particular geographic area of the county, interest group, arts institution, community organization, or audience.

(b) *Duties.* The duties of the local arts agency shall include:

(1) Serving as the designated local arts agency for the county, as defined by the state division of cultural affairs.

(2) Establishing, awarding and administering cultural programs and financial and technical assistance programs for artists, cultural institutions, and arts teachers.

(3) Administering the public art and design program as provided by agreement with the county.

(4) Reviewing, periodically, the Pinellas County Community Cultural Plan ("cultural plan"), including amendments thereto, and making recommendations to the board of county commissioners for consideration, adoption and incorporation into the county's comprehensive plan.

(5) Collecting, arranging, recording, preserving and disseminating aesthetic and cultural material and data.

(6) Reviewing and recommending legislation to the board of county commissioners in relation to cultural matters.

(7) Marketing or advertising arts and cultural programs and facilities.

(8) Promoting an aesthetic and cultural environment in the community.

(9) Encouraging and facilitating greater and more efficient use of governmental and private resources for the development and support of the arts and cultural programs.

(10) Encouraging and facilitating opportunities for county residents to participate in cultural activities.

(11) Promoting the development of county artists, cultural institutions, community organizations sponsoring cultural activities, and audiences.

(12) Surveying and assessing the needs of the arts, artists, cultural institutions, community organizations sponsoring cultural activities, and people of the county relating to the arts.

(13) Supporting and facilitating the preservation and growth of Pinellas County's cultural resources.

(14) Otherwise serving the citizens of the county and state in the realm of the cultural matters.

(c) *Transition provisions.* In support of the program transition from the county, Creative Pinellas, Inc. is hereby deemed to be the successor in interest to the county for the purposes of any grants or other arts or cultural program funding sources, as may be further specified in an agreement between the county and local arts agency.

(Ord. No. 11-20, § 1, 6-14-11)

Sec. 90-144. Cultural programs.

Subject to available annual funding, the local arts agency shall establish and/or administer cultural programs to accomplish the duties provided herein, and to implement the goals of the cultural plan, as it determines to be necessary and appropriate:

(1) The local arts agency shall adopt rules to determine eligibility, the application process, and award criteria, which shall be subject to approval by the board of county commissioners for any cultural grant programs funded by the county.

(2) The local arts agency shall provide such notification of the availability of cultural grants in newspapers, trade journals, posting, and the departmental website, as determined by the local arts agency, which is designed to reach the widest audience of potential applicants for the available grants.

(3) The grant award decisions of the local arts agency for grants funded by the county or the state shall be subject to approval by the board of county commissioners. All other grant award decisions of the local arts agency shall be final.

(4) The cultural grants programs, including grant contracts as may be required by, and approved pursuant to, applicable local arts agency procedures, shall be administered by the local arts agency.

(Ord. No. 11-20, § 1, 6-14-11)

Sec. 90-145. Public art and design.

(a) *Public art and design funding.* Subject to the availability of annual funding, a public art and design account or accounts shall be established by the county for monies appropriated by this article as well as gifts and grants of a monetary nature from other sources. All appropriations pursuant to this article shall inure to the use and benefit of the county, and said proceeds, together with the interest thereon, shall only be expended in accordance with the provisions of this article.

(1) Public art and design funds shall be expended in accordance with the county-approved public art and design program. An annual program may be presented to the board of county commissioners outlining the projected art projects and associated costs for the upcoming year. The committee shall provide recommendations to the board of county commissioners for disbursement.

(2) Funds may be used for artists' design services, the development of design concepts and models, for the selection, acquisition, installation, and exhibition of artworks.

(3) At the time of approval of the initial budget or budget amendments for capital improvement projects, the board may appropriate from the one percent local option infrastructure sales tax proceeds an amount up to one percent of the total eligible costs of the project or projects.

(4) Funds appropriated from the budget for one capital improvement project, but not deemed necessary or appropriate for that project, may be pooled with funds attributed to budgets for other projects and may be used for any art and design project in the county, subject to the art and design plan.

(5) Funds not expended on encumbered and approved projects that are not completed by the close of any fiscal year shall be carried over to subsequent fiscal years until the project is completed.

(b) *Public art and design committee.* The committee shall be appointed by the board of county commissioners to act in the public interest on all matters relating to this article, including, selection, operation, maintenance, administration, planning, education and curatorship of the public art and design program.

(1) *Membership.* The committee shall be composed of the following seven members provided that, as the need arises, the committee may appoint others to provide expertise or otherwise represent a particular interest unique to a location or characteristic of an artwork.

(i) One member selected by the board of county commissioners.

(ii) One member from the local arts agency.

(iii) Two members who are private citizens of the county with knowledge and appreciation for visual art.

(iv) Three members who are arts professionals.

(2) *Compensation.* Members of the committee shall serve without compensation.

(c) *Terms.*

(1) Members shall serve four-year terms in staggered terms to retain experience among the committee members.

(2) No member shall serve for more than two full terms, plus the remaining portion of the prior member's term if the member has been appointed to fill the unexpired term of a prior member.

(3) Any member who consistently fails to attend meetings without prior approval of the chair shall be removed and a new member shall be appointed to complete the term.

(d) *Responsibilities.*

(1) Subject to the availability of annual funding, the committee shall prepare and present a public art and design program to the board of county commissioners for the purpose of establishing an itemized and prioritized list of anticipated art projects. The committee shall also prepare and present recommendations to the board of county commissioners, whenever appropriate, in any matter relating to the public art and design program.

(2) The committee shall prepare implementation guidelines, selection procedures and organizational policies to facilitate this article, and to govern the manner and method of submission of proposed artworks to the committee, subject to approval by the board of county commissioners.

(3) The committee may act as a liaison with private developers to encourage and facilitate private contributions, and private art installations within corporate construction and alternation projects.

(4) The committee may advise and inform the board of acquisitions, installations, and temporary displays of artworks and other public art activities.

(5) The committee may identify appropriate projects or spaces to locate or display artworks. Funds appropriated against a particular project may be used to locate art at the same project or may be pooled for use elsewhere, if permitted by the funding source.

(6) The committee may coordinate, investigate and recommend other means by which artworks may be obtained, including donations to the trust fund, gifts and loans of artwork to the county, creation of additional nonprofit organizations, and grant applications.

(7) The committee may educate and stimulate the participation of all citizens in a joint public and private effort to promote the public art and design program.

(8) The committee shall work closely with the local arts agency to assure an overall consistency in the public art and design program.

(9) The committee shall receive recommendations from county staff as to appropriate locations for artworks and shall consult with the architect or the project manager of the county project for which an artwork is proposed.

(e) *Organization; selection of chair.*

(1) Immediately after the appointment of the first committee members, the committee shall organize by electing one of its members as chair. The chair's terms shall be decided by the committee. In the event the chair's position becomes vacant, a new chair shall be elected by the committee immediately after such vacancy is filled.

(2) The presence of four members shall constitute a quorum.

(f) *Procedures.*

(1) The committee shall meet as necessary to fulfill its duties herein, and may adopt rules for governing the conduct of its affairs.

(2) All meetings shall be open to the public and minutes kept including the vote of each committee member.

(g) *Selection process.*

(1) The committee shall select and acquire works of art of the highest quality and which are consistent with the public art and design program work plan as approved by the board of county commissioners.

(2) The committee shall select and acquire artworks that are appropriate in scale, material, form and content for the general, social and physical environment with which they are to relate.

(Ord. No. 11-20, § 1, 6-14-11)

Sec. 90-146. Ownership and maintenance.

(a) *Ownership.* Ownership of all artworks acquired by the county shall be vested in the county, and the county shall hold title to each, unless the board of county commissioners waives this requirement.

(b) *Maintenance.*

(1) All artworks shall be required to be accompanied by detailed instructions for maintenance and ongoing care, including annual maintenance cost projections.

(2) Funds for ongoing maintenance shall be designated annually by the board of county commissioners in accordance with the annual public art and design program.

(Ord. No. 11-20, § 1, 6-14-11)

Secs. 90-147—90-159. Reserved.

ARTICLE IV. RESERVED[5]

Secs. 90-160—90-178. Reserved.

[5]Editor's note(s)—Ord. No. 10-44, § 2, adopted Sept. 28, 2010, repealed Art. IV, §§ 90-160—90-178, which pertained to Pinewood Cultural Park. See the Code Comparative Table for full derivation.

Sec. 2.07. Environmental lands.

(a) The preservation of environmental lands as defined herein within Pinellas County supports the sustainability of natural resources, watersheds, and natural habitat; provides resource-based recreational opportunities; and promotes a healthy environment and community.

(b) Environmental lands subject to the provisions of this Charter are those county-owned lands designated as environmental lands pursuant to section 90-112, Pinellas County Code, and include county-owned lands within the Allen's Creek Management Area, Alligator Lake Management Area, Anclote Islands Management Area, Brooker Creek Preserve, Cabbage Key Management Area, Cow Branch Management Area, East Lake Management Area, Joe's Creek Management Area, King Islands Management Area, Lake Seminole Management Area, Lake Tarpon Management Area, Lake Tarpon West Management Area, Long Branch Management Area, Mariner's Point Management Area, Mobbly Bayou Preserve, Ozona Management Area, Shell Key Preserve, Travatine Island Management Area and Weedon Island Preserve.

(c) Additional county-owned lands may be designated as environmental lands subject to the provisions of this Charter by adoption of an ordinance by the board of county commissioners.

(d) The environmental lands designation may be removed from county-owned lands by adoption of an ordinance by the board of county commissioners and approval by a majority vote of the electors of Pinellas County in a referendum held at a general or special election called by the board of county commissioners, if the lands affected constitute more than one acre within a designated facility, or by adoption of an ordinance by the board of county commissioners if the lands affected constitute one acre or less within a designated facility.

(e) The county shall not sell, convey, or transfer any fee simple interest in county-owned lands designated as environmental lands subject to the provisions of this Charter, and the county shall not lease or license for a period longer than ten years any interest in county-owned lands designated as environmental lands subject to the provisions of this Charter, unless authorized by a majority vote of the electors of Pinellas County in a referendum held at a general or special election called by the board of county commissioners.

(Ord. No. 08-45, § 1, 8-26-08; Res. No. 16-48, § 1, 7-19-16)

Editor's note(s)—Ord. No. 08-45 was approved by referendum Nov. 4, 2008.

Res. No. 16-48, repealing the former § 2.07 and renumbering former § 2.08, pertaining to environmental lands, as herein set out, was approved by referendum Nov. 8, 2016. Former § 2.07, pertaining to annexation, derived from Ord. No. 00-66, § 3, adopted Aug. 22, 2000, and approved by referendum Nov. 7, 2000.

APPENDIX 7
Board of County Commissioners' Strategic Plan

PINELLAS COUNTY'S **Strategic Plan**

Our Vision: To Be the Standard for Public Service in America.

Our Mission: Pinellas County Government is committed to progressive public policy, superior public service, courteous public contact, judicious exercise of authority, and responsible management of public resources to meet the needs and concerns of our citizens today and tomorrow.

Deliver First-Class Services to the Public and Our Customers

- **5.1** Maximize partner relationships and public outreach
- **5.2** Be responsible stewards of the public's resources
- **5.3** Ensure effective and efficient delivery of county services and support
- **5.4** Strive to serve the needs of all Pinellas County residents and customers

Ensure Public Health, Safety, and Welfare

- **2.1** Provide planning, coordination, prevention, and protective services to create and enhance a safe, secure, and healthy community
- **2.2** Be a facilitator, convener, and purchaser of services for those in need
- **2.3** Provide comprehensive services to connect our veterans and dependents to the benefits they have earned
- **2.4** Support programs that seek to prevent and remedy the causes of homelessness and move homeless individuals and families to permanent housing
- **2.5** Enhance pedestrian and bicycle safety

Practice Superior Environmental Stewardship

- **3.1** Implement green technologies and practices where practical
- **3.2** Preserve and manage environmental lands, beaches, parks, and historical assets
- **3.3** Protect and improve the quality of our water, air, and other natural resources
- **3.4** Reduce/reuse/recycle resources. Including energy, water, and solid waste
- **3.5** Foster a sustainable and resilient community that is prepared for sea level rise and a changing climate

Foster Continual Economic Growth and Vitality

- **4.1** Proactively attract and retain businesses with targeted jobs to the county and the region
- **4.2** Invest in communities that need the most
- **4.3** Catalyze redevelopment through planning and regulatory programs
- **4.4** Invest in infrastructure to meet current and future needs
- **4.5** Provide safe and effective transportation systems to support the efficient flow of motorists, commerce, and regional connectivity
- **4.6** Support a vibrant community with recreation, arts, and culture to attract residents and visitors

Create a Quality Workforce in a Positive, Supportive Organization

- **1.1** Recruit, select, and retain the most diverse and talented workforce
- **1.2** Leverage, promote, and expand opportunities for workforce growth and development
- **1.3** Make workforce safety and wellness a priority
- **1.4** Maintain a fair and competitive compensation package

Updated 6/2021

APPENDIX 8
Pinellas County Comprehensive Plan Elements

Goals, Objectives and Policies

GEOLOGY, GROUNDWATER PROTECTION AND AQUIFER RECHARGE

GOAL ONE: PROTECT AND MANAGE THE FUNCTIONAL INTEGRITY OF THE COUNTY'S GEOLOGIC FEATURES AND ATTRIBUTES, AND ITS NATURAL GROUNDWATER AQUIFER RECHARGE AREAS AND WELLFIELDS, IN A MANNER THAT PRESERVES AND ENHANCES NATURAL FUNCTIONS, AND PROTECTS GROUNDWATER QUALITY.

1.1. Objective: Pinellas County shall continue to implement a comprehensive groundwater protection program.

1.1.1. Policy: Pinellas County shall continue to enforce zones of protection for regional wellfields within Pinellas County boundaries, consistent with the adopted wellhead protection ordinance, as determined by a flow net analysis based on the Floridan Aquifer potentiometric surface.

1.1.2. Policy: Pinellas County shall continue to control the use and storage of hazardous substances within its wellfield protection zones through implementation of the wellhead protection provisions of the Pinellas County Code.

1.1.3. Policy: Pinellas County shall continue to utilize its emergency response program that includes provisions for responding to accidental pollution events and providing a list of toxic and hazardous substances subject to the restrictions of the program, and shall require that businesses within the wellhead protection zone include emergency response measures within their operating permits.

1.1.4. Policy: Pinellas County shall rely upon and coordinate with Tampa Bay Water to assess groundwater quality and the impacts of groundwater withdrawals.

1.1.5. Policy: Pinellas County shall continue to use the Future Land Use Map to restrict the density and intensity of development within the identified wellfield protection zone.

1.1.6. Policy: Pinellas County shall continue to coordinate with adjacent counties, municipalities and agencies in an ongoing effort to protect regional wellfields and recharge areas.

1.1.7. Policy: The County shall continue to utilize the Future Land Use Map to protect aquifer recharge areas by limiting residential density to a maximum of 0.5 unit per acre within the northern portion of Planning Sector 2 (which includes the Eldridge-Wilde Wellfield and

surrounding lands), and by designating major wetland systems and associated uplands as preservation or preservation/resource management.

1.1.8. Policy: To protect groundwater recharge and groundwater quality, Pinellas County will preserve or restore natural drainage features through application of surface water management regulations during site plan review, by adherence to applicable federal, state and local regulations in County-designed projects, and by supporting potable water system improvements which are designed to protect and enhance the source water supply.

1.1.9. Policy: The County shall enforce ordinances that regulate borrow pits and landfills throughout Pinellas County, and landfills shall be prohibited within the wellhead zones of protection as determined in the County's groundwater protection program.

1.1.10. Policy: The County shall prohibit additional commercial or industrial land uses within the designated wellhead protection area in Planning Sector 2.

1.1.11. Policy: The County shall protect the wellfields in Planning Sector 2, including through lease agreements with property owners and by designating wellfields on County-owned property as Preservation - Resource Management, or Preservation on the Future Land Use Map.

1.1.12. Policy: Pinellas County shall continue to encourage and participate in efforts by the Southwest Florida Water Management District (SWFWMD) to prioritize the identification of groundwater recharge areas within the Northern Tampa Bay Water Use Caution Area (NTBWUCA).

1.1.13. Policy: In association with the update to the Land Development Code, evaluate the County's wellhead protection program to assess whether it continues to effectively regulate the direct or indirect release of pollutants into sinkholes, and areas of high groundwater recharge, in order to prevent groundwater contamination.

1.1.14. Policy: Pinellas County will regulate land use and development in a manner that protects the functions of natural drainage features for their contribution to recharge of the potable water supply.

1.1.15. Policy: Pinellas County will continue to encourage the development and implementation of source water protection initiatives and source water assessment programs by Tampa Bay Water.

1.1.16. Policy: Pinellas County will coordinate with the Southwest Florida Water Management District and the Florida Department of Environmental Protection, and utilize Florida Vulnerability Assessment (FAVA) data and maps, to identify and categorize recharge areas, and will incorporate the information into a geographic information systems format to facilitate use as a planning tool.

1.1.17. Policy: Pinellas County shall continue to acquire lands that contribute to protection of potable water recharge areas to the regional wellfields in this County.

1.2. Objective: Pinellas County shall continue to enforce its water shortage program in accordance with the Water Shortage Plan of the Southwest Florida Water Management District and Section 82 of the Pinellas County Code.

1.2.1. Policy: Pinellas County shall utilize the provisions of County Code Section 82 in cooperating with the Southwest Florida Water Management District and Tampa Bay Water to deal with water shortages and when enforcing water use restrictions as provided in Section 373.609, FS.

1.2.2. Policy: Pinellas County staff shall, in times of declared water shortage, provide timely and accurate information to the public, and enforce water use restrictions, consistent with Southwest Florida Water Management District guidelines and County Commission directives.

1.2.3. Policy: The County shall continue its commitment to be a model for, and to implement proactive, innovative, and creative conservation education programs and technologies.

1.3. Objective: Consideration will be given to the suitability of underlying soil conditions when making land use, zoning and development order decisions.

1.3.1. Policy: Pinellas County will evaluate soil conditions and limitations in the review of land use and zoning changes, and site plans.

NATURAL SYSTEMS AND LIVING RESOURCES

GOAL TWO: PINELLAS COUNTY WILL CONSERVE, PROTECT, RESTORE AND APPROPRIATELY MANAGE ITS NATURAL SYSTEMS AND LIVING RESOURCES ENSURE THE HIGHEST ENVIRONMENTAL QUALITY POSSIBLE.

2.1. Objective: Pinellas County shall continue to implement management programs for the conservation of natural ecosystems and species of conservation concern (inclusive of native vegetative communities, terrestrial, marine, estuarine and aquatic ecosystems, and native wildlife species).

2.1.1. Policy: Pinellas County shall follow an active program of identification, protection, conservation and/or restoration of functioning native ecosystems and native habitats, including for species of conservation concern.

2.1.2. Policy: Pinellas County shall continue to enforce existing ordinances that protect and conserve native ecosystems and wildlife habitat, including habitat for species of conservation concern, from destruction by development activities.

2.1.3. Policy: Pinellas County shall continue to require that the type, intensity and location of development be correlated inversely with important ecosystems and native wildlife species existing on each site.

2.1.4. Policy: Pinellas County shall continue to require that development of a site require maintenance or improvement of existing native vegetative communities and shall continue to require the removal of ecologically undesirable non-native vegetation.

2.1.5. Policy: The removal of ecologically-undesirable non-native vegetation will be required, to the degree feasible, in conjunction with County projects; native species and intact habitat will be protected or enhanced, and landscaping will, at a minimum, be 80 percent native species selected to suit the individual site and to meet Florida Yards and Neighborhoods standards.

2.1.6. Policy: Pinellas County shall continue to make a target list of ecologically undesirable plant species available to the public through such means as, but not limited to, the provision of literature in department lobbies, in development regulations, on the County’s website and in a variety of publications and educational outreach activities.

2.1.7. Policy: Pinellas County shall continue to pursue the acquisition of properties which contain desirable habitats, have the potential to be restored to provide desirable habitat, or serve to “fill in the gaps” in ecological corridors, or connect and enhance functional wildlife habitats in Pinellas County and throughout the region.

2.1.8. Policy: Pinellas County shall continue to manage County-owned environmental lands and resource-based parks to provide avenues for the dispersal of isolated populations of wildlife throughout Pinellas County and adjacent counties.

2.1.9. Policy: Pinellas County shall protect natural reservations as identified within the Recreation, Open Space and Culture Element by designating, whenever possible, natural reservations as Recreation/Open Space, Preservation-Resource Management, or Preservation on the County's Future Land Use Map.

2.1.10. Policy: Watershed and waterbody management plans shall identify existing and potential wildlife corridors and contiguous conservation and preservation areas and will identify opportunities to connect/enhance environmental lands and the open space network within the unincorporated county, municipalities and adjacent counties.

2.1.11. Policy: In the County's land acquisition, land regulation, and land management program, consideration will also be given to the protection of important, but isolated, lands where the isolation itself is providing an important habitat/species protection function.

2.1.12. Policy: Pinellas County's land acquisition efforts shall include a commitment to linking open space areas, and creating a network of greenways and greenspaces, which can be managed to support the protection, enhancement and restoration of functional and connected natural systems while providing, where appropriate and feasible, unique recreational opportunities, including nature-based experiences, for both residents and visitors.

2.1.13. Policy: Pinellas County shall continue to implement recovery programs for its natural ecosystems and for native wildlife including species of conservation concern, as well as those habitats identified in the Comprehensive Conservation and Management Plan (CCMP) as being of special concern, those identified as natural resources of regional significance by the Strategic Regional Policy Plan, and/or those resources identified by the County.

2.1.14. Policy: In association with the update to the Land Development Code, Pinellas County will evaluate the possibility of, or need for, buffers to protect nesting bald eagles. [10-57]

2.1.15. Policy: Pinellas County will coordinate with Pasco and Hillsborough Counties regarding extension of regional ecological corridors and greenway systems, and will share information regarding land development proposals that might have extra-jurisdictional impacts on existing corridors.

2.1.16. Policy: In association with the update to the Land Development Code, Pinellas County will determine the feasibility of regulatory techniques and/or incentives that can be used to help close the gaps in the ecological greenway system by partnering with the private sector on the set aside, or use, of lands that contribute to contiguity.

2.1.17. Policy: Pinellas County shall coordinate and share information with other local governments and agencies relative to the conservation, protection and management of natural ecosytems and native wildlife, including species of conservation concern in Pinellas County.

2.1.18. Policy: Pinellas County considers the protection of intact upland systems to be a priority and will continue to coordinate with environmental and regulatory agencies regarding the need to protect the County's diminishing uplands, particularly from wetland mitigation regulations applied during the development and permitting process.

2.1.19. Policy: In association with the update to the Land Development Code, a comprehensive review of existing environmental regulations will be initiated to identify opportunities to introduce new innovations, regulations and incentives that contribute to environmental improvement.

ENVIRONMENTAL LANDS AND RESOURCE-BASED PARKS

GOAL THREE: PINELLAS COUNTY'S ENVIRONMENTAL LANDS AND RESOURCE-BASED PARKS ARE THE HALLMARK OF THIS COUNTY'S ENVIRONMENTAL COMMITMENT, AND THESE LANDS ARE TO BE PROTECTED AND MANAGED IN PERPETUITY FOR THEIR CONTRIBUTION TO THE BIODIVERSITY AND BIOLOGICAL SUSTAINABILITY OF THE REGION, AS A MEANS OF PROVIDING RESPITE FROM URBAN LIFE AND BECAUSE THEY INSTILL FUTURE GENERATIONS WITH A SENSE OF APPRECIATION FOR FLORIDA'S NATURAL HERITAGE.

3.1. Objective: Pinellas County will, at all times and in all actions, be a leader in urban ecology by being a conscientious steward of its environmental lands and resource-based parks and will maintain the integrity of these lands for their ecological, hydrological and open space value, in a manner that contributes towards a net environmental and ecosystem benefit.

3.1.1. Policy: Pinellas County will continue to, through a variety of media, provide education and promote public access to its environmental lands and resource-based parks, consistent with approved management plans, as a means of instilling environmental stewardship, and appreciation of this County's natural resources.

3.1.2. Policy: Pinellas County will consider the impact of land use and zoning decisions, and site plan decisions, on environmental lands and resource-based parks, so that decisions do not inadvertently conflict with approved management plans or best management practices.

3.1.3. Policy: By December 2013, evaluate the creation of a Pinellas County environmental lands trust to be used to secure and acquire infill parcels, by allowing for the contribution of lands or monies. [10-57]

3.1.4. Policy: To foster environmental stewardship, the County's public outreach efforts will include information and education on best management practices for the neighbors of environmental lands and resource-based parks, as well as watershed concepts that demonstrate the impact of activities on nearby lands to the health of the preserve ecosystem.

3.1.5. Policy: Pinellas County will continue to pursue acquisition of infill properties that "close the gaps" in existing environmental lands and resource-based parks that enhance existing boundaries or natural systems.

3.1.6. Policy: Pinellas County will develop trails, outdoor classroom areas, exhibits and other facilities at its environmental lands and resource-based parks that are accessible to the public in order to enhance visitor experiences, without compromising environmental integrity, and in accordance with approved land management plans.

3.1.7. Policy: Pinellas County will strengthen partnerships with the media and municipalities to promote the purpose and value of environmental lands and resource-based parks.

3.2. Objective: As funding and staffing become available, Pinellas County will complete land management plans for its resource-based parks and its environmental lands. [12-10]

3.2.1. Policy: Pinellas County will continue to develop and update comprehensive management plans for its environmental lands and resource-based parks to ensure the protection and conservation of natural ecosystems and native wildlife, including species of conservation concern.

3.2.2. Policy: Each County environmental land and resource-based park land management plan will include, but not be limited to: natural resource descriptions, floral and faunal inventories, staffing needs, natural resource management strategies, educational programs, and resource-based recreation where compatible.

3.2.3. Policy: Baseline environmental data will be collected for each environmental land and resource-based park in order to devise appropriate management strategies.

3.2.4. Policy: Each management plan for a resource-based park will address which lands are available for educational activities or programming, as well as identify the capacity for events.

3.2.5. Policy: Pinellas County will undertake a sustainability analysis when necessary to assess compatibility of and impacts of, proposed uses in resource-based parks, preserves and managed environmental lands, including resource management strategies.

3.2.6. Policy: Subsequent to adoption of the Brooker Creek Preserve Management Plan, the location of any new vertical water supply infrastructure within the Brooker Creek Preserve will require that the County conduct two public information meetings, with final action to be at a public hearing by the Board of County Commissioners, and subject to the uses, standards, processes, and resource management overlay requirements (i.e., the RMO-2 requirement) specifically defined in the Preservation-Resource Management Future Land Use Category, and the corresponding Preservation – Resource Management Zoning District. [09-14]

3.2.7. Policy: In addition to meeting environmental permitting requirements, and the requirements of the controlling land use category, any groundwater pumping decisions, including applications for permits, related to the Brooker Creek Preserve will also be evaluated by staff to ensure that impacts to wetlands and uplands can be avoided or minimized, and the public will be informed about a water use permit application for Brooker Creek Preserve before that application is submitted by Pinellas County. The filing of permit applications by Pinellas County for water use within the Brooker Creek Preserve shall require approval by the Board of County Commissioners at a public hearing. [09-14]

STRENGTHENED CONNECTIONS TO THE WATER

GOAL FOUR: PINELLAS COUNTY WILL REMAIN A LEADER IN THE PROTECTION AND RESTORATION OF ITS SURFACE WATERS AND THE DEPENDENT HABITATS AND RESOURCES WHICH ARE ESSENTIAL TO THIS COUNTY'S CHARACTER, ECONOMY AND QUALITY OF LIFE.

4.1. Objective: Pinellas County shall protect, and conserve surface water resources and their living resources by preserving where appropriate, or restoring where possible, freshwater, marine and estuarine habitats, including coastal wetlands tidal streams, seagrasses, and other submerged aquatic vegetation, and by monitoring and managing, as best as possible, interactions between human activities and dependant marine and freshwater species.

4.1.1. Policy: The County shall continue to prohibit dredging and filling or other development activities having significant long-term impacts on marine and estuarine habitats such as seagrass beds, mangroves, tidal marshes and tidal flats, except in cases clearly in the public interest.

Goals, Objectives and Policies

THE PROVISION OF RECREATION AND OPEN SPACE

GOAL ONE: TO ADMINISTER OUTSTANDING COUNTYWIDE RECREATIONAL, OPEN SPACE AND ENVIRONMENTAL SYSTEMS THAT PROVIDE, THROUGH ACQUISITION, DEVELOPMENT AND MAINTENANCE, SUFFICIENT RESOURCE-BASED REGIONAL PARKS AND ENVIRONMENTAL LANDS THAT ARE ENVIRONMENTALLY SUSTAINABLE, FOSTER ENVIRONMENTAL STEWARDSHIP, AND ENHANCE THE COUNTY'S ECONOMIC VITALITY AND THE QUALITY OF LIFE FOR RESIDENTS AND VISITORS.

1.1. Objective: Pinellas County shall continue to provide a system of regional resource-based County parks and environmental lands to adequately meet the needs of Pinellas County residents through the Year 2025.

1.1.1. Policy: Pinellas County shall maintain a minimum level of service standard of 14.0 acres of parks and environmental lands, in combination, for every 1,000 residents within the County through the Year 2025.

1.2. Objective: Pinellas County shall continue to coordinate efforts with all levels of government and the private sector to increase the availability of public resource-based parklands and open space acreage to meet the adopted level of service standard defined in Policy 1.1.1.

1.2.1. Policy: Pinellas County shall annually review and update existing intergovernmental agreements with local, state and regional governments for the operation and use of park and recreational facilities and the management of open space acreage.

1.2.2. Policy: Pinellas County shall continue to seek public and private resources to support the acquisition and development of County recreation, resource-based park facilities, and open space acreage through grant-in-aid programs or other assistance programs.

1.2.3. Policy: Pinellas County shall continue the appointment of citizens to the Park and Recreation Advisory Board to provide citizen advice regarding resource-based recreation opportunities and utilization of County parkland.

1.2.4. Policy: The Park and Recreation Advisory Board shall have the opportunity to review and make recommendations to the Board of County Commissioners regarding proposed uses or activities which are inconsistent with County policy in County parks.

1. 3. Objective: Pinellas County shall continue to acquire open space, park and environmental land acreage countywide, with particular emphasis on filling in the gaps in the system and connecting existing properties.

1.3.1. Policy: Pinellas County's land acquisition and management program will focus on making parks and environmental lands available to all County residents, consistent with adopted park and environmental land management plans.

1.3.2. Policy: As new opportunities become available, or as County properties are surplused, the Pinellas County Department of Culture, Education and Leisure and the Department of Environmental Management will evaluate the recreational and/or environmental benefit, or potential benefit, of properties, including their ability to enhance the existing open space or park inventory.

1.4. Objective: Pinellas County will protect its open spaces and scenic vistas for their contributions to quality of life.

1.4.1. Policy: Pinellas County shall continue to pursue incentives, enforce existing ordinances, and consider new regulations that require the provision of open space areas and retention of open vistas, where appropriate.

1.4.2. Policy: Pinellas County shall enforce existing land development regulations, and evaluate the need for additional provisions or incentives for the retention of recreation and open space acreage, based on criteria and standards that reflect environmental, aesthetic and community needs.

1.4.3. Policy: Pinellas County will encourage and incentivize the retention and reestablishment of open vistas, where appropriate, with particular emphasis on coastal areas and lands surrounding parks and environmental lands.

1.4.4. Policy: Pinellas County will coordinate with other local governments and government agencies to protect open vistas along causeways and bridges.

1.4.5. Policy: Pinellas County will protect its environmental lands and resource-based regional parks from the impact of incompatible uses as identified in approved management plans, and from conversion to other purposes and uses that are inconsistent with approved management plans.

1.4.6. Policy: Pinellas County departments will maintain active lines of communication to remain apprised of potential opportunities to purchase open space lands.

1.5. Objective: In recognition of the limited amount of available open space remaining within the County, Pinellas County shall prohibit the conversion of dedicated recreation/open space land uses, and encourage the retention of non-dedicated recreation/open space land uses.

1.5.1. Policy: By December 2012, Pinellas County will evaluate whether additional policies, regulations, and/or incentives are required to support the retention of recreation/open space land use designations on golf course properties, small parks and other similarly designated privately-owned open space properties.

1.6. Objective: Pinellas County shall continue to improve public access to County parks and other facilities including County beach access parks, multi-use trails and boat ramp facilities.

1.6.1. Policy: Pinellas County shall, in cooperation with the Metropolitan Planning Organization (MPO), other agencies and governments, work to enhance physical access to park and recreation areas by automobile, bicycle, pedestrian, and public transportation.

1.6.2. Policy: Pinellas County shall continue to design and develop park facilities with access for the physically challenged.

1.6.3. Policy: Pinellas County will continue to emphasize the importance of providing sustainable public access to the County's resource-based regional parks and environmental lands, in accordance with approved management plans, as a means of instilling appreciation of the resources, understanding of their value and contribution to our quality of life, and a sense that each of us is a custodian of our natural surroundings.

1.6.4. Policy: Pinellas County will maintain an attractive countywide way-finding/directional signage system (brown and white signs) to identify the location of major resource-based parks, cultural facilities and environmental lands.

1.7. Objective: Pinellas County will continue to implement and enhance a comprehensive countywide system of greenways, blueways and trails.

1.7.1. Policy: By December 2015, Pinellas County will consolidate its greenways, blueways and trails into a master plan of existing and planned facilities and amenities. [10-57]

1.7.2. Policy: Pinellas County will continue to coordinate with other local governments and agencies to accomplish the development of an integrated system of greenways, blueways and trails.

1.7.3. Policy: Pinellas County's system of greenways, blueways and trails will emphasize connectivity between established resource-based parks and preserves, as well as key recreational destinations, and provide Pinellas County residents and visitors with new opportunities in which to recreate, exercise and enjoy; multiple uses shall be encouraged where appropriate.

1.7.4. Policy: Pinellas County will continue to evaluate opportunities for land acquisition along the Brooker/Anclote corridor to enhance both the recreational and environmental greenway system.

1.7.5. Policy: Pinellas County will evaluate opportunities for enhancing public recreational access along the Joe's Creek Greenway corridor as the opportunity arises. [10-57]

1.7.6. Policy: Pinellas County will support and promote the identification, including directional and way finding signage, and enhancement of regional systems of greenways, blueways and trails, and connect to such systems as opportunities arise.

1.7.7. Policy: The greenways, blueways and trails plan will recognize the value of connectivity between neighborhoods and workplaces, and the recognition of the trails network as a legitimate mobility alternative to the automobile will be a primary goal.

1.7.8. Policy: In association with the update to the Land Development Code, the County will evaluate its land development regulations and the development review process to identify opportunities and incentives for public access to the greenways, blueways and trails system to be accomplished in partnership with private development. [10-57]

1. 8. Objective: Pinellas County Departments shall cooperatively develop educational programs and materials concerning the conservation, protection, restoration, and interpretation of natural, historic and cultural resources.

1.8.1. Policy: Pinellas County shall continue to provide educational materials at existing and future County parks, educational facilities and environmental lands that promote native vegetative communities and wildlife, with particular emphasis on Florida-friendly landscaping techniques.

1.8.2. Policy: Pinellas County will implement all of the elements of the Comprehensive Plan in coordination so as to achieve a sustainable natural community and to support and promote the provision of nature-based and heritage-based tourism opportunities that contribute to environmental and cultural awareness and responsible stewardship among both citizens and visitors.

1.8.3. Policy: Pinellas County will continue to provide locations for multi-use pavilions and outdoor classrooms for sustainability/environmental education at public sites such as beaches, parks and environmental lands, consistent with approved management plans.

1.8.4. Policy: Pinellas County will coordinate the marketing of its regional park system, environmental lands and related recreational opportunities with the St. Petersburg/Clearwater Area Convention and Visitors Bureau.

PROTECTION AND MANAGEMENT OF PARKS AND ENVIRONMENTAL LANDS

GOAL TWO: TO PROTECT, IN PERPETUITY, THE OPEN SPACE VALUE AND COUNTYWIDE PUBLIC PURPOSE OF THE COUNTY'S REGIONAL PARKS, ENVIRONMENTAL LANDS AND OPEN SPACES, AND TO DEVELOP, IMPLEMENT AND ADHERE TO THE INDIVIDUAL MANAGEMENT PLANS AND STRATEGIES FOR THESE IRREPLACEABLE PUBLIC ASSETS.

2.1. Objective: Pinellas County shall continue to design and develop its resource-based parks, open spaces and environmental lands with a focus on the conservation, protection, restoration, management and interpretation of natural and cultural resources.

2.1.1. Policy: Pinellas County's land acquisition and multiple land use management efforts shall continue the commitment to linking open space areas, and creating a network of greenways and green spaces, which can be managed to support the protection, enhancement and restoration of functional and connected natural systems while contributing to watershed protection and providing resource-based recreational opportunities, including nature-based experiences, for both residents and visitors.

2.1.2. Policy: While recognizing the importance of its resource-based regional parks' core recreational value countywide to residents and visitors, Pinellas County will recognize the importance of the system's value to wildlife, including migratory birds, and maintain an appropriate balance.

2.1.3. Policy: Pinellas County shall continue to design and manage its parks and environmental lands to protect and restore where possible, native vegetative communities and critical wildlife habitat, including all flora and fauna identified as threatened, endangered or species of special concern.

2.1.4. Policy: As funding and staffing become available, Pinellas County will systematically analyze and identify the critical habitats in each resource-based park and identify appropriate protection strategies. [10-57]

2.1.5. Policy: Pinellas County will appropriately manage the historic tree canopies within its regional parks system and environmental lands.

2.1.6. Policy: Pinellas County shall continue to landscape park areas utilizing a minimum of 85 percent native shrubs and trees.

2.1.7. Policy: Pinellas County will continue to educate property owners adjacent to parks and environmental lands in a manner that fosters environmental stewardship.

2.1.8. Policy: Pinellas County will continue to incorporate environmental/ historical/archaeological education exhibits and kiosks to support the education curriculum at regional parks and environmental lands, consistent with approved management plans.

2.1.9. Policy: Pinellas County may incorporate public art, where appropriate, in the design of future facilities, commissioned sculpture and outdoor art throughout the parks and environmental lands, consistent with approved management plans and the County's Public Art and Design Master Plan.

2.2. Objective: Pinellas County will continue to protect, enhance and manage the resource-based parks for their habitat value and resource-based recreational purpose, balancing recreational activities and opportunities with environmental and cultural stewardship, so as to not negatively impact the critical and irreplaceable ecosystems found in the regional resource-based park system.

2.2.1. Policy: Pinellas County will develop specific management plans for each regional park in the regional park system as funding and staffing become available. [10-57]

2.2.2. Policy: Pinellas County shall, consistent with adopted management plans, continue to implement multiple land management practices within County parks to achieve the goals of the Recreation, Open Space and Culture Element as well as the Natural, Resources Conservation and Management Element.

2.2.3. Policy: Pinellas County will develop, maintain and operate regional resource-based parks in accordance with adopted management plans and master plans.

2.2.4. Policy: Resource-based regional park management plans shall, at a minimum, include the following:

- Overall objectives, strategies and policies

- A suitability assessment method to assess compatibility and impacts of proposed uses
- Monitoring and mitigation procedures
- Strategies for resource management
- A table showing the percentage of land to be used for conservation/preservation, open space, and developed areas
- A matrix that identifies development restrictions and identifies permitted uses within each land use
- Relationship to other adjacent or nearby public facilities, as applicable
- A determination of the capacity to accommodate special events
- Identification of desired visitor experiences, including activity, duration, available food and beverages, etc. to determine needs and opportunities for concession, public access, transportation, promotion, etc.

STRENGTHENING CONNECTIONS TO THE WATER

GOAL THREE: TO STRENGTHEN PUBLIC CONNECTIONS TO PINELLAS COUNTY WATERS AND WATERWAYS THROUGH THE MAINTENANCE, PROMOTION AND ENVIRONMENTALLY-SENSITIVE EXPANSION OF RECREATIONAL ACCESS.

3.1. Objective: In recognition of their recreational and economic importance, Pinellas County will encourage and support the retention, acquisition, and expansion, where appropriate, of water dependent recreation-related land uses, including marinas, boat ramps, and other means of public water and waterway access.

3.1.1. Policy: In association with the update to the Land Development Regulations, Pinellas County will investigate techniques to discourage or prevent the loss of water dependent land uses. [10-57]

3.1.2. Policy: Pinellas County will continue to pursue partnerships with other agencies and municipalities to improve and increase opportunities for public access to the water and waterways countywide. [10-57]

3.1.3. Policy: Pinellas County will continue to investigate opportunities for additional boat access facilities with particular emphasis on a North County deep water ramp. [10-57]

3.1.4 Policy: Pinellas County will strive, as far as practicable, to maintain the current ratio of boat ramp lanes and parking spaces to registered Pinellas County boaters; and to maintain the existing ratio, as of June 2007, of different types of boat ramps.

3.2. Objective: Pinellas County will continue to maintain and enhance, where feasible, the operation and efficiency of existing boat access facilities.

3.2.1. Policy: Pinellas County will continue to maintain its signs and/or graphics at County boat ramps regarding boat ramp use and etiquette. [10-57]

3.2.2. Policy: Pinellas County will continue to maintain its Pinellas County Boat Ramp Guide to Pinellas County, showing the type of access, locations, amenities, hours of operation, etc. [10-57]

3.2.3. Policy: In furtherance of boater and wildlife safety, Pinellas County will conduct an annual review with the Sheriff's Marine Unit regarding marine enforcement, monitoring and speed restrictions. [10-57]

3.3. Objective: Pinellas County shall continue to identify and prioritize coastal properties within the County for acquisition, consistent with the State's land acquisition program and Tampa Bay Estuary Program goals.

3.3.1. Policy: The County's process for identifying and prioritizing coastal properties for acquisition shall consider, at a minimum, the following criteria:

- degree of environmental significance and pristine condition;
- consistency with hazard mitigation requirements;
- beach access and management opportunities; and
- urban park and open space needs

3.3.2. Policy: The County shall actively coordinate and collaborate with other coastal governments and agencies in achieving this objective.

3.4. Objective: Pinellas County will maintain, enhance and expand, where possible, public beach and shoreline access sites.

3.4.1. Policy: The County shall continue, as practical, to acquire beach access sites in locations that enhance public access. [10-57]

3.4.2. Policy: Pinellas County will give priority to those public access acquisitions or improvements that are located where public access is needed most.

3.4.3. Policy: Pinellas County will actively seek partnerships and shared funding opportunities for the acquisition of beach access sites.

3.4.4. Policy: Pinellas County will seek to obtain, as necessary, perpetual easements for public beach accesses, and for privately-owned beach property located landward of the Erosion Control Line that requires renourishment.

3.4.5. Policy: Pinellas County will cooperate with the coastal municipalities to maintain and enhance the existing system of primary beach accesses, defined as 100 parking spaces and one restroom facility per mile of restored beach.

3.4.6. Policy: Pinellas County will continue to maintain its web-based Pinellas County Beach Access Guide, showing the different types of facilities or amenities available at different beach accesses. [10-57]

3.4.7. Policy: Pinellas County will encourage the use of consistent beach access signage, provided at no cost by the Florida Coastal Management Program of the Department of Environmental Protection.

3.4.8. Policy: Consistent with existing agreements, Pinellas County will share responsibility and cooperate with the coastal municipalities to identify and maintain existing vehicular access, particularly shell paths without structures, for resource management, construction, and emergency access to coastal areas.

3.4.9. Policy: Pinellas County will investigate ideas and incentives to establish 'maintenance of views to the water from public roadways' to be used in the evaluation of proposed development projects in the unincorporated county.

3.4.10. Policy: Pinellas County will continue to coordinate with managing agencies, including the Florida Department of Environmental Protection, U.S. Army Corps of Engineers, and municipalities to manage coastal resources.

3.4.11. Policy: Pinellas County shall not expend public monies for renourishment/restoring sand beaches where the amount of public access does not meet the minimum standards established by the State of Florida for State-financed beach renourishment/restoration projects.

3.4.12. Policy: The County will consider including, where practical, catwalks or other facilities for fishing on new or rebuilt County bridges.

3.5. Objective: Pinellas County will identify innovative ways to increase and enhance public accessibility to the beach, including the consideration of transportation and parking alternatives that also address pedestrian safety.

3.5.1. Policy: Pinellas County will continue to evaluate the feasibility of joint-use off-beach parking facilities, shuttle services to major beaches during peak weekend hours, and the acquisition of property near major causeways for future off-beach parking facilities, as opportunities arise. [12-10]

3.5.2. Policy: Pinellas County will continue to provide bicycle parking facilities at County-maintained beach accesses.

3.5.3. Policy: In furtherance of pedestrian safety, Pinellas County will coordinate with the Pinellas County Metropolitan Planning Organization and the Florida Department of Transportation to encourage the construction of traffic control/pedestrian crossings on Gulf Boulevard near beach access points.

FACILITY-BASED RECREATION

GOAL FOUR: TO MAKE URBAN LEVELS OF FACILITY-BASED RECREATION MORE ACCESSIBLE TO UNINCORPORATED RESIDENTS WHEN OPPORTUNITIES ARISE THROUGH FINANCIALLY-FEASIBLE STRATEGIES AND BENEFICIAL PARTNERSHIPS. [10-57]

4.1. Objective: Pinellas County will support facility-based recreation opportunities, on a case by case basis, that are financially feasible and based on funding availability, staffing levels and citizen priorities.[10-57]

4.1.1. Policy: The affordability of facility-based recreation to unincorporated residents will be a priority when developing or partnering on any facility-based recreation strategies. [10-57]

4.1.2. Policy: As funding and staffing allows, the County will evaluate opportunities for traditional and non-traditional recreational activities (such as skate parks and bicycle tracks). [10-57]

4.1.3. Policy: Pinellas County will continue to utilize creative funding and facility partnerships to meet facility-based recreation needs, including consideration of mutually beneficial interlocal and joint use agreements between the County and the School Board, adjacent municipalities, volunteer groups and other recreational service providers. [10-57]

4.2. Objective: Pinellas County shall continue to encourage the provision of facility-based recreational opportunities, where feasible, by public agencies, private enterprise and private developers.

4.2.1. Policy: In association with the update to the Land Development Code, Pinellas County will evaluate existing regulations to consider new

incentives or requirements for the provision of onsite recreational amenities by developers.

4.2.2. Policy: Pinellas County shall continue to explore and pursue partnerships and public and private resources to support the acquisition of recreation and open space acreage.

4.2.3. Policy: Pinellas County will continue to meet regularly with special district recreation providers to coordinate opportunities for capital improvements, programs and funding, where mutual benefit is provided.

4.2.4. Policy: Pinellas County will annually review existing agreements relating to the provision of facility-based recreation to facilitate recreational priorities and objectives.

4.2.5. Policy: Consistent with the Public School Facilities Interlocal Agreement, Pinellas County will coordinate with the Pinellas County School Board regarding the co-location of recreational uses, joint planning, development, operations and maintenance of facilities, and will annually review the School Board's five-year plan to identify opportunities.

4.2.6. Policy: In order to enhance facility-based public recreation opportunities, Pinellas County shall continue to coordinate with the Pinellas County School Board to determine the feasibility of making public school recreational facilities more accessible to surrounding neighborhoods.

4.2.7. Policy: As feasible and appropriate, and consistent with Objective 4.2. (and in conjunction with such activities as redevelopment, neighborhood revitalization, etc.), Pinellas County shall support the assemblage of land and assist in the development and improvement of neighborhood recreational facilities in coordination with neighborhood associations and organizations specializing in the delivery of recreational services.

4.3. Objective: Pinellas County will support the role of recreation/community centers in meeting the social, wellness, fitness and facility-based recreation needs of unincorporated residents.

4.3.1. Policy: Pinellas County will support the establishment of community centers in unincorporated areas consistent with the recommendations from the Recreation, Open Space and Culture System Master Plan, where feasible from a financial and operational perspective.

4.3.2. Policy: Pinellas County will consider the potential of vacant/under-utilized commercial space as possible locations for community centers or other recreational facilities if such opportunities become available and are financially feasible. [12-10]

4.4. Objective: Pinellas County will take a lead role in the identification of the opportunities for development of a regional sports complex, in partnership with other agencies.

4.4.1. Policy: By December 2012, Pinellas County will identify a site and a partner for a regional sports complex. [10-57]

4.4.2. Policy: Pinellas County will initiate discussions with potential commercial, municipal and/or non-profit agency partners to manage the proposed sports complex

4.4.3. Policy: Pinellas County will seek alternative funding sources for the proposed sports complex to minimize construction and/or operational costs.

4.5. Objective: The provision of facility-based recreation shall be compatible with surrounding land uses and shall not compromise the integrity of critical or significant natural systems.

4.5.1. Policy: The location of facility-based recreation sites and activities will not conflict with the County's goals for protecting those habitats identified by Pinellas County staff as critical or significant, or impact those areas set aside expressly for natural systems management.

4.5.2. Policy: The location of facility-based recreation sites and activities, including neighborhood-level parks, playgrounds and ballfields, must be compatible with, and should complement surrounding land uses.

CULTURAL, HISTORIC AND ARCHAEOLOGICAL RESOURCES

GOAL FIVE: TO PROMOTE THE ARTS, CULTURE, AND HISTORIC AND ARCHAEOLOGICAL RESOURCES WITHIN PINELLAS COUNTY, AND THEIR PRESERVATION, THROUGH PUBLIC AND PRIVATE INVESTMENT AND BY RAISING AWARENESS OF EXISTING FACILITIES AND PROGRAMS.

5.1. Objective: Pinellas County recognizes that cultural resources enhance the County's quality of life and shall increase awareness, appreciation, and opportunities for engagement with the County's cultural resources among both residents and visitors.

5.1.1. Policy: Pinellas County shall utilize the Pinellas County Cultural Affairs Department to increase awareness among both residents and

visitors of the existence and variety of the County's cultural resources.

5.1.2. Policy: Pinellas County will recognize and consider the visions, goals and recommendations within the Pinellas County Community Cultural Plan, Public Art and Design Master Plan, the Heritage Village Strategic Master Plan, and the Historic Preservation Program as referred to in Policy 5.3.3.

5.1.3. Policy: Pinellas County shall identify and pursue specific opportunities to inform residents and visitors of the cultural facilities and activities accessible to the public with the intent of increasing participation in, and support for, these cultural resources.

5.1.4. Policy: Pinellas County will continue its efforts to promote tourism activities, including heritage tourism that emphasizes appreciation of the County's cultural resources.

5.1.5. Policy: Pinellas County will investigate the development of a cultural overlay district concept.

5.1.6 Policy: Pinellas County will coordinate a multi-agency cooperative marketing and advertising program that reaches out to residents and visitors to promote awareness of cultural resources and their contribution to quality of life.

5.1.7 Policy: Pinellas County will continue to support non-profit cultural providers in the County through grants, advocacy, and other appropriate means.

5.1.8 Policy: By December 2010, Pinellas County will develop a cultural resources guide to enhance community understanding of the cultural amenities available in Pinellas County.

5.2. Objective: Pinellas County will encourage and promote public art and design, and seek ways to increase opportunities for public art and design throughout the County landscape.

5.2.1. Policy: By December 2008, Pinellas County will have developed a Public Art and Design Master Plan that identifies opportunities, locations and priorities for public art and establishes an implementation/funding strategy and schedule.

5.2.2. Policy: By December 2010, Pinellas County will establish public art educational materials to build community understanding about art in public places.

5.2.3 Policy: Pinellas County will investigate revising building and land development regulations to create incentives to encourage private development to integrate public art into project designs, where appropriate.

5.2.4. Policy: Pinellas County will continue to integrate art into County project designs, as appropriate.

5.2.5. Policy: Pinellas County will continue to identify opportunities for public art in regional parks and environmental lands, where appropriate and consistent with applicable management plans.

5.3. Objective: The County shall continue to identify, protect and preserve historic and archaeological resources in Pinellas County, including coastal areas. Particular emphasis will be given to increasing the interpretation and appreciation of such resources.

5.3.1. Policy: By December 2010, the County shall update the 1994 countywide inventory of historic and archaeological resources. The findings will be utilized to identify potentially significant local, state and national register eligible historic and archaeological resources in the County. The inventory may be further revised as needed, based upon information that meets acceptable professional criteria for identifying these resources. [10-20]

5.3.2 Policy: Concomitantly with the update to the countywide inventory of historical and archaeological resources, the County will update its Geographic Information System (GIS) in order to have an accurate database for making preservation decisions, including in association with redevelopment planning.

5.3.3 Policy: Based on the findings of the County's Historic Preservation Task Force and the resulting development of a historic preservation program, potential amendments to this Comprehensive Plan may be required to adequately protect historic resources, and inform County residents, businesses and local leaders of the value those resources bring to the character and quality of communities throughout Pinellas County. Furthermore, potential amendments to the County's Land Development Code may be required to adequately protect historic and archaeological resources.

5.3.4. Policy: As additional sites of potential historical or archaeological significance are identified in unincorporated Pinellas County, they shall be submitted to the Florida Department of State for inclusion in the Florida Master Site File.

5.3.5. Policy: Pinellas County shall continue to provide for the protection, preservation, and appropriate use of historically significant housing,

structures, and archaeological resources through implementation of the historic preservation and comprehensive zoning chapters of the Pinellas County Land Development Code.

5.3.6. Policy: Historic and archaeological sites as identified in the County's Geographic Information System shall be shown on site plans submitted for development or redevelopment.

5.3.7. Policy: When appropriate, and as resources allow, Pinellas County shall continue to support citizen-initiated efforts to preserve and protect historic and archaeological resources.

5.3.8. Policy: Pinellas County shall continue to offer incentives to protect and restore designated historic properties in the unincorporated area and, when appropriate, shall coordinate with the municipalities on intergovernmental efforts to protect historic resources.

5.3.9. Policy: Pinellas County shall recognize historic and archaeological resources that could potentially be affected by land use and zoning changes.

5.3.10. Policy: Pinellas County shall promote the protection, preservation, or sensitive adaptive reuse of historic and archaeological resources located in coastal areas and provide public access where appropriate and possible.

5.3.11. Policy: Pinellas County shall continue its historical and archaeological preservation education programs to inform residents and visitors about the history and prehistory of Pinellas County, and to increase an awareness of the significance of the County's historic and archaeological resources.

5.3.12. Policy: Pinellas County shall continue to recognize, preserve, protect, and interpret archaeological and historic sites and buildings that are listed on the official National Register, or are of local historical significance within County parks and environmental lands.

5.3.13. Policy: Pinellas County shall continue to support County historic and archaeological sites and structures such as the old County Courthouse, the Philippe Park Indian Mound and Fort DeSoto, as well as interpretive centers such as the Weedon Island Preserve Cultural and Natural History Center and Heritage Village, that contribute to heritage-based tourism and cultural stewardship.

5.3.14. Policy: When a significant historic structure or archaeological site is acquired by Pinellas County, the County shall assess the feasibility of preserving the historic structure or the significance of the archaeological site.

5.3.15. Policy: The County may identify and include public infrastructure improvements as part of its overall program to promote the protection and preservation of significant historic and archaeological resources.

5.3.16. Policy: By December 2010, Pinellas County will establish a countywide guide to historically significant facilities.

5.3.17. Policy: Pinellas County will maintain repositories for the protection and interpretation of archaeological, historic and public art collections.

5.3.18. Policy: Pinellas County will continue to offer historical and cultural programming and interpretation within its system of regional parks and environmental lands, where appropriate and consistent with applicable management plans.

5.3.19. Policy: Historical and cultural programming activities will not compromise the environmental, historical, archaeological and resource-based integrity of the regional parks and environmental lands in which they are located.

5.3.20 Policy: Pinellas County shall cooperate with the Florida Department of State, Division of Historical Resources (DHR) and the State Historic Preservation Office (SHPO) to provide them with additional local information on the evaluation of nominated National Register eligible sites. [10-20]

5.3.21 Policy: Pinellas County shall coordinate with and request from SHPO an evaluation of historic bridges located within Pinellas County that have been recommended eligible for listing on the National Register of Historic Places by the Florida Department of Transportation. [10-20]

5.3.22 Policy: Pinellas County shall develop strategies for documenting under-recorded historical and archaeological resources by emphasizing the documentation of linear resources (e.g. canals, railroads, historic road segments), by coordinating with local genealogical and historical societies to conduct surveys of historic cemeteries and unmarked graves in future cultural resource surveys, and by developing contexts for these resources to accurately assess their historic significance. [10-20]

5.3.23 Policy: Pinellas County shall consider coordination with municipalities, as appropriate, to record cultural resources related to the histories of ethnic enclaves (e.g. African-Americans, Greek heritage of Tarpon Springs, etc.). [10-20]

5.3.24 Policy: Pinellas County shall continue to conduct oral interviews to gather information about historical and cultural resources within the County. [10-20]

5.4 Objective: Pinellas County shall develop cooperative ventures with the State and local communities and municipalities, to develop a collaborative countywide educational outreach to promote historic preservation in Pinellas County. [10-20]

5.4.1. Policy: Pinellas County shall work with the Ozona and Crystal Beach communities to gauge the level of support for protecting historic resources in these communities. [10-20]

5.4.2 Policy: Pinellas County shall consider developing strategies for updating documentation for existing National Register of Historic Places (NRHP) sites. [10-20]

5.4.3 Policy: Pinellas County shall continue to assist municipalities, as appropriate, with nominations of eligible sites for listing on the National Register and shall coordinate with municipalities in the review of existing National Register historic boundaries and contributing properties as necessary. [10-20]

5.4.4 Policy: Pinellas County shall assist National Register nominations of eligible historic resources as evaluated by State Historic Preservation Office. [10-20]

5.4.5 Policy: Pinellas County shall develop a countywide historic preservation toolbox that would guide owners of historic properties on the availability of local programs and incentives that would help preserve and promote historic properties in Pinellas County. [10-20]

5.4.6 Policy: Pinellas County shall encourage municipalities to enact local historic preservation ordinances, historic property tax exemption ordinances, and historic preservation programs. [10-20]

5.4.7 Policy: To promote local historic preservation incentives available to municipalities, Pinellas County shall continue to support historic property ad valorem tax exemptions within municipalities that have adopted a local historic property tax exemption ordinance similar to the Pinellas County Historic Property Tax Exemption provisions in the Pinellas County Code. [10-20]

5.4.8 Policy: By 2010, Pinellas County shall amend the Historic Preservation Ordinance adopted in 1992 in order to meet the program requirements of becoming a Certified Local Government (CLG), and provide technical assistance to increase the number of municipalities participating in the state CLG program. [10-20]

5.4.9 Policy: Pinellas County shall develop strategies to provide municipalities with technical assistance and educational opportunities in historic preservation. [10-20]

5.4.10 Policy: Pinellas County shall support local historic preservation educational outreach programs available to all residents and visitors of Pinellas County interested in historic preservation, including owners of historic properties, realtors and developers, preservation commission and historical society members, municipalities, and historic preservation professionals. [10-20]

5.4.11 Policy: Pinellas County shall promote the economic benefits of historic preservation to real estate professionals, including realtors, developers, and insurance companies. [10-20]

5.4.12 Policy: Pinellas County shall coordinate with historical societies and museums to develop exhibits for schools and libraries highlighting cultural resources of the county. [10-20]

5.4.13 Policy: Pinellas County shall support the activities, policies and programs of the Pinellas County Historic Preservation Advisory Board. [10-20]

SUSTAINABILITY OF THE COUNTY'S RECREATION AND OPEN SPACE SYSTEM

GOAL SIX: TO PRACTICE AND PROMOTE A SUSTAINABILITY ETHIC, ENSURING THAT ECOLOGICAL LIMITS AND ENVIRONMENTAL IMPACTS ARE CONSIDERED IN ALL DECISIONS AND DESIGNS AFFECTING CULTURAL, RECREATION AND OPEN SPACE PLANNING, AND THAT ALL DECISIONS AND PROJECTS CONTRIBUTE INCREMENTALLY TO ACHIEVING AND SUSTAINING SOCIAL EQUITY, ECONOMIC PROSPERITY AND A QUALITY COMMUNITY FOR CURRENT AND FUTURE RESIDENTS.

6.1. Objective: Pinellas County will support and facilitate realization of the concept of livable urban communities by planning for, and providing, quality recreational opportunities and open spaces throughout the County, in a responsible manner that promotes and protects the environmental value of the County's natural reservations.

6.1.1. Policy: In association with the update to the Land Development Code, Pinellas County will review, and amend as necessary, the regulations to implement recreation and open space aspects of quality community/livable community initiatives.

6.1.2. Policy: Pinellas County will continue to implement programs that support bicycle lanes, trails and other alternatives to automobile travel, contribute to environmental quality and provide visual relief from urban surroundings.

6.1.3. Policy: To meet the needs of residents and further the ideal of quality communities as a function of recreation, leisure and mobility opportunities, the design and functionality of the Pinellas County regional park system and environmental lands, where appropriate, will have a renewed focus on the value of connectivity, on safe and attractive gathering places, on functional and attractive design, and on open vistas and open spaces.

6.1.4. Policy: Planning for recreational facilities will consider the needs of all members of the community and strive to provide equal access for everyone, including the underserved, through such means as partnering with the Pinellas Suncoast Transit Authority (PSTA), providing bike lanes where needed, and filling in the gaps where facilities may be inadequate or lacking.

6.1.5. Policy: In recognition of the County's near built-out condition and the fragile balance between the urban interface and its regional parks system and environmental lands, Pinellas County will institutionalize sustainability ethics as a way to help the County's natural reservations remain intact for habitat value and the enjoyment and benefit of future generations.

6.1.6. Policy: Pinellas County will integrate Green Design, as feasible and appropriate, into park and environmental land facilities and structures.

Goals, Objectives and Policies

NATURAL DISASTER PLANNING

GOAL ONE: PINELLAS COUNTY WILL PROTECT HUMAN LIFE, PRIVATE PROPERTY AND PUBLIC INVESTMENT FROM THE EFFECTS OF HURRICANES AND OTHER NATURAL DISASTERS

1.1. Objective: Pinellas County shall continue to implement, and update and revise, as necessary, its Post-Disaster Redevelopment Plan, as approved by the Pinellas County Board of County Commissioners, as part of the Pinellas County Comprehensive Emergency Management Plan, and shall continue to implement hazard mitigation measures to reduce the exposure of human life and public and private property to natural hazards.

1.1.1. Policy: The Redevelopment Plan shall provide guidelines for actions to be taken following natural disasters for immediate emergency recovery needed to protect the public health and safety, for short-range restoration, and for long-range reconstruction.

1.1.2. Policy: The Redevelopment Plan shall establish who will be responsible for making crucial decisions after a natural disaster regarding repair, reconstruction, relocation and hazard mitigation; this body could take the form of a recovery task force.

1.1.3. Policy: The Redevelopment Plan shall establish procedures for the restoration of essential public services and facilities following a disaster.

1.1.4. Policy: The Redevelopment Plan shall establish procedures for evaluating the effectiveness of current hazard mitigation measures at preventing damage.

1.1.5. Policy: The Redevelopment Plan shall establish procedures for utilizing information obtained from damage assessment teams in expediting post-disaster recovery.

1.1.6. Policy: The Redevelopment Plan shall contain provisions for enactment of a temporary restriction on issuing permits for reconstruction and repair not immediately needed to protect the public health, safety and welfare, and contain recommendations to enact expedited processes, such as permitting selected minor repairs and licensing and/or registering contractors.

1.1.7. Policy: The Redevelopment Plan shall establish criteria for evaluating the options for repairing, replacing, modifying or relocating public and private facilities and infrastructure within coastal high-hazard areas. Any actions chosen by Pinellas County to repair, replace, modify, or relocate public facilities and infrastructure within the coastal high hazard area shall be consistent with federal and state funding standards.

1.1.8. Policy: The Redevelopment Plan shall establish that structures damaged by fire or natural forces to the extent that the cost of reconstruction or repair exceeds 50 percent of the market value of the structure before the damage occurred shall be rebuilt to meet all applicable federal, state and local regulations. The Land Development Code shall determine the status of nonconforming uses when properties experience the level of damage addressed in this policy.

1.1.9. Policy: The Redevelopment Plan shall include guidelines and criteria for determining priorities for the acquisition of storm-damaged property in the coastal high-hazard area. These guidelines shall give priority to eliminating unsafe conditions and inappropriate uses. These guidelines/criteria will also be used to prioritize potential coastal acquisitions through the State's land acquisition program. In association with the update to the Post Disaster Redevelopment Plan, additional criteria will be developed and included within the redevelopment plan to recognize pristine coastal properties or properties of significant or important environmental sensitivity. [10-57]

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1.1.10 Policy: Pinellas County shall continue to implement its existing hazard mitigation programs that include shoreline restoration and enhancement, building code and floodplain regulations, development management techniques such as land use, zoning, and subdivision regulations, and other applicable hazard mitigation measures. Recommendations from interagency hazard mitigation reports may be incorporated, at the discretion of the County. These mitigation programs shall be amended, as necessary, to remain consistent with federal and state requirements.

1.1.11. Policy: Pinellas County will use its Comprehensive Plan, its Land Development Code, its Local Mitigation Strategy, and other applicable hazard mitigation measures, including appropriate recommendations from interagency hazard mitigation reports, to reduce unsafe conditions and inappropriate uses as opportunities arise, and to limit redevelopment in areas of repeated damage.

1.1.12. Policy: Pinellas County shall periodically evaluate both its Post-Disaster Redevelopment Plan and its Comprehensive Plan with the Local Mitigation Strategy in order to determine if any amendments or

revisions are required in order to facilitate implementation of the final strategies. [10-57]

1.1.13. Policy: The Post-Disaster Redevelopment Plan for Pinellas County shall also address steps to attain disaster assistance and funding to promote redevelopment of private property and businesses in order to foster economic recovery.

1.1.14. Policy: By December 2012, Chapter 34 of the Pinellas County Code will be amended to address housing emergency declarations and indicate the circumstances and future land use categories where temporary housing will be considered an allowable use. [12-10]

1.2. Objective: Pinellas County shall cooperate with state and regional agencies, and with other local governments to maintain or reduce hurricane clearance times as a component of the evacuation times for Pinellas County.

1.2.1. Policy: Pinellas County shall work towards reducing the out-of-county hurricane evacuation clearance time of 55 hours in 2006, as determined in the *Tampa Bay Region Hurricane Evacuation Study 2006,* for a category 5 storm event as measured on the Saffir-Simpson scale.

1.2.2. Policy: The adopted level of service standard for out-of-county hurricane evacuation clearance time for a category 5 storm event as measured on the Saffir-Simpson scale shall be 16 hours.

1.2.3. Policy: Pursuant to the Capital Improvements Element, Pinellas County shall annually evaluate projects proposed for inclusion within the Six-Year Schedule of Improvements and shall place a high priority on improvement needs for critical links and evacuation route points, and for bridges, causeways and highway facilities designated as regional evacuation routes when scheduling capital improvement projects.

1.2.4. Policy: The Board shall continue to enforce its regulations requiring the development of a hurricane evacuation plan by recreational vehicle parks and transient accommodations.

1.2.5. Policy: The County shall coordinate with the Florida Department of Transportation during preparation of the Transportation Improvement Plan for District 7 in order to encourage the State to give priority to road improvement projects on regional hurricane evacuation routes.

1.2.6. Policy: The County shall utilize the existing countywide computerized traffic signalization system and available law enforcement officers to expedite hurricane evacuation.

1.2.7. Policy: The County shall continue its public awareness campaign in cooperation with the Tampa Bay Regional Planning Agency to educate the general public on proper hurricane evacuation procedures. As part of the County's public awareness campaign, the County shall also publish and make available a hurricane preparedness publication to the general public prior to June 1 of each year.

1.2.8. Policy: Pinellas County shall cooperate with the State Division of Emergency Management to coordinate multi-county evacuations in a manner consistent with the Pinellas County Hurricane Evacuation Implementation Guide.

1.2.9. Policy: County-maintained roadways used as evacuation routes shall continue to be clearly posted.

1.2.10. Policy: Hurricane evacuation shall be planned and conducted in a manner consistent with the Pinellas County Comprehensive Emergency Management Plan.

1.2.11. Policy: To improve upon the intergovernmental and agency coordination, the County shall consider establishing an optional Public Safety Element of the Pinellas County Comprehensive Plan.

1.2.12 Policy: In assessing transportation needs, Pinellas County shall review its Special Needs/Evacuation Registration Program and other sources in considering the evacuation needs of at-risk populations that have special needs, language barriers, and that are transportation disadvantaged.

1.3. Objective: Pinellas County shall restrict development within the coastal storm area, and shall direct population concentrations out of the coastal storm area.

1.3.1. Policy: The coastal high-hazard area (CHHA) shall be the area defined by the *Sea, Lake and Overland Surges from Hurricanes (SLOSH)* model to be inundated from a category one hurricane, as reflected in the most recent *Regional Evacuation Study, Storm Tide Atlas.*

1.3.2. Policy: The coastal storm area shall be the area delineated in Figure 2 of the Coastal Management Element, which encompasses all of the following:

(1) The Coastal High Hazard Area (CHHA),

(2) All land connected to the mainland of Pinellas County by bridges or causeways,

(3) Those isolated areas that are defined by the SLOSH model to be inundated by a category two hurricane or above and that are surrounded by the CHHA or by the CHHA and a body of water, and

(4) All land located within the Velocity Zone as designated by the Federal Emergency Management Agency.

1.3.3. Policy: If 20% or more of a parcel of land is located within the coastal storm area, then the entire parcel shall be considered within the coastal storm area. However, if either a parcel of land or a group of parcels that are part of a master development plan is equal to or greater than 5 acres and less than 50% of the parcel or group of parcels is within the coastal storm area, the property owner may elect to provide a survey of the parcel or parcels to determine the exact location of the coastal storm area.

1.3.4. Policy: Pinellas County shall prohibit the location of new, or expansion of existing hospitals, nursing homes, and assisted living facilities within the coastal storm area, the area inundated by a category 2 hurricane as depicted by the *SLOSH* model, as reflected in the most recent *Regional Evacuation Study, Storm Tide* Atlas, and floodways. [12-10]

1.3.5. Policy: Pinellas County shall not approve any request to amend the Future Land Use Map (FLUM) to designate parcels of land within the coastal storm area with a FLUM category that permits more than 5.0 dwelling units per gross acre.

1.3.6. Policy: The area known as “Collany Island,” subject to a zoning and land use plan amendment approved in Ordinance 04-92, was a one-time exception to provide a zoning and land use designation for the site that is more consistent with the character of the neighborhood than the former commercial designation and no precedent is set through the adoption of Ordinance 04-92 for other amendments for lands located in the coastal storm area. Additionally, this finding will reaffirm Pinellas County’s commitment to Policy 1.3.5 of the Coastal Management Element that states Pinellas County shall not approve any request for residential density above five units per gross acre on the Future Land Use Map for areas within the coastal storm area.

1.3.7 Policy: During the statutorily required evaluation and appraisal process, the County's existing hazard mitigation programs, including those within the Land Development Code, shall be reviewed and revised if necessary to reduce the vulnerability of future development in the coastal storm area. This review shall evaluate the

recommendations of existing interagency hazard mitigation reports and the mitigation functions chapter of the Pinellas County Comprehensive Emergency Management Plan.

1.3.8. Policy: Consistent with the goals, objectives and policies of this Element and the availability of budgeted funds, the County shall evaluate the acquisition of storm-damaged property in the coastal storm area.

1.3.9. Policy: In association with the Evaluation and Appraisal of the Comprehensive Plan, Pinellas County shall evaluate the feasibility of limiting the capacity of hospitals, nursing homes, and assisted living facilities proposed to be located within area inundated by a category 3 hurricane as depicted by the *SLOSH* model, as reflected within the most recent *Regional Evacuation Study, Storm Tide Atlas*. [12-10]

1.3.10. Policy: If Pinellas County elects to utilize the provisions of §163.3178(9), F.S., to comply with the State's coastal high-hazard provisions when amending the Pinellas County Comprehensive Plan, any appropriate mitigation that may be required by this section shall be directed at increasing the number of hurricane shelter spaces, unless an alternative mitigation proposal has been approved by the Pinellas County Director of Emergency Management or her/his designee.

1.3.11. Policy: Mitigation required under Policy 1.3.11. above shall not exceed the amount required for a developer to accommodate impacts reasonably attributable to their development, and shall require Pinellas County and the developer to enter into a binding agreement to memorialize the mitigation plan.

1.4. Objective: Pinellas County shall restrict public expenditures that subsidize development or redevelopment in the coastal storm area.

1.4.1. Policy: County-funded infrastructure shall be prohibited within the coastal storm area except for the following:

The expenditure for the maintenance, repair or replacement of existing facilities; or

The expenditure for restoration or enhancement of natural resources or public access; or

The expenditure needed to address an existing deficiency identified in this plan; or

The expenditure for the retrofitting of stormwater management facilities for water quality enhancement of stormwater runoff; or

The expenditure for the development or improvement of public roads and bridges identified in the Traffic Circulation Element of this plan; or

The expenditure for a public facility of overriding public interest to ensure public health, safety, and welfare.

1.4.2. Policy: When public infrastructure within the coastal storm area is destroyed or receives damage that equals or exceeds 50 percent of the cost of replacing the facility at its current location, the County shall analyze the feasibility of relocating this infrastructure landward of the coastal storm area. This requirement is included within the Pinellas County Post-Disaster Redevelopment Plan as adopted within the Pinellas County Comprehensive Emergency Management Plan.

1.4.3. Policy: Pinellas County shall not construct bridges or causeways to barrier islands not serviced by such infrastructure at the time of Plan adoption.

1.4.4. Policy: Capital improvements identified the Pinellas County Local Mitigation Strategy (LMS) under the jurisdiction of Pinellas County shall be considered to be incorporated into the Capital Improvements Element of the Pinellas County Comprehensive Plan.

1.5. Objective: Between June 2007 and June 2012, the existing deficit of public shelter spaces within the County shall be reduced by five percent.

1.5.1. Policy: The County shall coordinate with local jurisdictions and appropriate agencies (including the Tampa Chapter of the American Red Cross) in the development of a countywide plan for increasing the number of public shelter spaces in Pinellas County.

1.5.2. Policy: Pinellas County shall expand its coordination efforts within the limits provided by legislative authority to coordinate facility expansion plans and development review with the Pinellas County School Board so that new school facilities and facility expansion will be located and designed to provide hurricane shelters.

1.5.3. Policy: If the County determines, during its review of a proposed public school site for consistency with the Pinellas County Comprehensive Plan and after consideration of the criteria in Section 235.26(9) of the Florida Statutes, that the site is an appropriate location for a shelter, the final determination of consistency will include a

recommendation that the public school be constructed to function as a public emergency shelter.

1.5.4. Policy: Whenever possible, new or expanded county buildings shall be located, designed, and constructed so that they may be utilized for hurricane shelters.

1.5.5. Policy: Alternatives to traditional public sheltering shall be developed and promoted through public education by Pinellas County and other appropriate agencies. Alternatives to traditional public sheltering shall include, but not necessarily be limited to, host home programs, inland sheltering, retrofitting of existing structures whenever possible, utilizing refuges of last resort as appropriate, and evacuation of guests from transient accommodations to inland "sister" transient accommodations.

1.5.6. Policy: Pinellas County shall initiate discussion of new cooperative efforts between the County, municipalities, the Pinellas County School Board, and other appropriate agencies in an attempt to increase the number of public shelters and to reduce the shelter deficit.

1.5.7. Policy: In order to reduce demand on limited public shelter spaces, Pinellas County shall utilize its public education program to inform Pinellas County residents about safe alternatives to using public shelter during hurricane evacuations.

1.5.8. Policy: As a means of identifying solutions to the existing public shelter deficit, Pinellas County shall continue to host occasional emergency shelter workshops, or summits, with affected governments and agencies in updating the status of public shelter availability and capacity.

1.5.9. Policy: Pinellas County shall participate with the State Division of Emergency Management and regional planning council in updating a regional evacuation study and, within a year of its completion, shall have evaluated any relevant recommendations, including those regarding shelter capacity, for inclusion in the Comprehensive Plan and the Comprehensive Emergency Management Plan.

1.5.10. Policy: In assessing shelter space, Pinellas County shall consider the shelter needs of at-risk populations that have special needs, language barriers, and pets.

BEACHES AND DUNES

GOAL TWO: PINELLAS COUNTY SHALL CONSERVE, MAINTAIN AND RESTORE COASTAL BEACH AND DUNE SYSTEMS TO BALANCE THE BENEFITS TO STORM PROTECTION, RECREATION, AND THE ECONOMY WITH THEIR FUNCTION AS A NATURAL RESOURCE.

2.1. Objective: Pinellas County shall continue to manage its sandy shoreline with the intent of restoring and preserving the natural functions of the beach and dune system.

2.1.1. Policy: Pinellas County shall continue to restore the developed sandy beaches and dunes primarily via its beach nourishment program; hard engineering structures shall be considered as a second option, to be implemented only if beach nourishment alone is insufficient in maintaining the beach and dune system.

2.1.2. Policy: Pinellas County shall continue the role as the lead agency (local sponsor) for coordinating and managing Federal beach nourishment projects.

2.1.3. Policy: Pinellas County shall monitor erosion of the County's nourished beaches and continue enhancement based on the results of the monitoring program.

2.1.4. Policy: Pinellas County will continue to partner with the Florida Department of Environmental Protection on beach restoration projects by submitting annual funding requests to the Florida Beach Management Program.

2.1.5. Policy: Pinellas County will not support shoreline hardening along the sandy beaches and dunes, except where necessary to protect upland property.

2.1.6. Policy: Beach restoration projects will be designed and constructed to protect the ability of sea turtles and shorebirds to nest on Pinellas County beaches.

2.1.7. Policy: Beach restoration projects will be designed and constructed with minimal impact to seagrasses and nearshore hardbottom.

2.2. Objective: Pinellas County shall continue to protect the stability of the beach and dune systems by utilizing construction standards, development regulations and other appropriate measures that minimize human impacts.

2.2.1. Policy: Pinellas County shall continue to implement County and State regulations pertaining to construction seaward of the State Coastal Construction Control Line. New development shall be prohibited in frontal dune and beach areas.

2.2.2. Policy: Vehicle traffic on the beach shall be prohibited with the exception of emergency law enforcement and maintenance vehicles, which shall be directed to marked driveways through the dunes.

2.2.3. Policy: Foot traffic will be directed to marked paths or dune walkovers in order to protect the dune system.

2.2.4. Policy: Pinellas County will support new dune walkover construction in locations where: 1) a dune exists, 2) public access is clearly marked, access to a public beach is provided, and public use is significant, 3) evidence of disturbance by pedestrian traffic, such as reduced dune elevation or disturbed vegetation, exists, and 4) construction of a dune walkover will not eliminate vehicle access to the beach.

2.2.5. Policy: Pinellas County shall designate undeveloped coastal barrier islands as Preservation, Recreation Open Space, or Preservation-Resource Management on the Future Land Use Map.

PUBLIC FACILITIES AND INFRASTRUCTURE

GOAL THREE: ADEQUATE PUBLIC FACILITIES SHALL BE AVAILABLE TO SERVE THE DEVELOPMENT AND REDEVELOPMENT PROPOSED IN THE FUTURE LAND USE AND QUALITY COMMUNITIES ELEMENT FOR THE UNINCORPORATED COASTAL PLANNING AREA.

3.1. Objective: Pinellas County shall continue to ensure that adequate levels of service are provided by public facilities within the unincorporated coastal planning area, and shall utilize the annual update of the Capital Improvements Element to schedule required infrastructure improvements in the unincorporated coastal planning area.

3.1.1. Policy: The level of service standards adopted elsewhere for public facilities in the Pinellas County Comprehensive Plan shall be the same standards used for public facilities and concurrency management within the coastal planning area.

3.1.2. Policy: The scheduling of public facility improvements within the coastal planning area shall be consistent with the Capital Improvements Element of this Plan.

3.1.3. Policy: The service areas for public facilities within the coastal planning area shall be those identified and/or established elsewhere in this Plan.

3.1.4. Policy: Pinellas County shall ensure that required infrastructure is available to serve development or redevelopment in the unincorporated coastal planning area, and shall require that development and redevelopment are consistent with the densities on the Future Land Use Map as well as with coastal resource protection and public safety policies.

3.1.5. Policy: Pinellas County will consider new strategies for the future of the County's bridges and causeways that emphasize sustainability and balance citizen needs, economic priorities and fiscal resources.

COASTAL LAND USE

GOAL FOUR: LAND USE DESIGNATIONS AND DECISIONS IN THE COASTAL PLANNING AREA SHALL BE CONSISTENT WITH THE FUTURE LAND USE AND QUALITY COMMMUNITIES ELEMENT OF THIS COMPREHENSIVE PLAN AND COMPATIBLE WITH PROTECTION OF THE COUNTY'S NATURAL AND HISTORIC RESOURCES, REFLECTING THE NEED FOR LONG-TERM SUSTAINABILITY, CONTINUED ECONOMIC VITALITY AND CONSIDERATION FOR THE VULNERABILITY OF THE COUNTY'S COASTAL LOCATION.

4.1. Objective: The County shall give priority to water-dependent and water-related land uses in the coastal planning area, in a manner consistent with its goals of long-term sustainability, continued economic vitality, the preservation of recreational and commercial working waterfronts, and the protection of coastal and marine habitats and species.

4.1.1. Policy: The County shall continue to enforce the performance standards for water-dependent and water-related land uses included within its Land Development Code.

4.1.2. Policy Pinellas County shall continue to conduct its comprehensive program of data collection, monitoring, education, interagency coordination and regulation to ensure that the location and impacts of water-related and water-dependent land uses do not conflict with the need to protect marine and coastal species and habitats, including the West Indian Manatee.

4.1.3. Policy: Pinellas County will continually evaluate the economic dynamics and trends affecting the viability of water dependent uses, including recreational and commercial working waterfronts, and adapt decisions and strategies relating to the protection of such uses as appropriate.

4.1.4. Policy: By December 2010, Pinellas County will investigate and evaluate the following strategies, based on the recommendations from the Boating Access Task Force report approved by the Board of County Commissioners, toward the preservation of recreational and commercial working waterfronts:

- The feasibility of investing directly in property preservation through land acquisition;
- Partnering and working with key municipal governments within the County that have jurisdiction over working waterfront areas;
- Partnering and working with the private sector;
- Protecting and maximizing the ability to use existing working waterfront facilities;
- Making improvements to existing County facilities;
- The feasibility of creating a working waterfront overlay zone.

4.1.5. Policy: To protect water dependent uses, including recreational and commercial working waterfronts, Pinellas County will discourage amendments to the Future Land Use Map and/or Zoning changes that would result in the discontinuation of such uses.

4.1.6. Policy: Pinellas County will continue to work with unincorporated waterfront communities to determine the need for additional regulatory incentives and criteria to support and/or enhance the preservation of viable recreational and commercial working waterfronts.

4.2. Objective: Boating access facilities will be sited or expanded in an environmentally-sensitive manner that strives to meet public access needs while minimizing negative impacts to coastal habitats, species and surrounding land uses.

4.2.1. Policy: The County shall as a minimum use the following criteria for siting marinas and boat ramp facilities:

- Adequate water depth to accommodate the proposed boat use. Sites that require no dredging or filling to provide access by canal, channel or road are preferred.
- Preference shall be given to the expansion of suitable existing facilities rather than construction of newly developed sites.

- Located in areas where there is adequate flushing of the basin to prevent stagnation and water quality deterioration.

- No adverse impact on archaeological or historic sites as defined by state and local comprehensive plans.

- Potential impact of the proposed facility on the West Indian Manatee.

- Reasonable access to a large navigable water body and/or prime boater destination points.

- Minimal impacts to environmentally-sensitive resources, including upland areas, consistent with Federal, State and local regulations.

- Sufficient upland area to accommodate all needed utilities and support facilities, such as parking spaces, rest rooms, dry storage, etc.

- Capacity of the surrounding roadways to handle boating traffic to and from the marina or boat ramp.

- Compatibility with surrounding and adjacent land uses.

- Adequate wastewater treatment capacity for upland and marine pump-out facilities, in accordance with State standards.

- Encourage facilities to have slips available for public use.

- Consideration of public safety and welfare.

- Marina and boat ramp development should be sensitive to the special requirements for developing in the following areas:

  a. Aquatic Preserves

  b. Outstanding Florida Waters

  c. Class II waters

  d. Areas approved or conditionally approved by the Florida Department of Environmental Protection (FDEP) for shellfish harvesting, and

  e. Other highly productive and/or unique habitats as determined by FDEP, by the Florida Fish and Wildlife Conservation

Commission (FFWCC), as identified in the Comprehensive Conservation and Management Plan (CCMP), or by Pinellas County, based on vegetation and/or wildlife species.

4.2.2. Policy: No marina or boat ramp shall be constructed or expanded in areas determined by the Florida Department of Environmental Protection, or other governmental wildlife protection agency, to be critical to the survival of the West Indian Manatee.

4.2.3. Policy: No marina project shall be approved until a hurricane plan for the project has been established.

4.2.4. Policy: The development of marinas shall be supported as a means of providing public water access to the extent that their development and use shall not adversely impact estuarine resources.

4.2.5. Policy: To address potential environmental and coastal resource impacts, the Building and Development Review Services Department will coordinate with the Department of Environmental Management in the siting of high-and-dry marina facilities.

4.2.6. Policy: On a case-by-case basis, Pinellas County will consider the feasibility of mooring fields as a means of boating access to area waters.

4.3. Objective: Pinellas County will continue, and improve upon as necessary, its long-standing efforts to manage and protect its coastal and marine resources, including manatees and their essential habitat.

4.3.1. Policy: Pinellas County shall continue to support the protection of manatees through such measures as enforcing land use, zoning restrictions and speed zones, implementing sea grass protection areas and land development regulations, regulating the location of docks, marinas and boat ramps, providing manatee signage, and educating the public.

4.3.2. Policy: In association with the update to the Land Development Code, Pinellas County shall review existing County regulations (e.g., Zoning Code, Water and Navigation Regulations, Boating Regulations, etc.) to determine if they continue to adequately support manatee protection goals. [10-57]

4.3.3. Policy: Pinellas County shall continue to collect information (e.g., manatee watch line, mortality data, seagrass monitoring, etc.) required to identify critical use areas for manatees, and will use the information to annually assess and revise, if necessary, its manatee protection measures and programs.

4.3.4. Policy: Pinellas County will continue its boater and public education efforts regarding manatee protection, particularly targeting areas and instances of high susceptibility to interactions between boaters and manatees.

4.3.5. Policy: To further boater and manatee safety, Pinellas County will continue to coordinate with the Sheriff's Marine Unit regarding marine enforcement, monitoring and speed restrictions.

4.3.6. Policy: Pinellas County will continue to monitor the boater to enforcement officer ratio as a means to determine if current levels of boating regulation enforcement are adequate, and if possible, will identify and evaluate potential funding sources for increasing boater regulation enforcement, if such a need is determined. [10-57]

4.3.7. Policy: Pinellas County will continue to coordinate with boating regulation enforcement agencies as the primary means of collecting data (speed citations, accident reports, etc.) to evaluate the potential need for additional manatee-related speed zones and/or changes to existing speed zones.

4.3.8. Policy: Pinellas County will continue to track and evaluate signage related to boat speed restrictions, etc., and make appropriate adjustments as necessary. [10-57]

4.3.9. Policy: Pinellas County will continue to identify, implement and enforce appropriate measures to protect important manatee sea grass feeding areas.

4.3.10. Policy: Pinellas County will continue active participation in state and regional technical forums regarding management and protection of manatees.

4.3.11. Policy: Pinellas County shall continue to use its land development code, and in particular, its countywide controls under the Water and Navigation Control Authority, to exercise locational restrictions and site-specific development controls to ensure development is undertaken in a manner that does not compromise the County's goals for protecting manatees.

4.4. Objective: By December 2008, Pinellas County will coordinate with Federal and State agencies to determine the need for a Manatee Protection Plan.

4.4.1. Policy: Pinellas County will utilize its existing Water and Navigation authority, land use planning and land development regulation strategies, and ongoing research and data collection to determine

the need for additional manatee protection strategies and/or a Manatee Protection Plan.

4.4.2. Policy: Pinellas County will coordinate with State and Federal agencies and those municipal governments with water access, as well as boater groups and other affected stakeholders, in the development of manatee protection strategies and in determining the need for a Manatee Protection Plan.

4.4.3. Policy: Pinellas County will evaluate funding strategies and options for implementing manatee protection measures.

4.4.4. Policy: Pinellas County will coordinate with Federal, State and local law enforcement agencies to maximize law enforcement coverage on the water within budgetary constraints.

4.5. Objective: Pinellas County will expand, promote and enhance its Clean Marina Program.

4.5.1. Policy: Pinellas County will continue to promote and expand its Clean Marina Program through outreach and educational efforts regarding the benefits of certification.

4.5.2. Policy: All County-owned marinas will initiate the process to obtain certification as a Clean Marina within six months of purchase, with the goal of becoming certified within one year.

4.6. Objective: In an effort to ensure the long-term viability and sustainability of its coastal resources and land uses, Pinellas County will remain apprised of, and plan where appropriate for rising sea levels.

4.6.1. Policy: Pinellas County will evaluate the data and findings regarding sea level rise on at least a five-year basis.

4.6.2. Policy: Based on the evaluations directed by Policy 4.6.1, Pinellas County will continue to refine and incorporate long-term planning strategies, and amend land development regulations as necessary, to responsibly plan for the effects of rising sea levels.

4.6.3. Policy: Pinellas County recognizes the potential need for adequate coastal buffering in its response to future sea level rise, and will give preference to low environmental impact methods of shoreline protection, such as beach nourishment, where feasible and appropriate.

4.6.4. Policy: Pinellas County will encourage, and participate in, coordinated intergovernmental and interagency efforts to develop responsible strategies for addressing the potential negative effects of rising sea levels.

4.6.5. Policy: Pinellas County will share information with local municipalities regarding the implications of sea level rise and development decisions along the coast and other vulnerable areas.

CAPITAL IMPROVEMENTS ELEMENT

of the

PINELLAS COUNTY COMPREHENSIVE PLAN

Prepared By:

The Pinellas County Planning Department

as staff to the

LOCAL PLANNING AGENCY

For

THE BOARD OF COUNTY COMMISSIONERS OF PINELLAS COUNTY, FLORIDA

Amended February 25, 2014 (Ordinance 14-12)
Amended January 27, 2015 (Ordinance 15-03)
Amended March 29, 2016 (Ordinance 16-19)
Amended July 23, 2019 (Ordinance 19-16)

GOALS, OBJECTIVES AND POLICIES

1. GOAL: PINELLAS COUNTY SHALL UNDERTAKE ACTIONS NECESSARY TO PROVIDE ADEQUATE, NEEDED PUBLIC FACILITIES IN A MANNER THAT PROTECTS INVESTMENTS, MAXIMIZES THE USE OF EXISTING INFRASTRUCTURE, AND PROMOTES SUSTAINABLE GROWTH THAT BALANCES ECONOMIC, SOCIAL, AND ENVIRONMENTAL CONSIDERATIONS.

1.1. Objective: Capital improvements shall be provided to correct existing deficiencies; replace worn-out or obsolete infrastructure prior to failure and maximizing useful life; implement operational efficiencies and to accommodate desired future growth, as indicated in the Capital Improvement Program described in the annual budget.

1.1.1. Policy: The Capital Improvements Element shall be reviewed annually for any applicable changes.

1.1.2. Policy: A Capital Improvements Program (CIP) Plan shall be prepared by the County Administration and affected departments and updated on an annual basis. The following CIP Portfolio Project Criteria shall be utilized for evaluating and ranking projects prior to their inclusion in the CIP Plan:

1. Asset Preservation; the extent to which the project protects or preserves the County's infrastructure.

2. Criticality of the project (consequences of not doing the project).

3. Economic Outcome; the extent to which the project enhances economic development in the County.

4. Environmental Stewardship; the extent to which the project implements green technologies or practices or otherwise serves to protect and improve the County's natural resources.

5. Service Delivery; the extent to which the project sustains or improves levels of service.

6. Project Coordination; the degree to which the project is linked to other existing or proposed projects managed by the County or an external partner.

7. Public Demand; the extent to which the project aligns with citizen expectations.

8. Regulatory requirements; the extent to which the project helps the County meet current or future regulatory requirements.

9. Public Health, Safety, and Welfare; the extent to which the project addresses an expert-defined health or safety condition.

1.2. Objective: Public expenditures that subsidize development in the coastal high-hazard area shall be limited to those improvements that are consistent with applicable goals, objectives, and policies in the Comprehensive Plan.

1.2.1. Policy: County-funded infrastructure shall be prohibited within the coastal storm area except for the following:

1. The expenditure is for the maintenance, repair or replacement of existing infrastructure; or

2. The expenditure is for restoration or enhancement of natural resources or public access; or

3. The expenditure is needed to address an existing deficiency identified in the Comprehensive Plan; or

4. The expenditure is for the retrofitting of stormwater management infrastructure for water quality enhancement of stormwater runoff; or

5. The expenditure is for the development or improvement of transportation infrastructure consistent with the Comprehensive Plan; or

6. Infrastructure intended to increase resiliency and minimize risk in the coastal storm areas.

7. The expenditure is for public facilities of overriding public interest as determined by the Board of County Commissioners.

1.3. Objective: Future development shall bear a proportionate cost of infrastructure improvements necessitated by development to maintain adopted level of service standards.

1.3.1. Policy: Pinellas County shall continue to implement its multimodal impact fee ordinance to finance transportation management strategies necessitated by new development.

1.3.2. Policy: Pinellas County's potable water and sewer impact fee revenues, also known as potable water and sewer connector fee revenues,

shall be allocated primarily for capital improvements related to expansion of potable water and sewer infrastructure.

1.3.3. Policy: Pinellas County shall continue to provide the option of using development agreements to provide public facilities to accommodate new development.

1.4. Objective: Pinellas County will manage its fiscal resources to ensure the provision of needed capital improvements for previously issued development orders, future development, and redevelopment in a manner that maintains adopted level of service standards.

1.4.1. Policy: Pinellas County shall manage its debt by only programming funds for infrastructure and programs that do not exceed the County's fiscal capacity.

1.4.2. Policy: Pinellas County shall confine long-term borrowing to capital improvements that cannot be financed from current revenues on a "pay-as-you-go" basis.

1.4.3. Policy: Pinellas County will ensure that any bonds issued will be structured to be paid back within a period not to exceed the expected useful life of the capital project.

1.4.4. Policy: Efforts shall be made to secure grants or private funds whenever available to finance the provision of capital improvements.

1.4.5. Policy: Pinellas County shall extend its local option gas tax levies from the present ten-year period to the authorized thirty-year period to finance transportation needs consistent with the Comprehensive Plan.

1.4.6. Policy: Pinellas County shall continue to collect a three-percent tourist tax and shall use one-half cent to implement needed improvements consistent with the Comprehensive Plan.

1.4.7. Policy: Fiscal policies of the Board of County Commissioners to direct expenditures for capital improvements shall be consistent with the Comprehensive Plan.

1.4.8. Policy: Pinellas County shall include capital improvement projects for the renewal and replacement of public facilities to maintain adopted level of service standards in the Capital Improvement Program.

1.4.9. Policy: The County shall continue to investigate other funding sources and strategies for the operation and maintenance of built and proposed capital improvements.

1.4.10. Policy: The County shall determine the best financial strategy(ies) to support and protect public access to water-dependent land uses.

1.4.11. Policy: The County shall establish explicit funding strategies and commitments to address the need for affordable or community housing.

1.4.12. Policy: The County shall acquire, assemble, and "bank" lands for current and future economic development needs.

1.5. Objective: Decisions regarding the issuance of development orders and permits shall be based upon coordination of the development requirements included in this plan, the Land Development Code of Pinellas County, and the availability of necessary public facilities needed to support such development at the time needed.

1.5.1. Policy: Pinellas County shall use the following level of service standards in reviewing the impacts of new development and redevelopment upon public facility provision.

Stormwater
All applicable Federal, state, and local regulations relating to flood control, stormwater treatment and wetland protection, shall continue to be met in public and private project design. Preference shall be given to stormwater management options that provide regional benefit, restore and enhance natural systems and floodplains, improve major conveyance systems or apply low impact development principles.

Recreation
Fourteen acres of County park and environmental lands for every 1,000 residents within the County.

Solid Waste and Resource Recovery
The level of service standard shall be to dispose of 1.30 tons per person per year.

Water Supply
Pinellas County shall use 115 gallons per capita per day when preparing its annual 5-year and 20-year potable water demand projections for the Pinellas County Water Demand Planning Area.

To determine whether adequate capacity is available for a development or redevelopment project in the unincorporated County that is served by a municipal potable water system, Pinellas County will utilize the level of service standards adopted by the municipal service provider.

Sanitary Sewer
Pinellas County Utilities shall provide the levels of service necessary for proper wastewater treatment, reuse and disposal in order to ensure the protection of its citizens and the

environment and to provide adequate wastewater treatment capacity for all current and projected wastewater facility demands of Pinellas County Utility customers.

Wastewater flows associated with existing and permitted development cannot exceed the wastewater treatment plant's permitted design capacity.

Treated effluent and biosolids shall meet all pertinent federal, state and local standards and regulations for treatment, reuse and disposal.

Pinellas County will, for concurrency management purposes, annually compare wastewater flows to permitted treatment capacity to determine the percentage of available capacity and assess whether permitted treatment capacity exceeds the needs of existing and committed development. If available treatment capacity meets this standard, development can be permitted.

Unpredictable situations where permitted capacity is temporarily exceeded due to unanticipated situations such as limited/extreme weather conditions shall not impact the determination of level of service conditions.

Peak design flow capacity shall be between 1.5 and 2.5 times the average daily flow for each sanitary sewer system, based on the individual characteristics of the system.

If an annual assessment evidences that a capacity deficit could occur within 10 years, Pinellas County Utilities will prepare a more detailed capacity analysis and determine whether facility expansion is required or if the service area is built out.

To determine whether adequate capacity is available for a development or redevelopment project in the unincorporated County that is served by a municipal wastewater system, Pinellas County will utilize the level of service standards adopted by the municipal service provider.

1.5.2. Policy: Amendments to the Comprehensive Plan and requests for new development or redevelopment shall be evaluated according to the following guidelines:

1. Contribute to a condition of public hazard as described in the Comprehensive Plan.

2. Aggravate any existing condition of public facility deficiencies, as described in the Comprehensive Plan.

3. Generate public facility demands that may exceed capacity increases planned in the Capital Improvement Program described in the annual budget.

4. Conform to land uses as shown on the Future Land Use Map.

5. Accommodate public demands based upon adopted level of service standards and attempts to meet specified measurable objectives when public facilities are provided by developers.

6. Demonstrate financial feasibility when public facilities will be provided, in part or whole, by Pinellas County.

7. Affect on state agencies and the Southwest Florida Water Management District's facility plans.

1.5.3. Policy: Pinellas County shall ensure that public facilities and services for which a level of service standard has been adopted and that is needed to support development will be available concurrent with the impacts of development. [16-19]

1.5.4. Policy: Pinellas County shall ensure that development orders issued prior to the adoption of the Comprehensive Plan shall be provided with necessary infrastructure and public services.

1.5.5 Policy: The County shall assure that its Comprehensive Plan is financially feasible.

1- INVENTORY

PUBLIC FACILITY NEEDS IDENTIFIED IN THE COMPREHENSIVE PLAN

This Capital Improvement Element (CIE) outlines the principles guiding the development of the Capital Improvement Program (CIP), which provides for the construction, extension, and increase in capacity of public facilities. The CIE also outlines the principles for correcting existing public facility deficiencies that are necessary to implement the comprehensive plan, identifies level of service (LOS) standards for public facilities, and establishes policies to ensure the availability and adequacy of those facilities.

The CIP described in the annual budget lists capital improvements identified for the next ten fiscal years and is incorporated as part of this CIE by reference. This is consistent with the provision of FS Title XI, Section 163.3177 (3)(a), which requires this element to address the public facility costs and projected revenue sources to fund capital improvements needed for at least the first five years of the comprehensive plan. Capital improvements identified within the Pinellas County Comprehensive Plan (Comprehensive Plan) are evaluated during the required annual review of the CIE to determine if they are needed sooner than initially anticipated.

All references to any ordinances, statutes or regulations contained herein shall, unless otherwise noted, be deemed to be those in effect as of the date of adoption of this element and thereafter as amended, renumbered or otherwise revised.

STATE HIGHWAY SYSTEM FACILITY NEEDS

The Transportation Element of the Comprehensive Plan addresses State Highway System needs within Pinellas County. Scheduling of these projects is determined by the Florida Department of Transportation (FDOT) and Forward Pinellas, in its role as the Pinellas County Metropolitan Planning Organization (MPO). The Board of County Commissioners determines the amount of financial assistance the County contributes to implement these projects. When scheduling and funding sources are determined, the projects that the County is helping to fund are included in the CIP.

PRACTICES GUIDING THE TIMING AND LOCATION OF CONSTRUCTION AND EXTENSION OR INCREASE IN CAPACITY OF PUBLIC FACILITES

LEVELS OF SERVICE

Level of Service (LOS) is an indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on the operational characteristics of the facility. LOS indicates the capacity per unit of demand for each public facility. LOS is a standard established and adopted by a local government that summarizes conditions of a public facility. LOS can refer to either the existing or desired standards.

LOS standards can affect the timing and location of development by encouraging development in areas where facilities may have excess capacity. On the other hand, development will not be permitted unless needed facilities and services are provided in a timely manner. Development and the provision of services and facilities may occur in a phased sequence over time.

Formal adoption of the Comprehensive Plan by the Pinellas County Board of County Commissioners resulted in a formal adoption of the following LOS standards for public facilities.

Stormwater

All applicable Federal, state, and local regulations relating to flood control, stormwater treatment and wetland protection, shall continue to be met in public and private project design. Preference shall be given to stormwater management options that provide regional benefit, restore and enhance natural systems and floodplains, improve major conveyance systems or apply low impact development principles.

Recreation

Fourteen acres of County park and environmental lands for every 1,000 residents within the County.

Solid Waste and Resource Recovery

The level of service standard shall be to dispose of 1.30 tons per person per year.

Water Supply

Pinellas County shall use 115 gallons per capita per day when preparing its annual 5-year and 20-year potable water demand projections for the Pinellas County Water Demand Planning Area.

To determine whether adequate capacity is available for a development or redevelopment project in the unincorporated County that is served by a municipal potable water system, Pinellas County will utilize the level of service standards adopted by the municipal service provider.

Sanitary Sewer

Pinellas County Utilities shall provide the levels of service necessary for proper wastewater treatment, reuse and disposal in order to ensure the protection of its citizens and the environment and to provide adequate wastewater treatment capacity for all current and projected wastewater facility demands of Pinellas County Utility customers.

Wastewater flows associated with existing and permitted development cannot exceed the wastewater treatment plant's permitted design capacity.

Treated effluent and biosolids shall meet all pertinent federal, state and local standards and regulations for treatment, reuse and disposal.

Pinellas County will, for concurrency management purposes, annually compare wastewater flows to permitted treatment capacity to determine the percentage of available capacity and assess whether permitted treatment capacity exceeds the needs of existing and committed

development. If available treatment capacity meets this standard, development can be permitted.

Unpredictable situations where permitted capacity is temporarily exceeded due to unanticipated situations such as limited/extreme weather conditions shall not impact the determination of level of service conditions.

Peak design flow capacity shall be between 1.5 and 2.5 times the average daily flow for each sanitary sewer system, based on the individual characteristics of the system.

If an annual assessment evidences that a capacity deficit could occur within 10 years, Pinellas County Utilities will prepare a more detailed capacity analysis and determine whether facility expansion is required or if the service area is built out.

To determine whether adequate capacity is available for a development or redevelopment project in the unincorporated County that is served by a municipal wastewater system, Pinellas County will utilize the level of service standards adopted by the municipal service provider.

CAPITAL IMPROVEMENT PROGRAM

The CIP will be consistent with the CIE of the Comprehensive Plan, as the CIP reflects the goals, objectives and policies of the CIE in its implementation strategies. However, the CIP is more inclusive than the CIE as the CIP is not limited to public facilities addressed in the Comprehensive Plan.

The first year of the County's CIP, which is known as the capital improvement budget, is the basis for actual appropriations authorized by the Board of County Commissioners for capital projects when adopting its annual budget. The remaining years serve as a guide for the planned future development of the County's infrastructure needs. The CIP is developed to anticipate the County's needs while taking into consideration the urgency of a project, the County's ability to administer the project, the involvement of outside agencies, and the potential for future funding of the project. Projects are introduced into the CIP based upon input from County residents, County staff, County Commissioners, and other governmental agencies.

Each project request to the CIP is reviewed by the submitting department and the County Administrator for its merit and relationship to overall County needs. The Board of County Commissioners conducts final review of the CIP at workshop sessions prior to adoption of the Pinellas County Annual Budget.

LAND DEVELOPMENT REGULATIONS

Within unincorporated Pinellas County, the Board of County Commissioners has enacted a number of regulations governing land development. Permits for development of lands within the unincorporated County require extensive site plan review to ensure that public facilities required by the County's zoning and subdivision regulations are in place. Such facilities include streets, sidewalks, utility easements, and drainage and flood control. The Concurrency Management System is intended to ensure that facilities and services needed to support development are available concurrent with the impacts of such development. Prior to the issuance of a development order and/or development permit, this Concurrency Management

System shall ensure that the adopted level of service standards required for roadways, potable water, sanitary sewer, solid waste, surface water management, recreation and mass transit shall be maintained.

Implementation of land development regulations can account for construction, extension, or increases in public facilities if it is found that there is not adequate capacity to accommodate proposed land use developments. Development permits normally are not issued if, after the site plan review process is completed, it is found that adequate facilities do not exist.

IMPACT FEES

Impact fees are charges assessed by local governments against new development, generally at the building permit stage. Impact fees are a means for local governments to cover the cost of providing capital facilities to serve new developments. These fees are usually based on a formula (an amount per square foot of new construction), a land use criteria (different fees for single-family and commercial office construction), or a use-based criteria (water meter size). Impact fees are meant to assist in the construction or expansion of infrastructure to keep pace with new growth. Impact fees do not provide funds for public facility operating costs.

Pinellas County adopted a countywide multimodal impact fee. This impact fee applies to all development activity that generates additional traffic and which require a certificate of occupancy, land use permit, or occupational license.

USER CHARGES AND CONNECTION FEES

User charges are designed to support the costs of public facilities or services by charging those who benefit from them. User charges are employed in many areas of local government service. Water and sewer user charges, along with connection fees, defray the cost of constructing and maintaining facilities, and these funds are commonly used to pay off revenue bonds. User charges may also be applied to solid waste services, parking, recreation, and mass transit. A related user charge is a stormwater utility fee, which assesses property owners for the percentage of stormwater runoff contributed to drainage system based on an average amount of contributing impervious surface.

As a tool for influencing the pace and pattern of development, user charges may be designed to vary for the quantity and location of the service provided. Thus, charges could be greater for providing services to outlying areas than for areas having excess facility capacity.

Pinellas County presently utilizes user charges and connection fees for sanitary sewer and potable water services, as well as for solid waste disposal. The County presently does not utilize a stormwater utility fee.

SPECIAL ASSESSMENT DISTRICTS

Special assessment districts are established to permit an assessment against properties which benefit from specific public improvements within the district. Special assessment districts can be initiated by a local government, a group of property owners, or by a community association, but it must be approved by a majority of property owners. Special assessment districts are established to fund street, sidewalk, drainage, sewer, water, streetlights, and other infrastructure improvements.

Presently, Pinellas County uses special assessment districts to fund for paving of local streets, local drainage improvements, and street lighting improvements.

MUNICIPAL SERVICES TAXING UNIT

A municipal services taxing unit (MSTU) is the legal and financial mechanism for providing specific services and/or improvements to a defined geographical area. A MSTU may levy ad valorem taxes without a referendum. A MSTU may also use assessments, service charges, or other revenue to provide its source of income.

There are 18 MSTUs operating in the unincorporated County. The primary MSTU represents all of the unincorporated area of Pinellas County. This MSTU is the funding vehicle for providing services to the unincorporated portion of the County, including the Sheriff's road patrol. The Public Library Cooperative, the Palm Harbor and Feather Sound Community Services Districts, and the 14 fire protection districts comprise the remaining MSTUs.

PLANNING STUDIES

Various departments under the Board of County Commissioners have completed planning studies that identify when and where public facilities need to be constructed, extended, or have its capacity increased. The Pinellas County Comprehensive Plan, especially the Future Land Use and Quality Communities Element, guides the location and intensity of land use activities in the unincorporated County. This, in turn, affects decisions on the timing and location of public facilities. Implementation programs and techniques will affect the provision of public services and facilities by conditioning development activity on the availability of adequate public services and facilities. Subdivision applications often include stipulations for public facility provision that are based on the Comprehensive Plan.

Other planning studies affecting the location of timing of public facilities include the Long Range Transportation Plan (Forward Pinellas acting as the MPO), the Pinellas County Stormwater Management Plan, the Sewer System's Master Reuse Plan, the Tampa Bay Water Master Water Plan, and the Utilities System's solid waste and resource recovery studies.

MANDATORY DEDICATION OR FEES IN LIEU OF

A local government may require, as a condition to plat approval, that subdivision developers dedicate a certain portion of the land in the development to be used for public purposes such as roads, parks, and schools. Dedication may be made to the governing body or to a private group such as a homeowners' association.

When a subdivision is too small or topographical conditions are such that a land dedication cannot reasonably be required, a local government may require the developer to pay a fee in lieu of dedication which is equivalent to the amount of land that otherwise would have been dedicated by the developer. This fee may be deposited into a separate account for future use toward provision of such facilities.

Pinellas County requires dedications for rights-of-way and easements for blocks, streets, lots, structures, canals, and major waterways, as well as shallow irrigation wells and water, sewer and reuse systems, if so required.

ENDANGERED LAND AND OPEN SPACE ACQUISITION

A referendum, passed in 1972 by Pinellas County residents, established a fund for use by the Board of County Commissioners to acquire endangered land and open space for environmental, recreation and open space purposes. Subsequent successful referenda passed in 1984, 1986, 1989, 1997 and 2007 have raised and will continue to provide additional funds for this program through 2020.

Pinellas County has acquired over 5,200 acres through the Pinellas County endangered lands program.

REDEVELOPMENT PLANS

Under Chapter 163, Part III, The Community Redevelopment Act, local governments are able to prepare redevelopment plans for certain designated areas of their communities. The redevelopment plan schedules improvements that can act as a catalyst for public and private development. One mechanism that can help fund these improvements is tax-increment financing. Tax-increment financing can be used to provide funds for infrastructure in areas where development is desired but funding for public facilities is not otherwise available when needed. Increase in tax revenues that are realized as a result of new development in a specified area are earmarked for financing public improvements or services in that area. Usually administered by a public agency, a tax-increment financing district is defined with a specified “base line” tax base of existing development. Improvements within the area are financed from public funds or bonds, then, are repaid from increasing tax revenues generated by the new development. The new development in effect pays its own way, using the local government’s normal tax program for the mechanism for deriving revenues.

Pinellas County has established the Lealman Community Redevelopment Area and contributes tax-increment revenues to 11 municipal community redevelopment districts.

DEVELOPMENT AGREEMENTS

Development agreements are contracts between local governments and developers sanctioned by state statute. Such contracts carry provisions that establish and approve the character, rate, and intensity of development on a parcel of land. Additionally, development agreements normally contain terms for the provision and financing of public facilities, such as roads, required for the proposed development. Development agreements also provide that local government rules governing development, such as zoning designations, cannot change during the duration of the agreement.

Pinellas County has entered into several development agreements, usually in association with a land use and/or zoning amendment.

MORATORIA

A moratoria or stopgap ordinance may temporarily halt or freeze development for a specified period of time on an emergency basis. A moratorium may be imposed on building permits, development approvals, or government services such as potable water connections, sanitary sewer extensions, or hook-ups. Moratoria may generally be imposed for a "reasonable time" to allow for necessary planning activities pending comprehensive plan preparation, adoption, or amendment. Florida courts have found development moratoria to be a valid measure of last resort for the protection of local public health, safety, and welfare when adopted in accordance with applicable procedures. Additional considerations in adopting a moratorium include:

1. Determining the legal status of existing permit applications and approvals to determine the extent of "vested rights" for developments approved prior to ordinance adoption;

2. Specifying the geographic extent of the moratorium (whether it will be jurisdiction-wide, or limited to specific hazard areas or areas with existing service insufficiencies); and

3. Specifying the time frame and conditions under which the moratorium will be imposed.

Currently, no moratoria are being imposed by Pinellas County.

FINANCIAL RESOURCES

PINELLAS COUNTY ANNUAL BUDGET

Meaningful discussion of financial resources available to Pinellas County requires a framework that reflects the synthesis of the County's fiscal affairs. This framework is the Pinellas County Annual Budget, which serves as the County's financial management plan.

For capital projects, a Capital Improvement Program (CIP) has been developed as a multi-year work plan to meet annual capital improvement needs. This program identifies projected capital expenditures to be incurred and the proposed resources necessary to finance the improvements. Capital improvements in total are financed by a combination of sales and use taxes, user charges, special assessments (including impact fees), investment earnings, debt proceeds, and designated balances (i.e. beginning fund balances).

2 - FINANCIAL ANALYSIS

The Pinellas County Office of Management and Budget (OMB) updates the Budget Forecast annually as a stand-alone document. Developing a multi-year forecast provides decision-makers with at least two key benefits: (1) assessing the long-term financial sustainability of the County's funds and (2) understanding the impact of today's decisions on the future.

Budget guidelines are developed by County Administration based on the results of the forecast and policy direction from the Board of County Commissioners. If the results of the forecast for a given fund indicate a shortfall, the budget guidelines would likely include some kind of corrective action. If a surplus is expected, the guidelines would most likely accommodate proposals for new or enhanced programs or reductions in revenue sources. After the Forecast is prepared and presented to the Board of County Commissioners in the January/February timeframe, the forecast is updated throughout the fiscal year in parallel with the budget development process.

Financial feasibility of the CIP is reviewed through the annual budget process, and is contained in the Budget Forecast. Operating cost considerations related to the implementation of the CIP are projected by the departments responsible for operating the completed facilities.

A Capital Improvements Program (CIP) Plan shall be prepared by the County Administration and affected departments and updated on an annual basis. The following CIP Portfolio Project Criteria shall be utilized for evaluating and ranking projects prior to their inclusion in the CIP Plan:

1. Asset Preservation; the extent to which the project protects or preserves the County's infrastructure.
2. Criticality of the project (consequences of not doing the project).
3. Economic Outcome; the extent to which the project enhances economic development in the County.
4. Environmental Stewardship; the extent to which the project implements green technologies or practices or otherwise serves to protect and improve the County's natural resources.
5. Service Delivery; the extent to which the project sustains or improves levels of service.
6. Project Coordination; the degree to which the project is linked to other existing or proposed projects managed by the County or an external partner.
7. Public Demand; the extent to which the project aligns with citizen expectations.
8. Regulatory requirements; the extent to which the project helps the County meet current or future regulatory requirements.
9. Public Health, Safety, and Welfare; the extent to which the project addresses an expert-defined health or safety condition.

3- IMPLEMENTATION

SCHEDULE OF CAPITAL IMPROVEMENTS

The CIP is a comprehensive plan of proposed capital projects, intended to identify and balance the capital needs of the community within the fiscal capabilities and limitations of the County. It is primarily a planning document and is updated annually and subject to change as the needs of the community become more defined and the adopted projects move closer to final approval. The first year of the program is the basis for actual appropriations authorized by the Board of County Commissioners for capital projects when adopting the annual budget. The remaining years are a guide for the future development of the County's new and replacement infrastructure needs. The CIP is incorporated by reference and is available at: http://www.pinellascounty.org/budget/

4 – MONITORING AND EVALUATION

The role of monitoring and evaluation is vital to the effectiveness of any planning program and particularly for the CIE. This is largely because the County's revenue and expenditure streams are subject to fluctuations in the economy. It is the behavior of these streams that will be used to predict fiscal trends in order to maintain the County's adopted level of service standards for public facilities. Therefore, the CIE requires a continuous program for monitoring and evaluation and this element will be reviewed on an annual basis to ensure that required fiscal resources are available to provide public facilities needed to support adopted LOS standards.

The monitoring and evaluation review shall include, but not be limited to, the following considerations:

1. The priority assignment of existing public facility deficiencies;

2. The County's progress in meeting those needs determined to be existing deficiencies;

3. The criteria used to evaluate capital improvement projects in order to ensure that projects are being ranked in their appropriate order of priority;

4. The County's effectiveness in maintaining the adopted LOS standards;

5. The County's effectiveness in reviewing the impacts of plans and programs of state agencies and Water Management Districts that provide public facilities within the County's jurisdiction;

6. The effectiveness of impact fees, and mandatory dedications or fees in lieu of, for assessing new development a pro rata share of the improvement costs which they generate;

7. The impacts of special districts and any regional facility and service provision upon the County's ability to maintain its adopted LOS standards (an example of this is a municipal services taxing unit);

8. Efforts made to secure grants or private funds, whenever available, to finance the provision of capital improvements;

9. The criteria used to evaluate proposed plan amendments and requests for new development or redevelopment; and

10. The capital improvements needed from the latter years of the Pinellas County Comprehensive Plan's planning period for inclusion in the CIP.

Goals, Objectives and Policies

GOAL ONE: THE PATTERN OF LAND USE IN PINELLAS COUNTY SHALL PROVIDE A VARIETY OF URBAN ENVIRONMENTS TO MEET THE NEEDS OF A DIVERSE POPULATION AND THE LOCAL ECONOMY, CONSERVE AND LIMIT DEMANDS ON NATURAL AND ECONOMIC RESOURCES TO ENSURE SUSTAINABLE BUILT AND NATURAL ENVIRONMENTS, BE IN THE OVERALL PUBLIC INTEREST, AND EFFECTIVELY SERVE THE COMMUNITY AND ENVIRONMENTAL NEEDS OF THE POPULATION.

1.1. Objective: Pinellas County shall, on a case by case basis, evaluate the use of sector planning and the use of more localized sector plans that can be responsive to the circumstances and issues affecting the various unincorporated communities throughout the County.

1.1.1. Policy: The Local Planning Agency shall, as the need or opportunity arises, assess whether certain communities or areas might benefit from individual and specialized planning and, based on the individual need and available resources, recommend a specific planning approach for that planning sector.

1.1.2. Policy: At a minimum, the Sector Plans shall address land use, urban design, transportation, recreation/open space, and natural resources. Other planning subjects may be addressed in a sector plan based on the issues facing the local community.

1.1.3. Policy: Any Sector Plans shall be adopted as part of the Pinellas County Comprehensive Plan and shall be consistent with the provisions of the Comprehensive Plan.

1.2. Objective: Establish development regulations that respond to the challenges of a mature urban county with established communities that are experiencing infill development and redevelopment activity.

1. 2.1. Policy: Standards of density, intensity, permitted uses, and other land use characteristics for all land uses shall be listed in the Future Land Use Category Descriptions and Rules of the Future Land Use and Quality Communities Element and incorporated as part of this policy.

1.2.2. Policy: The Local Planning Agency (LPA) of the Board shall ensure that zoning provisions within the Land Development Code are in conformance with the density, intensity, and other relevant standards contained within the Future Land Use and Quality Communities Element.

1.2.3. Policy: Plan designations on the Future Land Use Map shall be compatible with the natural environment, support facilities and services, and the land uses in the surrounding area.

1. 2.4. Policy: Recognizing that successful neighborhoods are central to the quality of life in Pinellas County, redevelopment and urban infill development should be compatible with and support the integrity and viability of existing residential neighborhoods.

1.2. 5. Policy: The Board shall implement land development regulations that are compatible with the density, intensity, and other relevant standards of those land use categories defined in the Future Land Use and Quality Communities Element.

1.2.6. Policy: Land development regulations that implement the Comprehensive Plan may be more restrictive than the land use standards contained within the Plan.

1.2.7. Policy: Special exception land uses when authorized by the Board of Adjustment after a determination of compliance with the standards specified in the Zoning Chapter of the Pinellas County Land Development Code shall be consistent with the Zoning Chapter of the Pinellas County Land Development Code.

1.2.8. Policy: Conditional uses, when authorized by the Board of County Commissioners after a public hearing, shall be consistent with the Pinellas County Comprehensive Plan.

1.2.9. Policy: The Pinellas County Land Development Code may allow a density bonus for Affordable Housing Developments as specified in the County's adopted State Housing Initiatives Partnership Housing Incentive Plan, and subject to program guidelines and specifications as well as compatibility with surrounding development, site constraints, and other appropriate considerations as determined through the Pinellas County Comprehensive Zoning Regulations and the site plan review process. Affordable housing density bonuses may also be granted to mobile home redevelopment transition projects, subject to Future Land Use Element Policy 1.2.12. Subject to the above constraints and considerations, and except as specified in Future Land Use Element Policy 1.2.12, any density bonus allowed for an affordable housing development shall not exceed 50 percent of the allowable density on a property as determined by the Future Land Use Map or the applicable land development regulations, whichever is more restrictive. A density bonus shall not be allowed for affordable housing developments located within the coastal storm area. [17-21]

1.2.10. Policy: Affordable Housing Developments (AHDs), as defined in the Pinellas County Affordable Housing Incentive Plan (AHIP) and in the Pinellas County Comprehensive Zoning Regulations and certified by the County as an AHD, may be permitted at densities up to 10 units per acre in the Commercial Neighborhood land use category and up to 15 units per acre in the Residential/Office/Retail, Residential/Office General, and Commercial General land use categories. The permitting of affordable housing developments within these land use categories shall be subject to program guidelines and specifications as well as compatibility with surrounding development, site constraints, and other appropriate considerations as determined through the Pinellas County Comprehensive Zoning Regulations and the site plan review process. Application of this affordable housing incentive shall not be allowed within the coastal storm area. [16-18]

1.2.11 Policy: The following criteria will be used in determining preferred locations for Affordable Housing Development (AHD):

1. A mode of transportation other than privately-owned vehicles (e.g. a bus stop) is available within walking distance of the proposed AHD;
2. The proposed AHD is located in proximity to neighborhood services such as a grocery store, pharmacy, or bank;
3. The proposed AHD is located in proximity to places of employment;
4. The proposed AHD is compatible with the surrounding development pattern;
5. There is adequate infrastructure to serve the proposed AHD; and
6. The proposed AHD is located outside the coastal storm area.

1.2.12 Policy: For permitted mobile home developments within a designated Community Redevelopment Area (CRA), and existing prior to January 30, 1990, affordable housing development bonuses may be granted to a mobile home redevelopment transition project up to the existing permitted nonconforming density of the subject development as documented by existing site plans on file.. As a requirement for utilizing this affordable housing density provision, mobile home redevelopment transition projects shall be developed per the requirements as prescribed in Section 38-100 (Redevelopment of Non-Conforming Mobile Home Parks) of the Pinellas County Land Development Code. [17-21]

1.3 Objective: Pinellas County, through its comprehensive planning program and land development regulations, shall support efforts to create, recreate, and maintain areas of mixed-use development at appropriate locations to achieve the following objectives:

- provide vibrant and safe walkable areas;

- concentrate growth in relatively discrete areas that are compatible with the community character, local traditions, and historic heritage;
- place housing in proximity to employment opportunities, services and amenities;
- establish urban areas that support transportation choices other than privately-owned vehicles and are more efficiently served by transit;
- establish quality-designed urban environments that create vibrant, livable places;
- provide locations that create a range of housing opportunities and choices, including the provision of affordable housing;
- provide urban areas that incorporate well-designed public spaces;
  provide neighborhoods with mixed use development that fits with the context and character of proximate residential neighborhoods; [16-18]
- provide adequate buffering and a transition gradient between non-residential and/or higher density residential development and proximate residential neighborhoods and/or less intensive nonresidential development;
- encourage development that is compatible with the natural environment and the overall vision of the community;
- transition to a pattern of various types of land use that is more efficient in the use of energy and reduces the emission of greenhouse gases.

1.3.1. Policy: The following guidelines will be used to help determine appropriate locations for mixed-use development: [16-18]

Table 1				
FORM OF DEVELOPMENT[2]	**Type of Mixed - Use Development**			
	Mixed-Use Projects	**Large-scale Mixed-Use Areas**	**Neighborhood-scale Mixed-Use Areas**	**Transit Oriented Development**
Neighborhoods				
Traditional	-	-	R	-
Suburban	-	-	R	-
Mobile Home & Manufactured	-	-	-	-
Large Multi-family Communities & Resorts	-	-	R	-
Centers				
Urban	A	A	A	-
Town	A	A	A	-
Suburban Commercial	A	A	-	-
Neighborhood	A	-	A	-
Village	A	-	A	-
Employment	A	A	-	-
Corridors				
Interstate	A	A	-	-
Commercial	A	A	A	-
Employment	A	A	-	-
Residential	-	-	-	-
Scenic/Non-Commercial[3]	R	R	R	-
Coastal[1]	A	A	A	-
Multimodal	A	A	A	A
Districts				
Airport	A	A	-	-
University/College Campuses	A	A	-	-
Arts and Cultural	R	A	-	-
Medical	R	R	-	-
Historic[4] -				

A = This type of mixed-use development is generally appropriate within this specific form of development

R = This type of mixed-use development should be regulated to ensure that it is compatible with this specific form of development

[1] = Limitations on residential densities within the coastal high hazard area and the coastal storm area may restrict residential development

[2] = The general forms of development that comprise the urban land use morphology in Pinellas County are described in the Definition Section of the Future Land Use and Quality Communities Element

[3] = Development policies specific to scenic/non-commercial corridors place additional requirements for locating mixed use development along these corridors

[4] Appropriate types of mixed use development will depend upon the historic development pattern within the district.

In addition to using **Table 1**, appropriate locations for large-scale or neighborhood-scale mixed use development shall be determined based on a balancing of the guidelines listed below that are applicable to the area under consideration, and the appropriate location for transit oriented development shall be based on the requirements listed at the end of the following guidelines:

LARGE-SCALE MIXED-USE PROJECT OR MIXED-USE AREA

1. The location can serve as a walkable destination for nearby areas.

2. There is adequate infrastructure serving the proposed location, including a transportation network that will meet the mobility needs of all principal modes of travel including bicycling, walking and transit as well as motor vehicles.

3. There are transportation choices other than privately-owned vehicles that service the proposed location. At least one of the following public transit services is available to serve the proposed mixed-use development:

    a. The location is served, or is scheduled to be served, by enhanced bus service with no more than 30 minute headways during weekday morning and evening peak hours. Service by more than one bus route is preferred, and the presence of a public or private circulator system that serves the location and has a service interconnection with the bus system may improve the location's suitability for mixed-use development.

    b. The location is served by a Bus Rapid Transit (BRT) route that is in operation or that has been selected for BRT service through the MPO process and there is a firm funding commitment to establish BRT and have it operational within 5 years.

4. The location has direct access or is in close proximity to a segment of the countywide or a local multi-use path or trail system.

5. The location can accommodate a mix of land uses, including a residential component, that are able to blend with surrounding uses without juxtaposing incompatible uses or building types.

6. The mixed-use development will create opportunities for providing a mix of housing types in a range of prices, a certain percentage of which will meet the County's affordable housing criteria.

7. The mixed-use development can accommodate one or more of the County's targeted industries or businesses.

8. The mixed-use development is of sufficient size to allow a decrease in density/intensity from the center of the mixed-use development to the periphery that is compatible with the surrounding land uses.

9. The mixed-use development will provide services (e.g. services such as convenience groceries, dry cleaners, and personal care) and amenities within walking distance of

residential development within the mixed use project or area or of residents in the surrounding community, if applicable.

10. Compatibility of mixed-use development with other goals, objectives, and policies of the Pinellas County Comprehensive Plan.

11. The relationship of the mixed-use development to plans of other local governments and the Regional Planning Council, to the Countywide Plan, and to the strategies in Pinellas by Design.

NEIGHBORHOOD-SCALE MIXED-USE PROJECT OR MIXED-USE AREA

1. The location can serve as a walkable destination for nearby areas.

~~2.~~ There is adequate infrastructure serving the proposed location, including a transportation network that will meet the mobility needs of all principal modes of travel including bicycling, walking and transit as well as motor vehicles.

3. The location can accommodate a mix of land uses, including a residential component, that are able to blend with surrounding uses without juxtaposing incompatible uses or building types.

4. The mixed-use development is of sufficient size to allow a decrease in density/intensity from the center of the mixed-use development to the periphery that is compatible with the surrounding land uses.

5. The mixed-use development will provide services (e.g. services such as convenience groceries, dry cleaners, and personal care) and amenities within walking distance of residential development within the mixed use project or area or of residents in the surrounding community, if applicable.

6. Compatibility of mixed-use development with other goals, objectives, and policies of the Pinellas County Comprehensive Plan.

7. The relationship of the mixed-use development to plans of other local governments and the Regional Planning Council, to the Countywide Plan, and to the strategies in Pinellas by Design.

TRANSIT ORIENTED DEVELOPMENT

Transit oriented development shall be located within an easy walking distance (roughly ½ mile) of existing or future transit stations that are part of a rail or fixed-guideway system as established in the Pinellas County Metropolitan Planning Organization's Long-Range Transportation Plan. The specific station locations are determined through a multi-agency process for transit corridor planning that is based on the Federal Transit Administration planning process in Pinellas County.

1.3.2. Policy Mixed-use development shall be integrated into a walkable area, which exhibits most, if not all, of the following characteristics:

a. A pedestrian-friendly environment that results in active, walkable streets.

b. Building setbacks are reduced.

c. Buildings are interconnected by a continuous network of safe, convenient, comfortable, and interesting sidewalks, paths, and bicycle routes.

d. If residential neighborhoods and other walkable destinations are located nearby, mixed-use development is interconnected with the surrounding community by a network of safe, convenient, comfortable, and interesting sidewalks, paths, and bicycle routes.

e. Pedestrian-scale streetlights and other amenities are installed.

f. There is safe, convenient access to public transit.

g. The development will provide well-designed public spaces (e.g. pocket parks and plazas) and space for civic uses such as libraries, community centers, law enforcement substations.

h. Applicable livable community characteristics identified in the policies in support of Goal 2.

1.3.3. Policy: Pinellas County shall establish the Activity Center and Mixed Use Corridor Future Land Use Map categories to recognize those areas of the County that are appropriate locations for mixed use development that serve as community focal points of commerce, employment, and housing. [16-18]

1.3.4. Policy: Use of the Activity Center and Mixed Use Corridor Future Land Use Map (FLUM) categories shall require a specific area plan approved by the Board of County Commissioners. The specific area plan shall, at a minimum, address the following: [16-18]

a. Permitted uses and locational criteria;

b. Density and intensity standards;

c. Provisions for mixed use;

d. Design criteria and/or guidelines;

e. Provisions for affordable housing and employment, if any;

f. Provisions that achieve a walkable area;

g. Impacts on public services and facilities;

h. Integration with planned and existing mobility systems;

i. Interrelationship of the proposed designation with the surrounding community;

j. Projected impact on traffic patterns resulting from mixed use development and an emphasis on pedestrian activity, existing and planned/programmed transit service and non-motorized modes of travel;

k. The ability of the surrounding road network to distribute vehicle trips away from road corridors experiencing congestion problems;

l. Incentives that may be offered to encourage development that has an overall community benefit; and

m. Consistency with the Pinellas County Comprehensive Plan.

These requirements for specific area plans may be met partially or in their entirety with the adoption of a form based regulating plan associated with the designation of a Form Based Code Zoning District, in which case the adopted regulating plan shall satisfy the above requirements to the extent they are addressed in the regulating plan.

It is intended that specific area plans required by this policy address the planning and urban design principles contained in Strategy LU 16.1 of the Countywide Plan Strategies.

1.3.5. Policy: Specific area plans or regulating plans, as described in Policy 1.3.4., and the County's land development regulations as they apply to the Activity Center and Mixed Use Corridor FLUM categories may require that, in order to exceed an established base residential density or intensity of use that is less than the maximum permitted in the FLUM category, a project shall provide public benefits and amenities that support one or more of the objectives listed in Objective 1.3. Pinellas County would determine what public benefits and amenities would be acceptable for receiving additional development rights, and the extent of those additional development rights.

1.3.6 Policy: Specific area plans or regulating plans, as described in Policy 1.3.4., and the County's land development regulations as they apply to the Activity Center and Mixed Use Corridor FLUM categories may require that development above an established base residential density or intensity of use rely upon the transfer of

development rights from other properties to the subject property or properties. [16-18]

1.3.7 Policy: Mixed-use development shall enhance, and not compromise, the integrity and viability of existing and planned residential neighborhoods.

1.3.8. Policy: Mixed-use development shall create a strong sense of community identity through consideration of such mechanisms as optional and/or required urban design and architectural design criteria, recognizing historic setback patterns and lot sizes, the creation of places that are oriented to the pedestrian and alternative modes of travel such as bicycle use, providing greenspace and landscaping in public spaces, and other appropriate mechanisms that may be specific to a particular location.

1. 3.9. Policy: In association with the update to the Land Development Code, Pinellas County shall identify proposed amendments to the Land Development Code to include mixed-use development standards to achieve the intent expressed in Objective 1.3. The proposals shall also consider additional code amendments to implement recommendations in *Pinellas by Design* and the livable community objectives and policies under Goal 2 of this element.

1. 3.10. Policy: In association with the update to the Land Development Code, Pinellas County in coordination with the Pinellas County Metropolitan Planning Organization shall recommend parking standards for mixed-use development.

1.3.11. Policy: Pinellas County will amend its land development regulations as determined appropriate based on the recommendations from Policy 1.3.10. [16-18]

1.3.12. Policy: The Residential/Office Limited, Residential/Office General, Residential/Office/Retail, Activity Center, and Mixed Use Corridor land use categories shall seek to achieve a mixture of uses distributed as follows within each category: Residential (5 percent to 50 percent), and Non-residential (50 percent to 95 percent). [16-18]

1.3.13. Policy: The Transit Oriented Development (TOD) land use categories, with the exception of the TOD – RC- E category, shall seek to achieve a mixture of uses distributed as follows: Residential (20 percent to 75 percent), and Non-residential (25 percent to 80 percent). [16-18] [10-56]

1.4. Objective: Support a coordinated approach to transit system planning within Pinellas County and the Tampa Bay area that includes all levels of government, the private sector, and the community. [10-56]

1.4.1. Policy: Ensure that the land use and environmental impacts of transit routes and station locations are considered throughout all steps in the transit planning process.

1.4.2. Policy: Balance mobility needs (e.g. frequency, speed) and the desire for economic development with regard to the location and number of transit stations.

1.4.3. Policy: The location of rail or fixed-guideway transit stations and their station area typologies shall be determined through a multi-agency process for transit corridor planning that is based on the Federal Transit Administration planning process in Pinellas County.

1.4.4. Policy: The determination of the appropriate typology for each transit station area shall be based on the Station Area Typologies in Table FLUM-3 of the Future Land Use Map Category Descriptions and Rules. [16-18]

1.5. Objective: Establish a land use pattern that is supportive of rail or fixed guideway transit by concentrating a mix of complementary, well-integrated land uses within an easy walking distance of rail or fixed-guideway transit stations.

1.5.1. Policy: Once the location of a rail or fixed-guideway transit station and the station area typology have been determined, the boundaries of the Station Area located within an easy walking distance (roughly ½ mile) of the transit station shall be identified and approved by the County through a process involving interested stakeholders, including the public.

1.5.2. Policy: Objective 1.3, the guidelines contained in Policy 1.3.1, and the principles and strategies contained in Policy 1.5.11 shall be considered in determining the Station Area boundaries.

1.5.3. Policy: Following approval of the Station Area boundaries for a particular transit station, the County shall initiate preparation of a Station Area Plan using as guidance Objective 1.3, Policy 1.3.2, the principles and strategies contained in Policy 1.5.11, the Station Area Typologies in Table FLUM-3, and applicable livable community policies listed under Goal 2 of this element. [16-18]

1.5.4. Policy: The development of Station Area Plans shall involve coordination with applicable transportation agencies, engage multiple stakeholders, and include a public involvement program.

1.5.5. Policy: Station Area Plans may include an evaluation area greater in extent than the Station Area in order to provide a context for development plans within the Station Area itself. [10-56]

1.5.6. Policy: Station Area Plans shall be approved by the Board of County Commissioners through the public hearing process established in the Florida Statutes for adoption of a land development regulation.

1.5.7. Policy If a Station Area will encompass more than one jurisdiction, the County will coordinate with the other affected jurisdiction(s) in determining station area boundaries and in developing the Station Area Plan.

1.5.8. Policy Approval of the Station Area Plan shall be separate from, but concurrent with, amendment of the Future Land Use Map to apply the appropriate Transit Oriented Development category.

1.5.9. Policy: By October 2010, the County shall establish a Future Land Use Map category that can be applied to station areas whose boundaries have been approved by the Board of County Commissioners to support transit ridership and take advantage of the major public investment in transit.

1.5.10. Policy: Pinellas County shall adopt transit oriented development (TOD) zoning districts as part of the major update to the Pinellas County Land Development Code that was initiated in 2010. These TOD zoning districts will be applicable to lands that are designated on the Future Land Use Map with a TOD land use category.

1.5.11. Policy: In order for transit oriented development (TOD) to achieve its full potential to create well-designed, livable mixed-use urban communities, improve a community's economic well-being, and establish energy efficient and sustainable patterns of various types of land use, the following principles and strategies will guide preparation of Station Area Plans, the development of TOD zoning districts, and the planning, design, and development of TOD:

Coordination and Economic Development

1) Plan for TOD in accordance with the requirements of the Federal Transit Administration New Starts planning and development process and evaluation criteria.

2) Establish a mechanism to coordinate all agencies, including transit agencies and the various governmental entities that can affect the success of Station Area Plans and transit oriented development.

3) Recognize that each station area around a rail or fixed guideway transit station is different and that each station area is located within its own unique context and serves a defined purpose in the context of the transit corridor and the regional transit system.

4) Strive to make TOD realistic, economically viable and valuable by conducting a location-based market analysis for development projections to identify land use mix and density/intensity of uses.

5) Consider Pinellas County's target industries when planning for station areas and their surrounding area of influence, and create strategies for attracting those employers.

6) Station Area Plans will include existing conditions, neighborhood context, station area type, redevelopment vision, concept plan, market research and development projections, appropriate zoning requirements, livable community and building design standards, street cross sections, streetscape development standards, pedestrian and bicycle access plans, public infrastructure improvements, signage plan, public realm, open space and environmental/sustainability plans, parking accommodations, and implementation plan.

7) Include historic resources, publicly-owned land and public buildings in the existing conditions section of Station Area Plans.

8) Identify strategies to promote implementation of Station Area Plans that include various mechanisms such as changes to regulatory requirements (e.g. revisions to Zoning Code), incentives, funding, public-private partnerships, joint/shared facilities, environmental remediation, and property aggregation of small and/or fragmented lots.

9) Work with neighboring jurisdictions toward common goals and commit to mutually beneficial partnerships to realize the economic benefits of TOD.

Land Use

1) Create compact station areas within a roughly ½-mile walk of public transit stations and with sufficient density and/or intensity to support transit ridership and take advantage of the major public investment in transit.

2) Provide greater flexibility for mixing uses and higher density/intensity that is easier to implement than traditional requirements and are able to respond to changing conditions.

3) Require minimum densities for new residential development in station areas, in accordance with the station typologies and Station Area Plans.

4) Require minimum intensities for new non-residential development within ¼ mile of a transit station, in accordance with the station typologies and Station Area Plans.

5) Provide a variety of housing types, including workforce housing, for a wide range of ages and incomes within station areas.

6) Identify station area types that address transit technology, community character, density/intensity and mix of land uses, housing mix, and building heights.

7) Provide active uses that attract and generate pedestrian activity, such as retail and office on the ground floor of buildings, including parking garages.

8) Provide basic goods and services that serve the daily needs of residents, commuters and visitors in station areas.

9) Prohibit automobile-oriented uses, such as drive-through facilities, within the immediate vicinity of a transit station, and limit these uses within the remainder of the station area.

10) Protect existing stable neighborhoods and designated historic structures and resources both within and on the periphery of station areas.

11) Ensure there are appropriate transitions in densities, intensities and building heights between TOD and surrounding lower density development (e.g. single-family neighborhoods)

12) Development should be most intense in the areas nearest the transit stations and less intense at the edges of the station area.

13) Promote the location of special traffic generators – such as cultural, educational, entertainment, recreational, and governmental uses – either within or adjacent to station areas.

Mobility – Pedestrians and Bicyclists

1) Make the pedestrian the focus of the TOD development strategy without excluding vehicles.

2) Establish level of service standards for station areas that emphasize the needs of pedestrians and bicyclists.

3) Provide an extensive pedestrian system within station areas that minimizes obstacles for pedestrians, provides connectivity with shorter walking distances, and provides protection from the elements where appropriate.

4) Minimize gaps in pedestrian networks accessing transit stations and station areas.

5) Size the pedestrian network for the anticipated level of service needed. Provide wide sidewalks and unencumbered walkways on key pedestrian corridors.

6) Create continuous, direct, safe, and convenient transit and pedestrian linkages, including walkways between principal entrances of buildings and to adjacent lots.

7) Provide clearly delineated pedestrian paths through surface parking to transit stations.

8) Provide bicycle parking and encourage bicycle amenities, such as bicycle repair, rental, and cyclist comfort stations.

Mobility – Parking

1) Introduce creative parking strategies and reduce parking requirements over time with the option of implementing new parking requirements as land use in the station area becomes increasingly integrated with transit service.

2) Develop areawide parking strategies through a coordinated approach to vehicular parking for all development within the station area.

3) Provide park and ride lots where appropriate.

4) Discourage large surface parking lots within ¼ mile of suburban center, town center, and neighborhood center transit stations, especially those greater than 2 acres.

5) Require well-designed structured parking decks within transit station areas, when and where appropriate.

6) Promote shared parking facilities.

7) Require large-scale site plans or master plans to include a parking plan to reduce the number of spaces over time as the transit system evolves and land use becomes increasingly integrated with the transit system.

Mobility – Street Network

1) Accommodate local and regional multimodal connections for all types of vehicles, including trains, buses, bicycles, cars, ships, boats, aircraft and taxicabs.

2) Design streets to be multi-modal, with emphasis on pedestrian and bicycle safety, access and circulation.

3) Design an interconnected street network to provide connections to existing or planned streets at intervals no greater than the appropriate maximum length for the station type.

4) Provide pedestrian and bicycle networks to connect dead-end streets and pass through long blocks.

5) Incorporate traffic calming and context sensitive design into street designs, as appropriate.

Community Design

1) Require urban design that creates a sense of place and enhances the community identity of station areas and makes them attractive, safe and convenient places.

2) Require application of livable community design and development standards, such as those standards identified in the policies supporting Goal 2 of this element, to create active places and communities where people feel a sense of belonging and ownership.

3) Encourage outdoor dining and entertainment venues where appropriate.

4) Require engaging, high quality public spaces and amenities around transit stations that function as organizing features and gathering places for the neighborhood. Encourage surrounding buildings to be oriented toward these public spaces.

5) Incorporate current best practices for sustainable technologies for station design and operations, such as in lighting, signage, audio/visual, cooling, waste management, landscape and stormwater systems.

6) Develop graphic wayfinding systems within station areas to assist visitors and tourists with navigation.

7) Make safety, with the emphasis on pedestrian, bicycle and Americans with Disabilities Act (ADA) access, a key focus of the TOD development strategy.

8) Design should appreciate and respond to the challenges of the Florida climate through building orientation and design, and through design features and amenities that protect the pedestrian from rain and sun.

9) Consider building design guidelines based on street types.

10) Provide building entrance locations that minimize the walking distance between the transit station and entrance to the building.

11) Provide clearly delineated pedestrian paths through surface parking lots to transit stations.

12) Bury utilities underground, when resources and opportunities allow.

Community Quality and Health

1) Implement TOD development strategies as a means to improve air quality and contribute to improved health benefits through reduction of vehicular air pollution emissions and increased pedestrian and cycling opportunities.

2) Implement TOD development strategies to promote energy efficient land use patterns and sustainable building design, the reduction of greenhouse gas emissions, and preserve or improve energy conservation features, such as mature tree canopy and use of native landscaping.

1.5.12. Policy: Station area plans and the County's land development regulations may establish a base residential density or intensity of use below the maximum allowed on the Future Land Use Map and require that a project within an approved station area provide public benefits and amenities that support one or more of the objectives listed in Objective 1.3 in order to exceed this base density or intensity. Pinellas County would determine what public benefits and amenities would be acceptable for receiving additional development rights above an established base, and the extent of those additional development rights.

1.5.13. Policy: Station area plans and the County's land development regulations may require that development above an established base residential density or intensity of use within an approved station

area rely upon the transfer of development rights from other properties to the subject property or properties.

1.5.14. Policy: No increase in the maximum permitted density on the Future Land Use Map shall be allowed for any portion of a station area located within the coastal high hazard area or the coastal storm area.

1.6. Objective: Pinellas County shall annually review, and amend as necessary, land use and development code provisions which restrain development and redevelopment in areas such as hurricane velocity zones and flood-prone areas to comply with the most recent standards of the National Flood Insurance program and all other applicable federal and state regulations, including any relevant findings derived from interagency hazard mitigation reports, in order to protect property and the health, safety and welfare of all residents.

1.6.1. Policy: Development or redevelopment in storm impact areas shall be restricted based upon the Natural Disaster Planning objectives and policies listed in the Coastal Management Element. The policies associated with those objectives shall be consistent with the criteria in the National Flood Insurance Program, and the County's Flood Damage Prevention and Flood Plain Management provisions of the Land Development Code.

1.6.2. Policy: The Land Development Code provisions regulating development or redevelopment in flood-prone areas shall be reviewed and amended as necessary should the criteria in the National Flood Insurance Program be modified.

1.6.3. Policy: The Local Planning Agency shall review those interagency hazard mitigation report recommendations addressing the elimination or reduction of land uses that are susceptible to damage by natural hazard, and shall recommend to the Board any changes to the Future Land Use Map and/or Plan policies considered critical to reducing, or mitigating, such hazard.

1.7. Objective: The LPA of the Board of County Commissioners shall identify existing land uses that are inconsistent with characteristics of the surrounding area on a case by case basis or through the completion of specific area studies.

1.7.1. Policy: Pinellas County’s program for eliminating or reducing these inconsistent land uses shall be based upon the regulations for nonconforming uses contained in the Pinellas County Land Development Code and any other applicable ordinances which may be developed.

1.7.2. Policy: By December 2008, Pinellas County shall have completed an assessment of the nonconforming use provisions within the Land Development Code and submit recommended amendments to the

Board of County Commissioners for updating the Code based on this assessment and prior Board direction. This assessment shall also include mobile home parks whose existing density exceeds that allowed by the Future Land Use Map and/or the Zoning Atlas.

1.8. Objective: Pinellas County shall continue to implement future land use policies that restrict the proliferation of urban sprawl at a density which is not compatible with support facilities.

1.8.1. Policy: The County shall continue to utilize a maximum density of 0.5 unit per gross acre in the northern portion of Planning Sector 2 as a mechanism to contain urban sprawl and protect the County's wellfields.

l.8.2. Policy: Within the constraints imposed by approved major projects and developments of regional impact, the Future Land Use and Quality Communities Element for Planning Sector 2 shall continue to maintain a gradient of decreasing residential densities from west to east and from south to north within the Sector.

1.8.3. Policy: The Board shall continue to pursue acquisition of open space and environmentally sensitive areas.

l.8.4. Policy: The Board shall continue to designate environmentally sensitive areas as Preservation or Preservation-Resource Management on the Future Land Use Map.

1.9. Objective: Through the application of innovative land development regulations the County will support planned residential developments and mixed land use development techniques which include intensity and use characteristics designed to make these developments more liveable and compatible with the natural environment.

1.9.1. Policy: The Board shall continue to utilize its innovative development regulations and staff shall continue to examine innovative techniques used elsewhere for incorporation into the Board's planning and regulatory program.

1.10. Objective: The scenic/non-commercial corridor policies adopted in the Comprehensive Plan shall continue to be enforced to preserve the scenic/non-commercial designations approved by resolution by the Board of County Commissioners for specific transportation corridors, and to protect their traffic carrying capacity.

1.10.1. Policy: Land uses along designated scenic/noncommercial corridors shall be managed to protect the traffic carrying capacity and the scenic nature of these roadways.

1.10.2. Policy: Low density residential development (0-5 units per acre) shall be the preferred land use along designated scenic/noncommercial corridors with the intent of keeping residential densities as low as possible within that range.

1.10.3. Policy: If improvements, such as a major capacity expansion to a roadway within a scenic/non-commercial corridor, or other changes within the corridor are determined to render low density residential use as untenable, then nonresidential Future Land Use Map (FLUM) categories may be considered under the following conditions:

a. the proposed category is compatible with the existing delineation of surrounding FLUM categories and the existing land use pattern;

b. the offsite impacts of the proposed category are compatible with, and will not adversely affect, existing and planned uses surrounding the subject site and within the corridor; and

c. the density/intensity of the proposed category is consistent with the intent of Objective 1.10 and policies 1.10.1 and 1.10.2. of this element.

1.10.4. Policy: Through application of the County Land Development Code, Pinellas County will ensure that development and redevelopment is consistent with the desire to preserve, and where possible, enhance the scenic vistas along designated scenic/noncommercial corridors.

1.10.5. Policy: The County shall coordinate with municipalities on implementation of the scenic/noncommercial corridor policy on County-operated facilities.

1.11. Objective: Pinellas County shall implement its land use policies in a manner that clearly defines the future land use categories and the regulations pertaining to them that manage growth in Pinellas County.

1.11.1. Policy: Land use categories shall be defined with enough detail to minimize internal conflict among uses and to provide precise indications of the level of development for facility and services planning.

1.11.2. Policy: Zoning, signage, subdivision, and other existing County land development regulations that are discussed in any element of the *Pinellas County Comprehensive Plan* or have been approved by the Board of County Commissioners shall be consistent with the Plan and include additional regulations that are specified by and based upon the Plan.

1.11.3. Policy: Pinellas County shall continue to use the Countywide Sign Ordinance as the basis for County regulations pertaining to signs to meet the safety, environmental, and aesthetic needs of the County.

1.12. Objective: Pinellas County shall promote the location of community or neighborhood commercial development within centers in order to achieve optimal land use relationships, avoid commercial intrusion and impacts into established neighborhoods, achieve compatibility with traffic movement objectives, minimize air pollution, and serve the immediate retail shopping needs of limited or defined geographic areas.

1.12.1. Policy: Pinellas County shall restrict the proliferation of strip commercial development in areas where it has not yet become established as the predominant commercial land use pattern.

1.12.2. Policy: Pinellas County shall permit commercial development in a manner that will maintain the economic vitality of recognized and established commercial areas.

1.12.3. Policy: By December 2009, Pinellas County shall consider amendments to its Land Development Code to support redevelopment of commercial corridors and employment corridors within unincorporated Pinellas County that are consistent with the livable community concepts espoused in Goal 2 of this element and its supporting objectives and policies.

1.13. Objective: The Future Land Use Map and land use policies shall define the location, type, and intensity of industrial activities (including manufacturing, services, warehousing, and trade) that may be operated in order to diversify the County's economy and provide a broad range of employment opportunities to the County's residents.

1.13.1. Policy: The Land Development Code shall continue to be reviewed and amended as necessary to restrict the impacts of industrial development upon surrounding land uses and the natural environment. A review of the Land Development Code will evaluate the efficacy of various techniques such as minimum setbacks and buffering requirements, groundwater protection measures, distinguishing between where industrial activity is allowed either as a permitted or a conditional use, restrictions on certain industrial activities occurring outdoors, and the application of performance standards.

1.13.2. Policy: Pinellas County will evaluate recommendations in the Industrial Lands Study, upon its completion in 2008, and develop recommended amendments to the Pinellas County Comprehensive Plan and land development regulations based on the Study's results. The proposed amendments will be submitted to the Board of County Commissioners no later than June 2009, and will include

recommendations on retaining sufficient acreage with appropriate future land use designations to accommodate the anticipated employment growth, by type, within the County.

1.13.3 Policy: Pinellas County will prioritize coordination with other jurisdictions and the Metropolitan Planning Organization/Pinellas Planning Council to determine appropriate increases in development potential within Target Employment Centers designated on the Countywide Plan Map, and amend the Pinellas County Comprehensive Plan accordingly. [16-18]

1.14. Objective: Pinellas County will encourage a land use pattern that provides opportunities for employment in proximity to housing and that more effectively balances the number of jobs with the number of housing units within different areas of the County.

1.14.1. Policy: As a means to reduce vehicle miles traveled and vehicle hours traveled for work trips, Pinellas County shall take steps to encourage the creation of housing and employment in proximity to each other where analysis of existing conditions and future growth reveals a significant disparity between the number of housing units and jobs.

1.14.2. Policy: In association with development of the second phase of the Economic Element, Pinellas County will identify specific policies and/or actions that would encourage additional employment in Planning Sectors 1 through 6 so that projected employment growth would be more comparable with projected population growth in these sectors.

1.14.3. Policy: Mixed-use projects and mixed-use areas that contain both residential units and jobs aligned with the employment objectives in the Economic Element shall be supported at appropriate locations as determined by the locational criteria for mixed-use development and other pertinent policies within this Plan.

1.15. Objective: Recognizing the economic significance of the mid-county Gateway Area, Pinellas County shall consider the recommendations in the *Gateway to the Future Plan* approved by the Board of County Commissioners on July 12, 2005 to position the Gateway Area to achieve maximum countywide benefit and as an opportunity to model sustainable planning practices and design concepts.

1.15.1. Policy: Pinellas County will continue to assess, and take part in, opportunities to collaborate on land use, transportation and watershed planning for the Gateway Area, including with the cities of St. Petersburg, Largo, and Pinellas Park.

1.15.2. Policy: Pinellas County will coordinate both internally and with affected jurisdictions and agencies in implementing recommendations contained in the *Gateway to the Future Plan.*

1.15.3. Policy: Redevelopment of the St. Pete-Clearwater International Airport property known as the AIRCO Golf Course is subject to approval by the Federal Aviation Administration and will be consistent with the objectives of the St. Pete-Clearwater International Airport Master Plan. [16-18]

1.15.4. Policy: Non-aviation related uses will be oriented toward the eastern and southern portions of the AIRCO property, and will be undertaken in a manner that provides appropriate buffering for surrounding land uses and that contributes to the economic, employment and sustainability goals for the County as a whole, as defined in the individual Elements of the Pinellas County Comprehensive Plan, and consistent with the objectives of the St. Pete-Clearwater International Airport Master Plan. [16-18]

1.15.5. Policy: The maximum allowable development permitted on the southerly 10 acres (approximately) of Parcel No. 34/29/16/00110/000/0023 that is designated as **Commercial General** on the Future Land Map is

AIRCO Golf Course Property		
Southerly Portion of Parcel No. 34/29/00110/000/0023		
Land Use Designation: Commercial General (approx. 10 acres)		
Type of Use	**Max Sq. Ft.**	**Max. Hotel Rooms**
Transient Accommodations with conference facilities	-	250
Stand-alone restaurant	14,000	

1.15.6. Policy: The maximum allowable development permitted on the northerly 118 acres (approximately) of Parcel No. 34/29/16/00110/000/0023 that is designated as **Employment** on the Future Land Map is [16-18]

AIRCO Golf Course Property		
Northerly Portion of Parcel No. 34/29/00110/000/0023		
Land Use Designation: Employment (approx. 118 acres)		
Type of Use	**Max Sq. Ft.**	**Max. Acres**
office	199,000	-
light industrial/flex	720,000	-
aviation uses	-	45

1.15.7. Policy: Prior to issuing any permits to redevelop the 10 acre portion of the AIRCO property in accordance with Policy 1.15.5 and designated as Commercial General on the Future Land Use Map, a transportation management plan must be submitted to, and approved by, the County Administrator, following a public hearing, addressing access from Ulmerton Road to the 10 acre commercial project site, including provisions, and a schedule, for any required roadway, non-vehicular, intersection or other access-related improvements.

1.15.8. Policy: Approval of a Master Development Plan, by the Board of County Commissioners at a public hearing, for the approximately 118 acre portion of the AIRCO property designated as Employment on the Future Land Use Map, including any adjacent property (ies) that might be included in the master development proposal, is required prior to issuing permits for any office and/or light industrial/flex development on the subject site. Aviation uses will be subject to another approval process and are not included in the Master Development Plan. At a minimum, the Master Development Plan will address the following: [16-18]

- Identification of the affected roadway network, planned mobility onsite and off for different travel modes (including roads, bicycle, pedestrian, and public transit), and required improvements to the transportation network, including the responsible entity and funding plan for those improvements.

- Water quality improvements and regional retention and treatment options.

- Appropriate buffering of the office and light industrial development from surrounding uses, particularly nearby residential uses.

- Incorporating livable community and environmental strategies that promote energy efficiency, provide choices in travel modes, and respond to water quality and other environmental concerns.

- Availability of adequate wastewater and potable water service and facilities.

- The ability to convert the office component to light industrial/flex space or vice versa as long as the resulting traffic impacts after the conversion do not exceed the traffic impacts associated with the development allocation specified in Policy 1.15.6 above.

- Determine the development rights associated with the existing water bodies located on the 118-acre subject site.

1.16. Objective: Pinellas County will implement its Brownfield Program to maximize the beneficial reuse of vacant and abandoned properties in a manner that contributes to economic vitality, community revitalization, community health, and environmental improvement.

1.16.1. Policy: Pinellas County will implement its Brownfield Program in both the unincorporated County and within those municipalities who wish to participate in the County's program.

1.16.2. Policy: The Pinellas County Brownfield Program will work with public and private entities, landowners and purchasers to assess the impacts of previous site uses and to facilitate cleanup of eligible properties in order to return them to a productive economic purpose and desirable community use.

1.16.3. Policy: The Pinellas County Brownfield Program will utilize, and leverage, private, local, state and federal funding resources and incentives to recycle Brownfield properties for a beneficial economic and community purpose.

1.16.4. Policy: The Pinellas County Brownfield Program will facilitate the clean-up and beneficial reuse of contaminated properties and remove them as a threat to community health and safety.

1.16.5. Policy: The process of designating a Brownfield under the County's Brownfield Program will include a review for consistency with the principles, goals, objectives and policies of the Pinellas County Comprehensive Plan.

1.17. Objective: Pinellas County shall preserve and seek to enhance established community values, a community's unique identity, and their social support structure, and will make decisions that are in concert with a community's established vision for their future.

1.17.1. Policy: As appropriate, and as resources allow, the Capital Improvements Element shall include any public facilities that have been identified to implement this objective.

1.17.2. Policy: Consistent with the purpose and intent of the Comprehensive Plan, Section 134-82(c) of the Land Development Code, Pinellas County shall make decisions, both unincorporated and countywide, that do not detract from the established community identity and social support structure but, instead, serve to preserve and enhance that identity and structure.

1.17.3. Policy: Pinellas County may amend the Future Land Use Map Series to identify a local community with a Community Overlay, and include in the Future Land Use and Quality Communities Element complementary guiding principles, policies, strategies or other appropriate provisions that are specific to that community and that further the achievement of Objective 1.17 within that community. The complementary principles, policies, strategies, or other provisions shall not conflict with or modify the characteristics, standards, criteria, and definitions contained in the Future Land Use Category Descriptions and Rules of the Pinellas County Comprehensive Plan, shall be developed so that the Pinellas County Comprehensive Plan remains internally consistent, and shall be initiated through a process approved by the Local Planning Agency.

Alderman Residential Rural Community Overlay

1.17.4. Policy: Pinellas County recognizes the significant contribution that the rural character of the Alderman Residential Rural Community makes toward providing a diverse mix of neighborhoods in urbanized Pinellas County; therefore, decisions by Pinellas County and its representatives will take into consideration the need to preserve and support the Community's rural character.

1.17.5. Policy: To help preserve the Alderman Residential Rural Community's rural character, a residential density of no greater than 0.5 units per acre shall be the preferred land use on the Pinellas County Future Land Use Map; therefore, increases in density will be discouraged within the Alderman Community Overlay.

1.17.6. Policy: An application to amend the Pinellas County Future Land Use Map (FLUM) for a parcel of land within the Alderman Residential Rural Community Overlay to increase the permitted residential density above 0.5 residential unit per acre shall require a corresponding amendment to the Future Land Use Map series within the Pinellas County Comprehensive Plan to remove the subject parcel from the Alderman Residential Rural Community Overlay. A proposed

amendment to the boundaries of the Alderman Residential Rural Community Overlay and a proposed amendment to increase residential density within the Overlay shall not be considered small scale development amendments as described in s.163.3187(1)(c) of the Florida Statutes.

Tierra Verde Community Overlay

VISION: Tierra Verde is a beautiful, tranquil, family oriented residential island community, surrounded by natural lands, the Gulf of Mexico and Tampa Bay. Small businesses and commercial uses serve to complement and support island residents. The surrounding waters support a thriving recreational boating industry with marinas and boat access points that are complementary to the character and scale of the community.

1.18. Objective: The Board of County Commissioners will utilize a Community Overlay to define and recognize Tierra Verde as a cohesive community and their decisions will support the local vision, community character, and natural environment.

1.18.1. Policy Land use, zoning and conditional use decisions by Pinellas County that affect properties in Tierra Verde should be compatible with the Island's established residential development pattern, allow for recreational boating opportunities where consistent with the Island's character, and/or enhance the viability of local businesses that serve the community.

1.18.2. Policy: The quality of life and residential character of the Tierra Verde community will be protected by retaining sufficient acreage on the Future Land Use Map for businesses that serve the local residents, by supporting recreational boating, by establishing community gathering places, and by respecting and protecting the natural environment that surrounds the Island.

1.18.3. Policy: All development on the Island should be compatible with the community and surrounding residential properties, and fit within the height, scale and criteria of current development regulations.

1.18.4. Policy: The siting of boat access facilities and services on the Island will be consistent with the siting criteria included in the Coastal Management Element of the Pinellas County Comprehensive Plan.

1.18.5. Policy: Pinellas County will consider Tierra Verde's coastal vulnerability when making land use, zoning and conditional use decisions in the community.

1.18.6. Policy: Pinellas County will work to enhance communication between the County and Tierra Verde businesses and residents.

1.19. Objective: The natural surroundings of Tierra Verde will be preserved and enhanced as they provide a vital coastal habitat function as well as a resource-based recreation function dependant on a coastal location.

1.19.1. Policy: Land use, zoning, conditional use and project decisions by Pinellas County and other agencies will place a priority on the protection of native vegetation, terrestrial and marine habitats and dependent species.

1.19.2. Policy: Pedestrian and bicycling connectivity on the Island, and to connect to points off the island, will be maintained and improved where feasible, as well as opportunities for kayaking and non-motorized water access.

1.20. Objective: Identify and prioritize infrastructure improvements necessary to maintain public safety and quality of life in Tierra Verde.

1.20.1. Policy: Pinellas County will identify infrastructure improvements that support the Vision for Tierra Verde and include them within the Capital Improvements Element of the Pinellas County Comprehensive Plan and/or in other applicable implementing plans or programs,

1.20.2. Policy: In determining priorities for infrastructure improvements Pinellas County will consider input from the community.

Ozona Community Overlay

1.21. Objective The Board of County Commissioners will adopt a Community Overlay to define and recognize Ozona as a distinct Pinellas County community.

1.21.1. Policy: The following statements define the distinct characteristics and features of the Ozona Community that have been identified by the Community and are recognized by the Board:

- Ozona has a history that dates back to the 1880s. Ozona was one of the original communities in Pinellas County. Evidence of this remains with not only a number of buildings, structures, and features in the community but also with many artifacts that have been preserved or discovered over the years. This heritage is valued not just because the singular value of each feature but also due to their composite and cumulative value as the origin and heritage of the community. It is the intent that these historic features be preserved, enhanced and, where possible, replicated.

- Ozona has many environmental features which include coastal waters and indigenous marine life, remnants of a natural shoreline with its associated vegetation and wildlife, inland wetlands and uplands with their associated vegetation and wildlife, and a large bird population.

These features are woven into the development fabric of Ozona as an intrinsic part of the community. It is the intent that these environmental features be preserved and enhanced not only for the benefit of the residential community but also to support environmental diversity now and for the future.

- Ozona has a strong sense of community identity reflected in the general atmosphere and neighborly connectedness. There are many activities in the community that assist and further a sense of community. Since the community is composed of the people within it, it is important to provide opportunities for people to maintain their sense of community and to maintain their relationships. Community features such as activity centers and points of interest further these relationships. It is the intent to ensure that community features such as the post office, the Village Hall, Pinellas Trail, the elementary school, neighborhood gathering points, friendly developed areas, safe walking roadways, and vantage points to appreciate the environment are fostered and supported.

- Ozona in recent years has become well established as a livable community. This was initially the result of the County Commission passing a resolution establishing Ozona as a golf cart community. That resolution established guidelines that not only permitted golf carts but defined a related set of safety procedures that the community has embraced. This form of transportation is very compatible with the pedestrian and bicycle friendly environment that also exists within the community thereby making Ozona a livable community. It would be the intent to continue to support these livable community aspects within Ozona.

- Ozona demonstrates a unique character of development where there is a diverse mix of residential and commercial activities and land-use, that has evolved in a compatible way. The businesses in their recognized areas are considered community assets which benefits and provides commercial opportunities to people without the need to leave the community. Marinas provide an ambience that is consistent with the waterfront heritage of Ozona. Residential development has developed in a low intensive character that is accepted in the community as the preferred development pattern. It is the intent to continue these compatible relationships between residential, commercial, and various land use types within Ozona.

East Lake Tarpon Community Overlay

VISION: East Lake Tarpon is a beautiful, predominately family-oriented residential area in the unincorporated area of northern Pinellas County. It is generally bordered to the west by Lake Tarpon, to the east by the Brooker Creek Preserve, to the north by the Pasco County boundary and to the south by Tampa Road, excluding the City of Oldsmar. Small businesses and limited commercial uses serve to support the residents of the community. Lake Tarpon to the west

provides recreational boating activities and the community's natural lands provide many passive resource-based recreation opportunities to the residents. This area is known for its quiet, scenic neighborhoods of unique residential communities and limited small businesses providing a safe and fun place to grow up. [12-13]

1.22 Objective: The Board of County Commissioners will utilize a community overlay to define East Lake Tarpon as a cohesive community and their decisions will support the local vision, community character and natural environment. Small businesses support the residential character of the community. Maintaining the community's quality of life, low density residential character, and expansive open spaces is to be considered before any zoning changes or increased densities are considered. [12-13]

1.22.1 Policy Land use, zoning and conditional use decisions by Pinellas County that affect properties in East Lake Tarpon should be compatible with the established residential development pattern and passive recreation areas, allow for recreational boating, fishing and water activities consistent with the character of East Lake Tarpon, and/or enhance the viability of local businesses that serve the community. [12-13]

1.22.2 Policy The quality of life and the residential character of the East Lake Tarpon community will be protected by retaining sufficient acreage on the Future Land Use Map (FLUM) for businesses that serve the local residents, by supporting local boating, by establishing local gathering places, and by protecting the natural environment that defines the character of the community. [12-13]

1.22.3 Policy All future development in East Lake Tarpon should be compatible with the community and fit within the community's characteristic land use types, density, height, and scale. [12-13]

1.22.4 Policy Pinellas County will consider the residential and scenic use of East Lake Tarpon when making land use, zoning and conditional use decisions in the community to preserve the green space that helps define the quality of life. [12-13]

1.22.5 Policy Pinellas County will work to enhance strong communications between the County and East Lake Tarpon businesses and residents. [12-13]

1.22.6 Policy The natural areas within East Lake Tarpon will be protected or enhanced, as they provide boating and resource-based recreation functions for the residents who choose to live near these scenic lands. [12-13]

1.22.7 Policy Land use, zoning, conditional use and project decisions by Pinellas County and other agencies will place a priority on the protection of

natural land resources, lake and estuary habitats and dependant species. [12-13]

1.22.8 Policy The County will strive to maintain the scenic corridor designation of East Lake Road (County Road 611) and Keystone Road (County Road 582), and consider this residential-oriented scenic corridor designation when evaluating land use and zoning changes within the corridors or expansion of commercial zones in the East Lake Tarpon area. [12-13]

1.23 Objective Identify and prioritize infrastructure improvements necessary to maintain public safety and quality of life of East Lake Tarpon. [12-13]

1.23.1 Policy Pinellas County will identify infrastructure improvements that support the Vision for East Lake Tarpon and include them within the Capital Improvements Element of the Pinellas County Comprehensive Plan and/or in other applicable implementing plans or programs, if financially feasible. [12-13]

1.23.2 Policy In determining priorities for infrastructure improvements, Pinellas County will consider input from the community. [12-13]

Crystal Beach Community Overlay

VISION: Crystal Beach is a distinct Pinellas County Community. The following characteristics help define its history, character and natural environment, demonstrating that the Community is unique and worthy of special recognition and consideration by the Board of County Commissioners: [16-55]

- Crystal Beach is a small, largely residential, unincorporated area in northern Pinellas County. The Crystal Beach Community Overlay Boundary is generally bordered to the west by St. Joseph's Sound, to the east by U.S. Alternate 19 North, the Pinellas Trail, Avery Bayou and Sutherland Bayou, to the north by Oceanview Avenue and to the south by Sutherland Bayou and St. Joseph's Sound. (For a map depicting the Crystal Beach Community Overlay Boundary, refer to Exhibit A of Ordinance No. 16-55.)
- Crystal Beach is one of the original communities in Pinellas County with homesteading beginning in the 1850's. In 1912, A.D. Powers and J.D. Hanby platted a traditional grid street layout, which included a main boulevard and alleyways that promote connectivity, along with abundant natural features such as Live Oak Park and a public waterfront path along St. Joseph’s Sound. This original layout contributes to Crystal Beach being a pedestrian, bicycle and golf cart-friendly Community with an “Old Florida” feel that lives on to this day.
- Foundational to the character of Crystal Beach is the long-established, paved and shell pathway and public area along St. Joseph's Sound, bordered by mangroves. This path (referred to as Gulf Shore Park by Powers and Hanby) allows the public - both residents of and visitors to Crystal Beach—to enjoy peaceful walks along the water.

- The area's many environmental features include coastal waters, indigenous marine life, Chautaugua Lake fed by natural springs, and a largely unsullied natural shoreline along St. Joseph's Sound and into Sutherland and Avery Bayou. It contains wetlands and uplands and their associated vegetation and wildlife, as well as a large population of native birds and waterfowl. Mangroves border the unpaved portion of the public path that runs along the Sound.
- There is a strong sense of community in Crystal Beach. Powers and Hanby's original vision of a quiet place where people could relax, fish, walk, and "enjoy life and talk to neighbors" is a reality today.

1.24 Objective: The Board of County Commissioners will utilize a Community Overlay to define and recognize Crystal Beach as a cohesive community and as a means to identify and support the local vision, community character and natural environment.

1.24.1 Policy: Land use, zoning, and conditional use decisions that affect properties located within the Crystal Beach Community Overlay should be compatible with the Community's primarily low density residential development pattern.

1.24.2 Policy: Pinellas County will consider the historical and functional integrity of the Revised Plat of Crystal Beach (which resulted in largely low-density residential development in a traditional grid pattern layout with a main boulevard and alleyways that promote connectivity) when making land use, zoning, conditional use and site plan decisions for properties located within the boundaries of the Revised Plat of Crystal Beach. The boundaries of the Revised Plat of Crystal Beach are defined as Georgia Avenue to the south, Alternate U.S. Highway 19 to the east, lots on the north side of Avery and Ohio Avenues to the north, and Gulf Drive to the west. (The Revised Plat of Crystal Beach shall be considered a subset of the Crystal Beach Community Overlay, and Policy 1.24.2 shall only be applicable to properties located within the boundary of the Revised Plat of Crystal Beach as described herein. The Crystal Beach Community Overlay Boundary as described in the Vision and as depicted in Exhibit A of Ordinance No. 16-55 is applicable to Policies 1.24.1, 1.24.3. 1.24.4, 1.24.5, 1.24.6 and 1.24.7.)

1.24.3 Policy: Decisions by Pinellas County and other agencies that affect the use and development of land located within the Crystal Beach Community Overlay will place a priority on the protection of the recreational spaces and assets, natural and historic resources, and the natural environment, including mangrove and other estuary habitats and the dependent species associated with them.

1.24.4 Policy: A coastal shoreline path, comprised of the paved and unpaved public right-of-way along St. Joseph's Sound from Ohio Avenue to

Georgia Avenue, has existed as a public amenity since Crystal Beach was originally platted and represents an integral and defining public feature of the Community, providing public access to the scenic waterfront. County staff will work with the County's Historic Preservation Board and the Crystal Beach Community and the owners of the private property along the coastal shoreline path to explore preservation of the path as a landmark site as allowed under the County's historic preservation ordinance in recognition of its significance to the Community and the County. It is not the intent of this policy to impact private property rights.

1.24.5 Policy: Live Oak Park, as depicted on Exhibit A of Ordinance 16-55, was set aside in the early 1960s to serve as an important gathering place for the Community and will be protected for its historic, environmental and community value. Pinellas County and other agencies will consider these factors when making any decisions affecting Live Oak Park.

1.24.6 Policy: The County is supportive of the Community's desire to preserve its coastal character through the use of native landscaping and will partner with the Community where practical and feasible on identifying ideas and locations for beautification of public right-of-way, particularly along Crystal Beach Avenue.

1.24.7 Policy: Commercial land uses within Crystal Beach along Alternate U.S. Highway 19 are appropriate and compatible with the residential areas of Crystal Beach. Commercial businesses along this state highway are an asset to Crystal Beach residents, and it is the intent to retain this pattern of residential and commercial development in the Community.

1.25 Objective Pinellas County shall continue to pursue an overall beautification program for landscaping the County's roadway corridors and shall provide funds for implementing this program.

1.25.1 Policy Pinellas County shall continue implementation of a landscaping program for the public rights-of-way along the arterial and collector roadways of the County. This program shall use native and drought-tolerant trees and plants where feasible.

1.25.2 Policy Pinellas County's overall beautification program shall further other applicable objectives and policies of the Comprehensive Plan as they relate to such goals as water conservation and the use of native and drought-tolerant vegetation.

in all residential communities through local land development regulations.

2.4.8. Policy: Local setback requirements should allow porch easements in subdivision design and promote living areas of the structure that are closer to the street than garage areas.

2.4.9. Policy: Encourage single family attached and multi-family developments to be designed to include orientation of the front door to a neighborhood sidewalk and street.

GOAL THREE: PINELLAS COUNTY'S PLAN SHALL PROMOTE A BALANCED RELATIONSHIP BETWEEN THE NATURAL ENVIRONMENT AND DEVELOPMENT.

3.1. Objective: The Pinellas County Land Development Code shall be applied in a manner that ensures compatibility between the Future Land Use Map, existing environmental conditions and constraints, as well as environmental management goals.

3.1.1. Policy: Environmentally-sensitive lands which are designated by the Preservation land use category on the Future Land Use Map, shall be protected through the application of existing land development regulations or the development of new regulations.

3.1.2. Policy: Designated preservation areas shall be retained as undeveloped land suitable for passive recreation, conservation, or aesthetic uses to provide opportunities to appreciate the natural environment.

3.1.3. Policy: The natural environment shall be both preserved and enhanced by a sensitive land use program which will include adherence to, but not be limited to, the following chapters of the Land Development Code: Habitat Management and Landscaping; Floodplain Management; Flood Damage Prevention; Site Development and Platting; Comprehensive Zoning Regulations; and any other applicable regulations that deal with on-site environmental concerns but also with surrounding land uses.

3.1.4. Policy: The Local Planning Agency of the Board shall continue to recommend provisions within the zoning regulations for retaining open space and preserving groundwater recharge characteristics in both developed and developing areas of the County.

3.2. Objective: Pinellas County shall continue its proactive program for managing the impacts of development upon the County’s natural resources (including wetlands, uplands, and the marine environment), and shall continue to ensure that these resources are successfully integrated into the urban environment such that the overall function and viability of these areas is maintained, or where practical, enhanced or restored.

3.2.1. Policy: Significant wetlands and twenty-five year floodplains shall continue to be protected and conserved by their existing designations of Preservation on the Future Land Use Map (FLUM), as adopted by the Board and based upon the comprehensive assessments performed by Pinellas County to evaluate, and subsequently identify, those wetland and floodplain resources with significant value or function.

3.2.2. Policy: Where development activity results in an adverse impact to wetlands, or unique ecosystems as determined by Pinellas County, mitigation by the developer shall be considered as one means to compensate for the loss of natural system function when the impact is unavoidable.

3.2.3. Policy: Pinellas County shall continue to use a variety of methods for protecting the County's open space areas and natural resources (including wetlands) which include, but are not limited to, the acquisition of open space and environmentally sensitive areas, allowing the Transfer of Development Rights (TDRs), density averaging, and requiring upland buffers adjacent to wetlands and other natural environments identified by Pinellas County.

3.2.4. Policy: Pinellas County shall continue to protect the natural resources of the County through, at a minimum, the application of the Pinellas County Stormwater Management Plan and the Florida State Implementation Plan addressing air quality, as well as enforcement of the Flood Damage Prevention, Flood Plain Management, Habitat Management and Landscape, and the Pinellas County Water and Navigation Control Authority sections of the Land Development Code, and the Future Land Use Map.

3.2.5. Policy: Shorelines shall be protected by preservation land use designations, aquatic preserves, development setbacks, public acquisition, or other measures as deemed necessary.

3.2.6. Policy: Natural drainage features/areas shall be utilized where possible as part of the Pinellas County Stormwater Management Plan.

3.2.7. Policy: No development use shall occur over natural water areas unless so indicated as a recognized use on the Future Land Use Map.

3.2.8. Policy: The potable water system, wellfields, wellheads and aquifer recharge areas shall be protected through ongoing implementation of the County's groundwater protection program; by the County's continued acquisition of environmentally sensitive areas; by permitting in the area east of East Lake Road and north of Keystone Road in the vicinity of the Eldridge-Wilde wellfield only Preservation, Preservation-Resource Management, Recreation/ Open Space, and Residential Rural (0.5 unit per acre) land uses

designations, and institutional uses approved through the County's conditional use or special exception process that are consistent with the very low density characteristics of the area; by regulation of borrow pits, and by prohibiting landfills and additional commercial and industrial land uses within the zones of protection determined by the County's groundwater protection program.

3.2.9. Policy: Natural drainage storage areas shall continue to be preserved by land use provisions.

3.2.10. Policy: Pinellas County shall continue its program of integrated land and water resource planning and management, as exemplified by the commitment to comprehensive watershed studies and the preparation of management plans, by the enforcement of a comprehensive wellhead protection program including land use restrictions, permitting and monitoring criteria, and land acquisition, by ongoing implementation of a multi-faceted water conservation and demand reduction program, by exploring reasonable technologies for water supply, and by the application of Comprehensive Plan policies and land development regulations directed at such things as habitat management and enhancement, promotion of native and drought tolerant plantings, wetland protection, stormwater treatment, and floodplain management.

3.2.11. Policy: Pinellas County shall continue to identify and protect isolated wetlands and other environmentally sensitive vegetative communities and habitats through the site plan process, which includes the application of project-appropriate land development regulations, conservation easement requirements, staff review of pertinent vegetation and habitat information, specific permitting requirements, and field work by development review staff.

3.2.12. Policy: Pinellas County shall continue to participate in efforts, such as those underway by the Tampa Bay National Estuary Program, and via local watershed planning and similar initiatives in response to Policy 2.1.2. in the Natural Resource Conservation and Management (NRCM) Element of this Plan, to identify significant wetland and other habitat areas for protection, restoration and/or enhancement. Staff will periodically review, at a minimum, the maps and related information from the Florida Game and Fresh Water Fish Commission and the Southwest Florida Water Management District to ensure that the most accurate information is being used at all times, and to determine if there are additional significant wetland areas that should be amended to Preservation or Preservation-Resource Management on the Future Land Use Map.

APPENDIX 9
Arthropod Management Plan

ARTHROPOD MANAGEMENT PLAN – PUBLIC LANDS

DESIGNATED BY THE STATE OF FLORIDA OR ANY POLITICAL SUBDIVISION THEREOF AS BEING ENVIRONMENTALLY SENSITIVE and BIOLOGICALLY HIGHLY PRODUCTIVE THEREIN PURSUANT TO SECTION 388.4111, FLORIDA STATUTES

Name of Designated Land: Weedon Island Preserve

Location: Pinellas County

Land Management Agency: Division of Recreation and Parks

Are Arthropod Surveillance Activities Necessary? **Yes** ☒ **No** ☐

If "Yes", please explain: Mosquito breeding occurs in the park in the tidally influenced areas as well as by rains in the picnic areas. Surveillance is required to determine the population of juvenile and adult mosquitoes as well as determining the proper treatment, both pesticide selection and timing.

Which Surveillance Techniques Are Proposed?

Please Check All That Apply:

Landing Rate Counts ☒ **Light Traps** ☐ **Sentinel Chickens** ☐

Citizen Complaints ☒ **Larval Dips** ☒ **Other** ☐ **[below]**

If "Other", please explain:

Primary Targeted Arthropod Species: *Ochlerotatus sollicitans* and *Oc. taeniorhynchus*

Secondary Targeted Arthropod Species: *Culex* and *Psorophora*

Larval Control:

Number of Dips per site: **5**

Percentage of Dips positive which might trigger action: Treat whenever larval mosquitoes found

Are post treatment counts being obtained: **Yes** ☒ **No** ☐

Biological Control of Larvae:

Might Predacious Fish be stocked: **Yes** ☐ **No** ☒

Other Biological Controls that might be used:

Records:

Are Records being kept: **Yes** ☒ **No** ☐

Records Location: **4100 118th Ave N, Clearwater FL**

How Long: At least 3 years, as required by law. Electronic records are part of permanent database.

Method of Application:

(Please Check All That Apply:)

Ground ☒ **Aerial** ☒

Please specify: Ground treatments by backpack spreader/sprayer, FMI pump, B & G hand sprayer.

Aerial larvicide treatments by Bell 47 helicopter.

In the event of public health emergency control, a fixed wing aircraft would be contracted for aerial adulticide.

Material to be used for Larviciding Applications:

(Please Check All That Apply:)

Bti ☒

Bs ☒

Methoprene ☒

Non-Petroleum Surface Film ☒

Other x☑x

If "Other", please specify: Spinosid (Natular products)

Adult Control:

Normal Control Permethrin, Malathion, & Sumethrin, and only in public use areas by ground application.

Public Health Emergency Control Dibrom

Notification:

Via email County Lands Manager for larviciding and adulticiding

Vegetation Modifications:

Will it be necessary to trim or alter vegetation to conduct Surveillance or Treatment?

Brazilian pepper trimming for access for inspection and treatment is allowed.

Mangrove trimming within the state parks must be pre-approved by the Park Manager

Aquatic Vegetation:

None

Land Management Comments:

An annual report of arthropod control activity at Weedon Island Preserve should be submitted to the Pinellas County Environmental Lands Manager by December 31.

Arthropod Control Agency Comments:

Signature of Lands Manager or Representative	**Date** 11/02/2021
Signature of Mosquito Control Director / Manager	**Date** 11/02/2021

APPENDIX 10
Friends of Weedon Island Agreement

OPERATING AGREEMENT BETWEEN
PINELLAS COUNTY, FLORIDA
AND
FRIENDS OF WEEDON ISLAND, INC.

THIS AGREEMENT, made and entered into this 20 day of February, 2019 by and between Pinellas County, a political subdivision of the State of Florida, located at 315 Court Street, Clearwater, FL 33756, hereinafter referred to as the "County," and Friends of Weedon Island, Inc., a Florida nonprofit corporation, with its in principal place of business located at 1800 Weedon Drive NE, St. Petersburg, FL 33702, hereinafter referred to as the "Friends."

WITNESSETH:

WHEREAS, Section 90-18 of the Pinellas County Code (the "Code") requires that Citizen Support Organizations such as the Friends conducting operations on park/preserve lands enter into written agreements with the County;

WHEREAS, the County and the Friends have a long-standing, mutually beneficial relationship each party seeks to continue;

WHEREAS, the Friends contribute significant time and funds to enhance Weedon Island Preserve (the "Preserve"), which ultimately provide savings for the County and its taxpayers;

WHEREAS, the County and the Friends share a common vision to further enhance the Preserve's ecosystem, infrastructure, and visitor experience.

NOW THEREFORE, in consideration of the above and mutual covenants contained herein, the parties agree as follows:

A. **Purpose**: The purpose of this Agreement is to provide a basic legal mechanism for the parties to work together to support the Preserve. Nothing herein prevents the parties from executing separate, more specific, agreements toward that end.

B. **Preserve Facilities Use**: The County shall provide and not unreasonably withhold certain reasonable and complementary use of Preserve facilities to the Friends. Such complementary use shall be permitted at the County's discretion, although the County may not unreasonably withhold such use. Such use may include, but is not limited to, meetings seminars, classes, and programs. The Friends shall maintain Preserve facilities it uses in clean, safe, working order at all times. Unless directed otherwise by the County, prior to Preserve closure, the Friends shall return all Preserve facilities it uses during the day to the same condition that the facilities were in when Friends operations commenced on that day. The Friends recognize this obligation to maintain Preserve facilities may involve janitorial work, which shall be performed exclusively by members of the Friends unless otherwise authorized by the County. Any complementary use of Preserve facilities shall be consistent with the County Parks & Conservation Resources Department's (the "Department") Mission and the Friends' Mission. Under no circumstances may the Friends' complementary use of Preserve facilities be utilize for private benefit.

B. **Budget and Expenditures**: The Friends shall have full control over its budget. The County shall not require any expenditure by the Friends, outside of incidental charges to which any member of the public would be subject (e.g., permit applications fees). Notwithstanding the above, the Friends shall expend all funds it generates strictly for the benefit of the Preserve and reasonable administrative and operational costs incurred therewith. The Friends shall utilize reasonable financial procedures to record its revenues and expenditures and update its gross assets and liabilities accordingly.

allocation between the parties for planned Preserve projects. Such a request must be honored by the non-requesting party at least once per year.

E. **Compliance with Applicable Laws**: The Friends agree to fully comply with Chapter 90 of the Code titled "Preserves and Conservation Resources" and all Rules and Regulations issued by the Department, including acquiring County permits, licenses, or other special permissions where required. For example, if the Friends desire to hold a Special Event at any Pinellas County Preserve, it shall first obtain the appropriate permit from the Department under Section 90-9 of the Code. The Friends similarly agree to acquire any additional requisite local, state, or federal permits and shall comply with applicable local, state, and federal law at all times.

F. **Public Records**: The Friends acknowledge that, like the County, information and data it manages pursuant to this Agreement may be public records under Section 119 of the Florida Statutes and agrees to retain, maintain, secure, and produce public records in compliance therewith. The Friends shall not charge any duplication or special service fees authorized under Section 119 of the Florida Statutes to the County should the County request public records from the Friends pursuant to an audit, reporting requirement, or otherwise.

G. **Audit**: Notwithstanding and in addition to the reporting and retention requirements of Sections C and F above, the parties shall retain all records relating to this Agreement for three (3) years after expiration or termination of this Agreement. The County reserves the right to require the Friends to provide a certified financial audit conducted by an independent certified public accountant at the expense of the County at any time.

C. **Annual Reporting Requirements**: In accordance with Section 90-18(c) of the Code, the Friends shall, between September 15 and September 30 of each year, provide the County with an Annual Report containing, at a minimum, a copy of the following: (1) its budget for the upcoming fiscal year; (2) a balance sheet with supporting financial statements for the ending current fiscal year; (3) its most recent Form 990 issued by the Internal Revenue Service for Tax-Exempt Organizations; (4) a statement of its annual goals and objectives; (5) an evaluation of the ending current fiscal year's operations and programs; and (6) a list of its current officers. Further in accordance with Section 90-18(e) of the Code, the County shall subsequently publish the Annual Report on the Department's website.

D. **Intent of Annual Reporting Requirements**: The intent of the reporting requirements listed in Section C above is not to burden the Friends, but rather to ensure transparency with donors and the public. Therefore, reportable items need not be overly comprehensive, but shall be detailed enough to provide donors with: (1) complete assurance that donations have not been misappropriated; and (2) a firm understanding of the ends (projects, activities, services, etc.) that his or her donation may have supported or will support. To assist in preparing its annual report, the Friends may request that the County provide a written overview of Preserve needs and anticipated or completed projects. Such overview shall be provided to the Friends at least once per year within thirty (30) days of request. The parties understand that such overview is a non-binding, living document intended to incorporate new Preserve needs and opportunities as they arise. The County or the Friends may likewise request a meeting with the other party to discuss resource

H. **Term**: This Agreement shall become effective upon execution by both parties and shall expire five (5) years from the effective date, unless terminated earlier in accordance with the provisions herein. The parties may agree in writing to extend this Agreement for any length of time.

I. **Amendment:** Except as otherwise provided herein, this Agreement may only be amended by mutual written agreement of the parties. The parties may amend this Agreement at any time.

J. **Termination:** Either party may terminate this Agreement with cause by providing written notice to the other party; such termination shall be effective immediately upon the other party's receipt of such notice. This Agreement may be terminated with cause if either party fails to fulfill or abide by any term or condition specified herein. Additionally, either party may terminate the Agreement without cause by providing written notice to the other party; such termination shall be effective thirty (30) days from the other party's receipt of such notice. The parties may likewise mutually agree in writing to terminate this Agreement for any reason at any time. As required by Section 90-18(b) of the Code, upon expiration or termination of this Agreement, the Friends shall cease operations at the Preserve and remove any reference to the Preserve or Department from its entity name within fifteen (15) days. Compliance therewith shall not abrogate the right of the County to avail itself of all available legal remedies, nor shall expiration or termination of this Agreement prevent either party from doing same. Nothing herein prevents the parties from entering into a new operating agreement after expiration or termination of this Agreement.

K. **Indemnity:** The Friends shall indemnify, pay the reasonable cost of defense, and hold harmless the County from all suits, actions, or claims of any character brought on account of any negligent act or omission of the Friends, its officers, members, agents, assignees, or contractors excepting only such injuries or damages caused by the negligence of the County.

L. **Friends' Property Damage:** Notwithstanding the indemnification language set forth in Section K above, the Friends shall be responsible for any damage to equipment, property, or materials owned, leased, or possessed by the Friends, its officers, members, agents, assignees, or contractors. The Friends shall not be responsible, however, for damage to equipment, property, or materials that the Friends has donated to the County for which the County has expressly in writing: (a) accepted the donation; and (b) assumed ownership.

M. **Insurance:** The Friends shall at all times during the term of this Agreement comply with the County's minimum insurance requirements set forth in Exhibit A attached hereto. The County may determine that a particular activity requires additional insurance. In this instance, the Friends shall be subject to the same County insurance procedures and requirements that any entity or citizen(s) seeking to conduct such an event, activity, or service is subject. For example, issuance of Special Event Permits by the Department is contingent upon satisfaction of variable insurance requirements based on the size, scope, and nature of the event. The County shall consider any input from the Friends as to appropriate insurance policies and limits for a particular activity.

N. **Assignment and Contracting:** The Friends shall not assign any interest in this Agreement, enter into any subcontract for performance of this Agreement, or contract with any vendor, contractor or subcontractor to operate at the County Friends System, without the prior written approval of the County.

O. **Notice:** All notices, forms, and other written correspondence required under this Agreement or by law shall be in writing and delivered via USPS Certified First Class Mail or e-mail to the following addresses. Notice shall be considered received or delivered as reflected by an e-mail read receipt or certified mail delivery receipt.

As to the County:

Pinellas County Preserves and Conservation Resources Department
Attn: Bureau Director
12520 Ulmerton Road
Largo, FL 33774
pcozzie@pinellascounty.org

As to the Friends:

Friends of Weedon Island, Inc.
Attn: President
1800 Weedon Drive NE
St. Petersburg, FL 33702
David.Bruzek@duke-energy.com

Either party may change its notice information for this Agreement (name/title, mailing address, e-mail address) at any time by providing written notice of same to the other party.

P. **Severability:** The invalidity or unenforceability of any provisions of the Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

IN WITNESS WHEREOF, the parties herein have executed this Agreement as of the date first above written.

PINELLAS COUNTY, FLORIDA

By:_____
Barry Burton, County Administrator

Date:_____

Approved as to Form:

By:_____
County Attorney's Office

FRIENDS OF WEEDON ISLAND, INC.

By: David Bruzek
David Bruzek, President

Date: 2/20/2019

Witness:

By:_____

_____
(Attesting Witness's Name/Title)

APPENDIX 11
Alliance for Weedon Island Archaeological Research and Education Agreement

LICENSE AGREEMENT

THIS LICENSE AGREEMENT ("Agreement") is made and entered into this 10 day of May 2011, by and between PINELLAS COUNTY, a political subdivision of the State of Florida, (hereinafter referred to as "COUNTY"), which terms shall include COUNTY'S designated representative and/or successors in interest, and the ALLIANCE FOR WEEDON ISLAND ARCHAEOLOGICAL RESEARCH AND EDUCATION, INC., (herein referred to as "AWIARE").

WITNESSETH

WHEREAS, Section 125.01 Florida Statures, authorizes the Board of County Commissioners of Pinellas County, Florida to provide for and maintain County property; and

WHEREAS, the Department of Parks and Conservation Resources ("PCR") operates and maintains the premises at 1500 Weedon Drive N.E., St. Petersburg; and

WHEREAS, said premises could become the subject of vandalism and other undesirable activity; and

WHEREAS, the COUNTY seeks to provide maximum feasible use and protection of its properties and other natural and cultural resources thereon; and

WHEREAS, the COUNTY has determined that it is in the public interest to enter into an Agreement with AWIARE for the support of archaeological and interdisciplinary scientific research on the Weedon Island Preserve; and

WHEREAS, AWIARE has agreed to occupy the premises at Weedon Island Preserve, "WIP," to use it as an archaeological field station and housing space, and to provide certain services.

NOW, THEREFORE, in consideration of the mutual covenants terms and conditions herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby mutually acknowledged, the parties agree as follows:

1. PREMISES: COUNTY agrees to provide to AWIARE use of a field station, and other improvements located at 1500 Weedon Drive N.E., St. Petersburg, FL 33702, Pinellas County, herein after and further described in Exhibit "A-1" and Exhibit "A-2" attached hereto collectively referred to as (Premises). AWIARE agrees to accept the Premises in "as is" condition, and acknowledges that COUNTY makes no warranty, implied or expressed, as to the condition, safety, or nature of the improvements on the Premises. Further AWIARE agrees that

any and all occupants or temporary residents and guests shall abide by the terms of this agreement and all codes, ordinances, and policies governing the Premises.

2. TERM: This Agreement shall be for a one (1) year term, with four (4) successive 1-year renewal options. Occupancy for Exhibit "A-1" shall commence upon the signature of all parties (hereinafter referred to as "Commencement Date") and Exhibit "A-2" shall commence when the Deputy currently occupying the residence of the Premises vacates same on or about July 1, 2011.

3. TERMINATION:

A. This Agreement in its entirety, or alternatively, the use of any portion of the premises referenced herein as Exhibits A-1 and A-2 individually, may be terminated at any time by either party with 30 days written notice.

B. Upon termination of this Agreement, AWIARE and any temporary residents of the Premises shall vacate same in good condition, ordinary wear and tear excepted.

4. RENT: AWIARE shall not be required to pay rent to COUNTY for the term of this Agreement.

5. USE: It is understood and agreed between the parties hereto that AWIARE covenants that same Premises during the continuance of the Agreement shall be used by AWIARE as an archaeological field station and temporary housing space, and for no other purpose or purposes, without the written consent of COUNTY, and AWIARE agrees to cause the Premises to be operated for such use during the entire term of this Agreement, unless prevented from doing so by causes beyond AWIARE's control, and to conduct its actions at all times in a reputable manner. This Agreement is made on the express condition that the Premises shall be used only in conformance with the applicable laws and ordinances, and AWIARE shall not make, or allow to be made, any offensive or unlawful use of Premises. All rights of AWIARE hereunder may be terminated by COUNTY in the event that any other use be made thereof.

6. OBLIGATIONS OF AWIARE: At all times during this agreement, AWIARE shall:

A. Be responsible for all conditions created or caused by the negligent or wrongful act or omission of AWIARE, or any other person on the Premises with AWIARE's consent;

B. Keep the Premises clean and sanitary, and maintain and care for the lawn and shrubs;

C. Remove all garbage in a clean and sanitary manner;

D. Keep all plumbing fixtures clean and sanitary;

E. Not destroy, deface damage, impair, or remove any part of the Premises or property in the Premises belonging to COUNTY, or permit any person to do so;

F. Require all on the Premises with to conduct themselves in a manner that does not unreasonably disturb neighbors or facility visitors or that constitutes a breach of the peace;

G. Use and operate in a reasonable manner all electrical, plumbing, sanitary, heating, ventilating, air-conditioning, and other facilities and appliances;

H. Not commit waste on the Premises nor maintain, or permit to be maintained, a nuisance on the Premises;

I. Maintain and repair premises as specified in Exhibits "C" and "D" attached;

J. Perform any and all functions related to AWIARE's agreement of 2010 with the COUNTY for which on-site occupancy is allowed as an incident of the agreement, including but not limited to:

K. Providing an on-site and/or mobile telephone number to appropriate COUNTY officials;

L. Notifying, when necessary, the appropriate COUNTY officials or law enforcement agents of those violating applicable laws, ordinances, rules or regulations;

7. OBLIGATIONS OF COUNTY: At all times during the term of this Agreement, COUNTY shall:

A. Comply with the requirements of all applicable building, housing, and health codes.

B. The PCR South-County Ops staff will maintain tree-trimming in the backyard, an exercise performed annually just prior to the onset of the hurricane season; Ops will pre-arrange this work with AWIARE. The chain-link fence line will be maintained by the PCR South-County Ops staff unless AWIARE plants native vegetation along the fence; at such time, maintenance will become the responsibility of the AWIARE. Mowing and trimming in the front yard will be the responsibility of the PCR South-County Ops staff unless AWIARE identifies particular areas that it wishes to maintain.

8. UTILITIES: COUNTY and AWIARE, respectively, will be responsible for the payment of utilities as indicated on Exhibit "B" attached hereto and made a part hereof,

9. REPAIRS, MAINTENANCE, SERVICES AND APPLIANCES: AWIARE shall maintain the Premises in good repair in a clean, neat, orderly, and sanitary condition. AWIARE will be responsible for all maintenance including structural and non-structural repairs and replacements as outlined in Exhibit C. In the event repairs or replacements become necessary that are not due to any acts or omissions of AWIARE and AWIARE or the COUNTY elects not to make said repairs or replacements, AWIARE has the right to terminate this Agreement with thirty (30) days prior written notice.

AWIARE shall take good care of Premises, appliances and fixtures; and responsibility for maintenance of the Premises shall be performed by the parties to this Agreement as described in Exhibits "C" and "D" attached hereto and made a part hereof.

10. ALTERATIONS, AND/OR LIENS:

A. AWIARE will not make any alterations, improvements or additions in or to the Premises, or install any equipment of any kind that will require any alteration of or addition to, or use of the water, heating, air-conditioning or electrical or other building systems or equipment, without the prior written consent of COUNTY. AWIARE shall pay all charges for labor, services, and materials used in connection with any such improvements and fixtures, except movable furniture, shall become the property of COUNTY and remain upon the Premises and be surrendered at the end of Agreement.

B. AWIARE shall promptly pay for all charges for labor, services and materials used in connection with any improvements or repairs to the Premises undertaken by AWIARE. Any mechanics liens against the Premises, or the land and building arising out of work performed by or for AWIARE are hereby expressly prohibited and in the event of the filing of any Claim of Lien, AWIARE shall promptly satisfy same or transfer it to a bond; and AWIARE shall in any event protect COUNTY'S interest in underlying real estate and shall hold COUNTY harmless against any such claims.

C. AWIARE shall have no power or authority to create any lien to attach to the present estate, reversion or other estate of COUNTY in the Premises herein demised or on the building or other improvements thereon, and all materialmen, contractors, artisans, mechanics and laborers and other persons contracting with the AWIARE with respect to the demised Premises or any part thereof, are hereby charged with notice that they must look to AWIARE to secure

payment of any bill for work done or material furnished or for any other purpose during the term of this Agreement.

11. POSSESSION: AWIARE shall be granted possession of the Premises as set forth herein and shall be entitled to full use of said Premises.

12. INSURANCE: AWIARE shall procure, pay for, and maintain during the term of this Agreement insurance as required below:

A. A Risk Dwelling policy including personal liability with limits of not less than $500,000 each occurrence for personal injury and/or bodily injury including death; and property damage of not less than $500,000 each occurrence. (Combined Single Limits of not less than $500,000 each occurrence will be acceptable). Coverage shall be on an "occurrence" basis. Fire Legal Liability shall be included to limits of $500,000. This insurance may be provided through one (1) primary policy, or through use of a primary and an excess umbrella in follow form to reach the total required limits.

B. A Certificate of Insurance shall be filed prior to submission of this Agreement to Pinellas County Lease Management Division and annually during the term of this Agreement to Lease Management Division, 509 East Avenue South, Clearwater, FL 33756. AWIARE shall notify COUNTY within twenty-four (24) hours after receipt of any notice of expiration, cancellation, non-renewal or material change in coverage. Companies issuing the insurance policy, or policies shall have no recourse against COUNTY for payment of premiums or assessments for any deductibles which are at the sole responsibility and risk of AWIARE. Pinellas County Board of County Commissioners shall be endorsed to the required policy or policies as an additional insured except for Workers' Compensation. The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by COUNTY to any such future coverage, or to COUNTY'S Self-Insured Retentions of whatever natures.

C. In the event the above described insurance may not be obtained by AWIARE, AWIARE shall procure, pay for, and maintain during the term of the Agreement the following: A HO4 policy covering fire, theft, and lightning, and limited personal liability in a form and in such amounts established by COUNTY'S Risk Management Department. In the future, if the coverage described in Paragraph 13 of the Agreement becomes available for this Property, AWIARE will be required to provide such coverage within thirty (30) days of the date of notice sent to AWIARE by COUNTY.

13. LIABILITY OF COUNTY: All property of any kind that may be on the Premises during the continuance of the Agreement shall be at the sole risk of AWIARE, and COUNTY shall not be liable to AWIARE or any other person for any injury, loss or damage to Property or to any person on said Premises.

14. ASSIGNMENT AND SUBLETTING: AWIARE agrees not to assign or in any manner transfer this contract or any estate or interest therein without the previous written consent of COUNTY and not to sublet said Premises or any part or parts thereof. Such consent is at the sole discretion of COUNTY, and consent by COUNTY to one or more assignment of this Agreement shall not operate as a waiver of COUNTY'S rights under this section.

15. INDEMNIFICATION: AWIARE covenants and agrees that it will indemnify and hold harmless COUNTY and all of COUNTY'S officers from any claim, loss, damage, cost, charge or expense arising out of any act, action, neglect or omission by AWIARE, its invitees, licensees, officers, agents, contractors, or subcontractors during the term of this Agreement, and any extensions thereof, whether direct or indirect, or by or on account of any claim or amounts recovered under "Worker's Compensation Law' or of any other laws, by laws, ordinance, order of decree, and whether to any person or property to which COUNTY or said parties may be subject including COUNTY'S costs and attorneys fees incurred in defending such claims, except that neither AWIARE nor any of its invitees, licensees, agents, employees, contractors or subcontractors will be liable under this section for damages arising out of or injury to persons or property directly caused by or resulting from the sole negligence of COUNTY or any of its officers or employees.

16. DESTRUCTION OF PREMISES: If the demised Premise shall without fault of AWIARE, be destroyed by fire, storm or other casualty or be so damaged thereby as to become wholly or partially untenantable, COUNTY may, by written notice delivered to AWIARE within thirty (30) days after such destruction or damage, terminate this agreement or elect to rebuild or repair. In the event of repair or rebuilding, this Agreement shall remain in force, and COUNTY shall rebuild or repair the Premises within a reasonable time after such election, putting the Premises in as good condition as they were at the time immediately prior to the destruction or damage. COUNTY may at its option, elect to replace said structure with another existing structure, moved onto the site.

17. HAZARDOUS SUBSTANCES: AWIARE shall not cause or permit the presence, use, disposal, storage, or release of any Hazardous Substances on or in the Premises, AWIARE shall not do, nor allow anyone else to do, anything affecting the Premises that is in violation of any Environmental Law. The preceding sentence shall not apply to the presence, use, or storage on the Premises of small quantities of Hazardous Substances that are generally recognized to be appropriate to normal maintenance and laboratory use. AWIARE will develop a control plan that conforms to industry standards for the safe storage and use of any hazardous materials that are used in normal laboratory procedures. AWIARE shall promptly give COUNTY written notice of any investigation, claim, demand, lawsuit or other action by any governmental or regulatory agency or private party involving Property and any Hazardous Substance or Environmental law of which AWIARE has actual knowledge. If AWIARE learns or is notified by any governmental or regulatory authority, that any removal or other remediation of any Hazardous Substance affecting the Premises is necessary, AWIARE shall promptly take all necessary remedial actions in accordance with Environmental Law. As used in this paragraph, "Hazardous Substances" are those substances defined as toxic or hazardous substances by Environmental Law and the following substances: gasoline, kerosene, other flammable or toxic petroleum products, toxic pesticides and herbicides, volatile solvents, materials containing asbestos or formaldehyde, and radioactive materials. As used in this paragraph, "Environmental Law" means Federal laws and laws of the jurisdiction where the Premises is located that relate to health, safety and environmental protection.

18. DEFAULT: If AWIARE should fail to keep and perform any of the terms, covenants, conditions or provisions in this Agreement contained to be kept and performed by AWIARE, COUNTY shall notify AWIARE of the default and its demand to cure the default. AWIARE shall have fifteen (15) days from the date of notice to cure said default, or to commence with steps as are necessary to cure such default, which once commenced, AWIARE agrees and shall pursue continuously until the default is finally cured. Upon AWIARE'S failure to either cure said default or to take steps necessary to cure said default, it may be lawful for COUNTY to declare said Agreement terminated and to re-enter upon the Premises and to retake possession of the said Premises. AWIARE covenants and agrees that upon termination of the said demised term, AWIARE, will surrender and deliver said Premises peaceably to COUNTY, their representatives and attorneys, immediately upon the termination of the said demised term.

In the event AWIARE defaults as set out above or elsewhere in this Agreement, all reimbursements of monies due from AWIARE during the term of this Agreement or any extension thereof, shall at the option of COUNTY become immediately due and payable in full. COUNTY may re-enter the Premises using such force for that purpose as may be necessary without being liable to any prosecution therefore, and COUNTY may repair or alter the Premises in such a manner as COUNTY may deem necessary or advisable to re-use the Premises. Should COUNTY need to pursue any of its remedies, COUNTY shall be entitled to recover damages, including costs and attorneys fees. Failure to elect any of the available remedies upon the occurrence of any default shall not operate as a waiver of any future election of remedies.

19. SIGNS: AWIARE agrees that any signs on the Premises must have COUNTY'S written approval before installation.

20. SUBROGATION: AWIARE hereby waives subrogation rights for loss or damages against COUNTY.

21. WAIVER: One or more waivers of any covenant or condition by COUNTY shall not be construed as a waiver of any subsequent breach of the same covenant or conditions, and consent or approval by COUNTY to or of any act by AWIARE requiring COUNTY'S consent or approval shall not be construed a consent or approval to or of any subsequent similar act by AWIARE.

22. OBSERVANCE OF LAWS: AWIARE agrees to observe, comply with and execute promptly during the term hereof, all laws, rules, requirements, orders, directives, codes, ordinances and regulations of any and all governmental authorities or agencies, of all municipal departments, bureaus, boards and officials, of all County, State, and Federal boards and agencies and of insurance carriers, due to this use or occupancy of the Premises. All additions, alterations, installations, partitions, or changes shall be in full compliance with the aforementioned authorities.

23. ACCESS TO PREMISES: COUNTY shall have the right to enter upon Premises with reasonable notice during normal working hours for the purpose of inspecting or conducting tests upon the same or for making repairs to Premises or to any property owned or controlled by COUNTY therein. Such repairs shall not unduly interfere with AWIARE'S occupancy, except as is naturally necessitated by the nature of the repairs being affected.

24. RELATIONSHIP OF PARTIES; CONSTRUCTION OF AGREEMENT: Nothing contained herein shall be deemed or construed by the parties hereto, nor by any third party, as creating the relationship of principal and agent or of partnership or of joint venture between the parties hereto, it being understood and agreed that no provision contained herein, nor any acts of the parties herein, shall be deemed to create any relationship between the parties hereto other than the relationship of COUNTY and AWIARE.

25. SURRENDER AT TERMINATION: Upon the termination of this Agreement, AWIARE agrees to surrender and yield possession of the Premises to COUNTY, peacefully and without notice, and in good order and condition, broom clean condition, but subject to such damage or destruction or condition as AWIARE is not required to restore or remedy under other terms and conditions of this Agreement. AWIARE also agrees to sign a termination of Agreement statement in recordable form. This latter Agreement shall survive the termination of the Agreement and shall be binding on the heirs, personal representatives, guardians and successors of AWIARE.

26. NOTICES: All notices given to COUNTY hereunder shall be forwarded to COUNTY at the following address, by registered or certified mail, return receipt requested, until AWIARE is notified otherwise in writing:

Lease Management Division
509 East Avenue South
Clearwater, Florida 33756

with copies to:
Department of Parks and Conservation Resources
12520 Ulmerton Road
Largo, Florida 33774

All notices given to AWIARE shall be forwarded to the President of AWIARE at the following address:

1500 Weedon Drive N.E.
St. Petersburg, FL 33702

By registered or certified mail, return receipt requested, until COUNTY is notified otherwise in writing.

27. QUIET ENJOYMENT: COUNTY covenants and agrees that upon AWIARE performing all of the covenants and conditions aforesaid on AWIARE'S part to be observed and

performed, AWIARE shall and may peaceably and quietly have, hold and enjoy the Premises hereby demised for the term aforesaid.

28. PUBLIC ENTITY CRIME ACT: AWIARE is directed to the Florida Public Entity Crime Act, Section 287.133, Florida Statutes, as amended from time to time, and COUNTY'S requirement that AWIARE comply with it in all respects prior to and during the term of this Agreement.

29. RADON GAS: Radon is a naturally occurring radioactive gas that, when it has accumulated in a building in sufficient quantities, may present health risks to persons who are exposed to it over time. Levels of radon that exceed Federal and State guidelines have been found in buildings in Florida. Additional information regarding radon and radon testing may be obtained from County Public Health Department.

30. FISCAL FUNDING: In the event funds are not appropriated by COUNTY in any succeeding fiscal year for purposes described herein, then this Agreement shall be deemed to terminate at the expiration of the last fiscal year for which funds were appropriated and expended, or if necessary as set forth in paragraph 3(A) herein.

31. ENTIRE AGREEMENT: The Agreement as hereinabove set forth, including all exhibits and riders, if any, incorporates all covenants, promises, agreements, conditions and understandings between the parties, and no covenant, promise, agreement, condition or understanding, either written or oral, not specifically set forth herein shall be effective to alter the performance or the rights of the parties as hereinbefore stated.

< SIGNATURE PAGE FOLLOWS >

IN WITNESS WHEREOF, the parties have executed this Lease Agreement as of the Effective Date.

WITNESSES:

Print Name: Sue Rhinehart

Print Name: Helen Wyskiver

AWIARE

By: Brent Wiseman

Title: President

Date: 4/19/11

WITNESSES:

Print Name: Della Klug

Print Name:

PINELLAS COUNTY

By: Robert S. LaSala

Robert S. LaSala, County Administrator

Date: 5-10-11

APPROVED AS TO FORM, OFFICE OF THE COUNTY ATTORNEY

By: MZas

Senior Assistant County Attorney

EXHIBIT "A-1"
Premises

1500 Weedon Drive NE
St. Petersburg, FL 33702



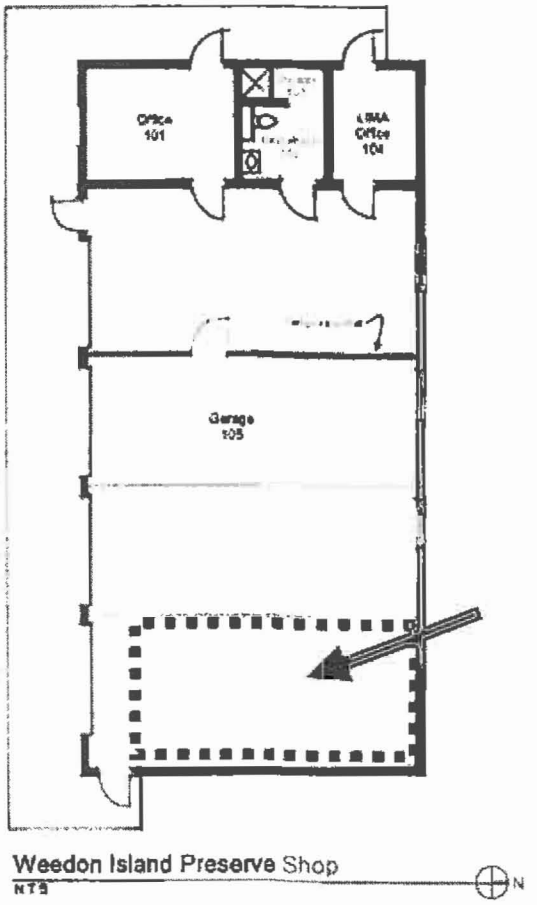


EXHIBIT "A-2"
Premises

1500 Weedon Drive NE
St. Petersburg, FL 33702

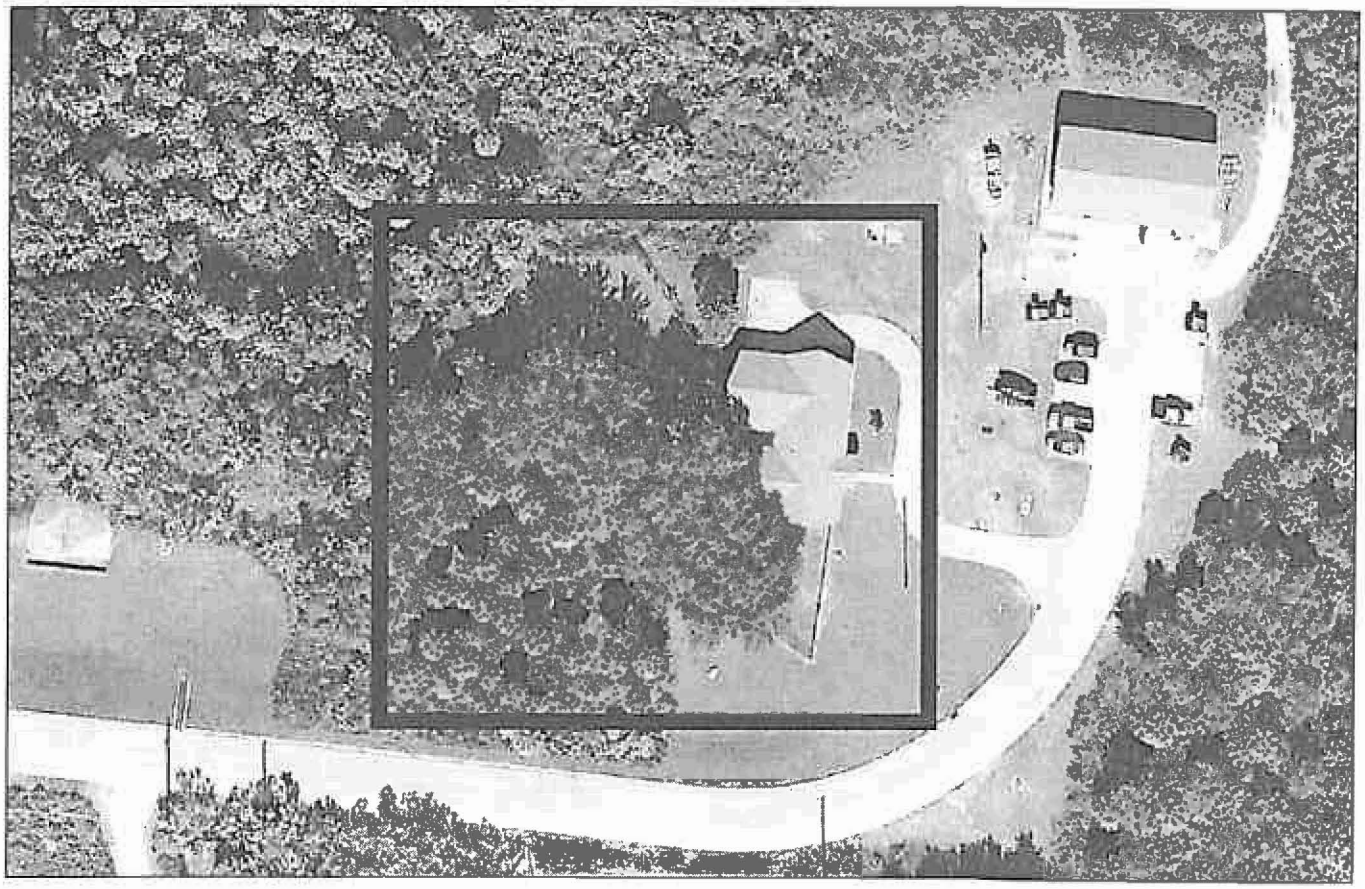


EXHIBIT "B"
Utilities

UTILITY	COUNTY RESPONSIBILITY	AWIARE RESPONSIBILITY
Electric		X
Water	X	
Garbage	X	
Telephone		X
Cable		X
Lift station	X	

If such charges are not so paid, the Agreement may be considered in default as COUNTY elects. COUNTY shall not be liable in any manner for damages to AWIARE'S property, or for any other claim by AWIARE, resulting from any interruption in utility services.

EXHIBIT "C"
Maintenance and Services

Maintenance/Services	County's Responsibility	AWIARE's Responsibility
AC Filter Replacement		X
Alterations/Renovations (after occupancy)		X
Bathroom Fixtures		X
Carpet Cleaning		X
Carpet Replacement		X
Door/Locks		X
Elec. Fixtures Exterior		X
Elec. Fixtures Interior		X
Electrical Wiring		X
Entrance/Driveway		X
Smoke Alarms		X
Fire Extinguishers		X
Flooring		X
Glass Replacement		X
Grounds/Residence		X
HVAC Maintenance		X
Interior Walls Bearing		X
Interior Walls Non-Bearing		X
Kitchen Fixtures		X
Light Bulbs		X
Main Water Piping Interior		X
Main Water Piping Exterior		X
Painting Exterior		X
Painting Interior		X
Roof Repairs		X
Roof Replacement		X
Window Cleaning		X

EXHIBIT "D"
Appliances, Fixtures and Furnishings

Appliances/Fixtures/Furniture	County's Responsibility	AWIARE's Responsibility
Ceiling Fans		X
Dishwasher		X
Garbage Disposal		X
Refrigerator		X
Garage A/C Wall Unit		X
Hot Water Heater		X
Deep Sink in Garage		X

FIRST AMENDMENT TO LICENSE AGREEMENT

THIS FIRST AMENDMENT TO LICENSE AGREEMENT, is made and entered into this 27 day of January, 2017 between PINELLAS COUNTY, a political subdivision of the State of Florida, (hereinafter referred to as "COUNTY"), which terms shall include COUNTY'S designated representative and/or successors in interest, and ALLIANCE FOR WEEDON ISLAND ARCHAEOLOGICAL RESEARCH AND EDUCATION, INC., (hereinafter referred to as "AWIARE") (collectively referred to as the "Parties").

WITNESSETH

WHEREAS, the Parties previously entered into a License Agreement (License) for space at the residence located at 1500 Weedon Drive N. E. together with the bay in the maintenance garage space, commencing on May 10, 2011 for the bay space and on or about July 1, 2011 for the residence/workshop as an archaeological field station and housing space, for a term of up to five years, with a termination date of June 30, 2016; and

WHEREAS, AWIARE also has an agreement with COUNTY for space at the Weedon Island Preserve Cultural and National History Center (CENTER) that has extended term options until September 30, 2022 with the current option term ending September 30, 2017; and

WHEREAS, the Parties desire to extend the term of the License to coincide with those of the agreement for the CENTER to keep both areas on the same schedule for notifications; and

WHEREAS, the Parties desire to eliminate the garage space from the licensed premises now that the work on the canoe is completed; and

WHEREAS, the County Department in Paragraph 26 has changed to Real Estate Management, Real Property Division.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Parties hereby agree as follows:

1. The bay in the maintenance garage (as shown on exhibit A-1 of the License) will no longer be included in the premises and the premises will only consist of the residence.
2. The amended term will run from June 30, 2016 to September 30, 2017 with one (1) additional five-year period ending on September 30, 2022.
3. Notices from AWIARE to the COUNTY will now be addressed to Real Estate Management, Real Property Division at the same address.

The Parties, hereby agree that all other terms, conditions, and provisions set forth in that certain License Agreement dated May 10, 2011, shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties have caused this First Amendment to License Agreement to be executed on the day and year first written above.

WITNESSES:

Print Name: ROBERT J AUSTIN

Print Name: Phyllis Kolianos

AWIARE:
ALLIANCE FOR WEEDON ISLAND ARCHAEOLOGICAL RESEARCH AND EDUCATION, INC.

By: _____
John W. Arthur, PhD
Title: President

WITNESSES:

Della Klug

Print Name: Della Klug

s/Jo Lugo

Print Name: Jo Lugo

COUNTY:
PINELLAS COUNTY, FLORIDA

By: _____
Mark S. Woodard, County Administrator

APPROVED AS TO FORM
OFFICE OF THE COUNTY ATTORNEY

By: _____
Asst. County Attorney

Alliance for Weedon Island Archaeological Research and Education, Inc.
1500 Weedon Drive NE, St. Petersburg, FL 33702

EMERGENCY - HURRICANE PREPAREDNESS PLAN
AWIARE RESEARCH STATION, WEEDON ISLAND PRESERVE

The Weedon Island Preserve is a peninsula surrounded by water and subject to possible high-tidal flooding and severe weather. Access roads flood quickly during approaching storm events giving a limited number of hours for preparedness.

This Emergency Hurricane Preparedness Plan outlines the steps that will be taken to protect the documents, equipment and cultural resource collections stored at the Alliance for Weedon Island Archaeological Research and Education, Inc. (AWIARE) Research Station in the event of a hurricane or other natural disaster. This plan and guidelines will be activated upon hurricane warning directives issued by Pinellas County Government Officials for the Weedon Island Preserve.

Emergency Response Checklist

1. Contact List of AWIARE Emergency Response Team
   - List attached and updated annually.
   - Contact list provided to Director of Parks and Conservation Resources.

2. Preparation of Research Station Laboratory
   - Backup important computer files
   - Move computers and equipment from all windows and elevate high above floor areas. Place equipment in garbage bags and seal.
   - If possible, remove computers and other electronic equipment to safe area outside of hurricane zone.
   - Unplug all non-essential equipment.
   - Elevate all documents and books from any shelves or file cabinets and store in sealed plastic tubs.

3. Collections
   - 85% of AWIARE artifact collections are stored in 4-mil zip lock bags inside sealable plastic tubs on steel shelving units. The remaining 15% are in carboard boxes awaiting cataloging and permanent storage.

- Elevate any collection boxes from the floor and bottom shelves to at least table height in laboratory. Place any cardboard boxes in heavy-duty plastic bags and/or cover with plastic sheeting.
- Move collection boxes from back porch area into the common area of the Station. Elevate boxes if possible and place any cardboard boxes in plastic bags and/or cover with plastic sheeting.
- Close all blinds.

4. Other Preventive Measures
   - Clean out refrigerator
   - Clear desktops, tables, and all other exposed surfaces
   - Wrap bookcases in plastic
   - Move essential files into plastic tubs and place in interior non-windowed back bathroom.

In preparation prior to hurricane season, needed hurricane supplies will be purchased and stored in case of an approaching disaster event.

Supplies will include:

- Large plastic tubs
- Role of heavy-duty sheet plastic
- Heavy-duty garbage bags
- Duct tape

In addition, archival materials and important corporate documents are being scanned and saved to computers as back up in case of damage or destruction.

Emergency Response Team Contacts

John Arthur, PhD
arthurj@mail.usf.edu
(727) 873-4960
C (727) 501-3442

Robert Austin, PhD
roc_doc@verizon.net
(813) 205-9847

Phyllis Kolianos, MA
pkolianos@gmail.com
(727) 937-8779
C (727) 480-3329

Dave Burns, MA
Dbburns73@gmail.com
(813) 690-3153

APPENDIX 12
Species Lists and Florida Natural Areas Report

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Abrus precatorius	rosary pea		I	N	Yes
Abutilon hulseanum	mauve				
Acrostichum danaeifolium	giant leather fern				
Agave decipiens	false sisal				
Alysicarpus ovalifolius	false moneywort; alyce clover				Yes
Amaranthus blitum subsp. *emarginatus*	purple amaranth				Yes
Ambrosia artemisiifolia	common ragweed				
Andropogon brachystachyus	shortspike bluestem				
Andropogon floridanus	Florida bluestem				
Andropogon glomeratus	bushy bluestem				
Andropogon glomeratus var. *glaucopsis*	purple bluestem				
Andropogon glomeratus var. *pumilus*	bushy bluestem				
Andropogon tracyi	Tracy's bluestem				
Andropogon virginicus	broomsedge bluestem				
Andropogon virginicus var. *glaucus*	chalky bluestem				
Ardisia escallonioides	marlberry				
Aristida gyrans	corkscrew threeawn				
Aristida patula	tall threeawn				
Aristida spiciformis	bottlebrush threeawn				
Aristida stricta var. *beyrichiana*	wiregrass				
Asimina reticulata	netted pawpaw				
Avicennia germinans	black mangrove				
Axonopus furcatus	big carpetgrass				
Baccharis angustifolia	saltwater falsewillow				
Baccharis halimifolia	groundsel tree				
Bacopa monnieri	herb-o-grace				
Balduina angustifolia	Coastalplain honeycombhead				
Batis maritima	saltwort; turtleweed				
Bejaria racemosa	tarflower				
Berchemia scandens	Alabama supplejack; rattan vine				
Bidens alba	beggerticks				
Blutaparon vermiculare	samphire; silverhead				
Borrichia frutescens	bushy seaside oxeye				
Bulbostylis barbata	watergrass				Yes
Bulbostylis ciliatifolia	capillary hairsedge				
Bulbostylis stenophylla	sandyfield hairsedge				
Callicarpa americana	American beautyberry				

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Canavalia rosea	seaside jackbean				
Cartrema floridanum	scrub wild olive				
Carya glabra	pignut hickory				
Cassytha filiformis	love vine				
Casuarina equisetifolia	Australian-pine; horsetail casuarina		I	P,N	Yes
Catharanthus roseus	Madagascar periwinkle				Yes
Cenchrus gracillimus	slender sandbur				
Cenchrus spinifex	coastal sandbur				
Centella asiatica	spadeleaf				
Ceratiola ericoides	Florida rosemary				
Chamaecrista fasciculata	partridge pea				
Chamaecrista nictitans var. *aspera*	sensitive pea				
Chiococca alba	snowberry; milkberry				
Chrysopsis floridana	Florida goldenaster	E			
Citrus x *aurantium* section *aradisi*	grapefriut cross w/ sour orange & sweet orange				Yes
Cnidoscolus stimulosus	tread softly; finger rot;				
Coccoloba uvifera	seagrape				
Conocarpus erectus	buttonwood				
Conyza canadensis	dwarf Canadian horseweed				
Crocanthemum corymbosum	pinebarren frostweed				
Crotalaria pallida var. *obovata*	smooth rattlebox				Yes
Cupaniopsis anacardioides	carrotwood			N	
Cynodon dactylon	bermuda grass				Yes
Cyperus croceus	Baldwin's flatsedge				
Cyperus ligularis	swamp flatsedge				
Cyperus ovatus	pinebarren flatsedge				
Cyperus polystachyos	manyspike flatsedge				
Cyperus tetragonus	fourangle flatsedge				
Dactyloctenium aegyptium	Durban crowfootgrass				Yes
Dalbergia ecastaphyllum	coinvine				
Desmodium floridanum	Florida ticktrefoil				
Desmodium tortuosum	dixie ticktrefoil				Yes
Dichanthelium dichotomum	cypress witchgrass				
Dichanthelium ensifolium var. *ensifolium*	cypress witchgrass				
Dichanthelium ensifolium var. *unciphyllum*	cypress witchgrass				
Dichanthelium portoricense	hemlock witchgrass				
Digitaria ciliaris	southern crabgrass				

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Digitaria serotina	blanket crabgrass				
Dioscorea bulbifera	air potato		I	N	Yes
Distichlis littoralis	shoregrass; keygrass				
Distichlis spicata	saltgrass				
Distimake dissectus	noyau vine				
Dodonaea viscosa	varnishleaf				
Eclipta prostrata	false daisy				
Edrastima uniflora	clustered mille-graines				
Eleusine indica	Indian goosegrass				Yes
Enterolobium contortisiliquum	earpod tree				Yes
Eragrostis elliottii	Elliott's lovegrass				
Eragrostis gangetica	slimflower lovegrass				Yes
Eragrostis spectabilis	purple lovegrass				
Eragrostis virginica	coastal lovegrass				
Erigeron quercifolius	oakleaf fleabane				
Erythrina herbacea	coralbean; Cherokee bean				
Eugenia axillaris	white stopper				
Eugenia uniflora	Surinam cherry		I		Yes
Eupatorium capillifolium	dogfennel				
Eupatorium mikanioides	semaphore thoroughwort				
Eupatorium serotinum	lateflowering thoroughwort				
Euphorbia bombensis	dixie sandmat				
Euphorbia cumulicola	coastal dune sandmat; sanddune spurge	E			
Euphorbia cyathophora	paintedleaf; fire-on-the-mountain				
Euphorbia hyssopifolia	hyssopleaf sandmat				
Euphorbia maculata	spotted sandmat				
Euploca polyphylla	pineland heliotrope				
Eustachys glauca	saltmarsh fingergrass				
Eustachys petraea	pinewoods fingergrass				
Euthamia caroliniana	slender flattop goldenrod				
Euthamia graminifolia	flatop goldenrod				
Ficus microcarpa	Chinese banyan, Indian laurel		I		Yes
Fimbristylis cymosa	hurricanegrass				
Fimbristylis spadicea	marsh fimbry				
Forestiera segregata	Florida swampprivet				
Fuirena scirpoidea	southern umbrellasedge				
Galactia volubilis	downy milkpea				

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Geobalanus oblongifolius	gopher apple				
Guilandina bonduc	gray nicker				
Helianthus debilis subsp. *debilis*	East Coast dune sunflower				
Heliotropium curassavicum	seaside heliotrope; salt heliotrope				
Heteropogon contortus	tanglehead				Yes
Heterotheca subaxillaris	camphorweed				
Hexasepalum teres	poor joe; rough buttonweed				
Houstonia procumbens	innocence; roundleaf bluet				
Hypericum cistifolium	roundpod St. John's-wort				
Hypericum gentianoides	pineweeds; orangegrass				
Hypericum tetrapetalum	fourpetal St. John's-wort				
Ilex ambigua	Carolina holly				
Ilex cassine var. *cassine*	dahoon				
Ilex glabra	inkberry; gallberry				
I*mperata cylindrica*	cogongrass		I	N	Yes
Indigofera hirsuta	hairy indigo				Yes
Indigofera spicata	trailing indigo				Yes
Ipomoea alba	moonflowers				
Ipomoea pes-caprae subsp. *Brasiliensis*	railroad vine				
Iva frutescens	bigleaf sumpweed; marshelder				
Juncus roemerianus	needle rush; needlegrass rush; black rush				
Juncus scirpoides	needlepod rush				
Juniperus virginiana	red cedar				
Kalanchoe pinnata	cathedral bells; life plant		II		Yes
Kalanchoe x houghtonii	chandelier plant, mother of millions		II		Yes
Laguncularia racemosa	white mangrove				
Lantana strigocamara	lantana; shrubverbena				Yes
Lechea minor	thymeleaf pinweed				
Lechea torreyi	Piedmont pinweed				
Liatris gracilis	slender gayfeather				
Limonium carolinianum	Carolina sealavender				
Livistona chinensis	Chinese fan palm		II		Yes
Ludwigia maritima	seaside primrosewillow				
Lupinus diffusus	Skyblue lupine				
Lycium carolinianum	Christmasberry				
Lygodium japonicum	Japanese climbing fern		I	N	Yes
Lyonia ferruginea	rusty staggerbush				

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Lyonia fruticosa	Coastalplain staggerbush				
Lyonia lucida	fetterbush				
Mecardonia acuminata subsp. *peninsularis*	axileflower				
Melaleuca quinquenervia	punktree		I	P,N	Yes
Melinis repens	rose natal grass		I		Yes
Melothria pendula	creeping cucumber				
Mikania scandens	climbing hempvine				
Mimosa strigillosa	powderpuff				
Mollugo verticillata	Indian chickweed; green carpetweed				Yes
Momordica charantia	balsampear		II		
Monanthochloe littoralis	shoregrass; keygrass				Yes
Monarda punctata	spotted beebalm				
Muhlenbergia capillaris var. *capillaris*	hairawn muhly				
Myrica cerifera	wax myrtle				
Myrsine cubana	myrsine				
Nephrolepis cordifolia	tuberous sword fern		I		Yes
Oenothera simulans	southern beeblossum				
Oplismenus hirtellus	woodgrass; basketgrass				
Opuntia austrina	pricklypear				
Opuntia stricta	erect pricklypear; shell mound pricklypear	T			
Orthochilus ecristatus	giant orchid; non-crested eulophia	T			
Palafoxia integrifolia	Coastalplain palafox				
Panicum hemitomon	maidencain				
Panicum repens	torpedograss		I		Yes
Panicum virgatum	switchgrass				
Parkinsonia aculeata	Mexican palo verde; Jerusalem thorn				Yes
Parthenocissus quinquefolia	Virginia creeper; woodbine				
Paspalum laeve	field paspalum				
Paspalum notatum var. *saurae*	bahiagrass				Yes
Paspalum setaceum	thin paspalum				
Paspalum urvillei	vaseygrass				Yes
Passiflora suberosa	corkystem passionflower				
Pattalias palustre	Gulf Coast swallowwort				
Pectis prostrata	spreading cinchweed				
Persea borbonia var. *boronia*	red bay				
Phlebodium aureum	golden polypody				
Phoradendron leucarpum	oak mistletoe				

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Phyla nodiflora	turkey tangle fogfruit; capeweed				
Phyllanthus abnormis	Drummond's leafflower				
Phytolacca americana	American pokeweed				
Pinus elliottii	slash pine				
Pinus palustris	long leaf pine				
Pityopsis graminifolia	narrowleaf silkgrass				
Pleopeltis polypodioides var. *michauxiana*	resurrection fern				
Pluchea baccharis	rosy camphorweed				
Pluchea carolinensis	cure-for-all				Yes
Pluchea odorata	sweetscent				
Polygala nana	candyroot				
Polygala setacea	Coastalplain milkwort				
Polygonella polygama var. *polgamum*	October flower				
Polypremum procumbens	rustweed				
Portulaca amilis	Paraguayan purslane				Yes
Portulaca oleracea	little hogweed				
Portulaca pilosa	pink purlane; kiss-me-quick				
Prunus caroliniana	Carolina laurelcherry				
Prunus serotina	black cherry				
Psilotum nudum	whisk fern				
Psychotria nervosa	wild coffee				
Psychotria tenuifolia	shortleaf wild coffee				
Pteridium aquilinum var. *pseudocaudatum*	tailed braken fern				
Pterocaulon pycnostachyum	blackroot				
Quercus chapmanii	Chapman's oak				
Quercus geminata	sand live oak				
Quercus laurifolia	laurel oak				
Quercus myrtifolia	myrtle oak				
Quercus nigra	water oak				
Quercus pumila	running oak				
Quercus virginiana	live oak				
Rhizophora mangle	red mangrove				
Rhus copallinum	winged sumac				
Rhynchospora colorata	starrush whitetop				
Rhynchospora fascicularis	fascicled beaksedge				
Rhynchospora intermedia	pinebarren beaksedge				
Rhynchospora megalocarpa	sandyfield beaksedge				

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Richardia brasiliensis	tropical Mexican clover				Yes
Ricinus communis	castorbean		II		Yes
Rivina humilis	rougeplant				
Sabal palmetto	cabbage palm				
Sabatia brevifolia	shortleaf rosegentian				
Saccharum giganteum	sugarcane plumegrass				
Sacciolepis striata	American cupscale				
Salicornia ambigua	perennial glasswort				
Salix caroliniana	Carolina willow; Coastalplain willow				
Sapindus saponaria	soapberry				
Schefflera actinophylla	Australian umbrella tree; octopus tree		I		Yes
Schinus terebinthifolius	Brazilian pepper		I	P,N	Yes
Scleria ciliata	fewflower nutsedge				
Scleria triglomerata	tall nutgrass				
Scoparia dulcis	sweetbroom				
Selaginella arenicola	sand spike-moss				
Senna obtusifolia	coffeeweed; sicklepod				
Senna occidentalis	septicweed				Yes
Serenoa repens	saw palmetto				
Sesuvium maritimum	slender seapurslane				
Sesuvium portulacastrum	shoreline seapurslane				
Setaria parviflora	yellow bristlegrass; knotroot foxtail				
Sida cordifolia	llima				Yes
Sida rhombifolia	Cuban jute; indian hemp				
Sideroxylon celastrinum	saffron plum				
Smilax auriculata	earleaf greenbrier				
Smilax bona-nox	saw greenbrier				
Smilax laurifolia	laurel greenbrier; bamboo vine				
Solanum americanum	American black nightshade				
Solidago odora var. *chapmanii*	Chapman's goldenrod				
Solidago sempervirens	seaside goldenrod				
Solidago stricta	wand goldenrod				
Sophora tomentosa var. *truncata*	yellow necklacepod				
Sophronanthe hispida	rough hedgehyssop				
Sophronanthe pilosa	shaggy hedgehyssop				
Spartina alterniflora	saltmarsh cordgrass; smooth cordgrass				
Spartina bakeri	sand cordgrass				

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native
Spartina patens	marshhay cordgrass; saltmeadow cordgrass				
Spartina spartinae	Gulf cordgrass				
Sphagneticola trilobata	creeping oxeye (wedelia)		II		Yes
Sporobolus jacquemontii	West Indian dropseed		II		Yes
Sporobolus virginicus	seashore dropseed				
Stenotaphrum secundatum	St. Augustine grass				
Suaeda linearis	sea blight; annual seepweed				
Symphyotrichum tenuifolium	perennial saltmarsh aster				
Telmatoblechnum serrulatum	toothed mid-sorus fern; swamp fern				
Terminalia muelleri	Australian almond		II		Yes
Thelypteris kunthii	widespread maiden fern; southern shield fern				
Tillandsia recurvata	ballmoss				
Tillandsia usneoides	Spanish moss				
Toxicodendron radicans	eastern poison ivy				
Trichostema dichotomum	forked bluecurls				
Triplasis americana	perennial sandgrass				
Typha domingensis	southern cattail				
Urena lobata	ceasarweed		I		Yes
Urochloa distachya	tropical signalgrass				Yes
Urochloa maxima	guineagrass		II		Yes
Vaccinium arboreum	sparkleberry				
Vaccinium myrsinites	shiny blueberry				
Vaccinium stamineum	deerberry				
Vicia acutifolia	fourleaf vetch				
Vigna luteola	hairy cowpea				
Vitis aestivalis	summer grape				
Vitis rotundifolia	muscadine				
Washingtonia robusta	Washington fan palm		II		Yes
Ximenia americana	hog plum				
Yucca aloifolia	Spanish bayonet				

[1] Florida Department of Agriculture and Consumer Services - Notes on Florida's Endangered and Threatened Plants - 2nd Ed.- 2000

E = endangered T = threatened CE = commercially exploited

[2] FICS Florida Invasive Spedies Council, Formerly Florida Exotic Pest Plant Council - 2019, https://floridainvasivespecies.org/plantlist2019.cfm

Weedon Island Preserve Plant List

Scientific Name	Common Name(s)	FDA Rank[1]	FISC Exotic[2]	Govt Exotic[3]	Non-Native

I = Category I, species that are invading and disrupting native plant communities

II = Category II, species that have shown a potential to disrupt native plant communities

[3] Government Rank

P = prohibited by FL Dept Env. Protection

N = Noxious weed as listed by the FL Dept. of Agriculture & Consumer Services

U = Noxious weed listed by U.S. Dept. of Agriculture.

Updated by Pam Leasure August 2021

Weedon Island Preserve Bird List

Confidence	Scientific Name [a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
1	*Anas fulvigula*	Mottled Duck				x	x	
1	*Anas discors*	Blue-winged Teal					x	17 reported on IMBC 15 Sep 2007
1	*Anas clypeata*	Northern Shoveler					x	
1	*Anas crecca*	Green-winged Teal					x	
1	*Aythya affinis*	Lesser Scaup				x	x	
1	*Lophodytes cucullatus*	Hooded Merganser					x	
1	*Mergus serrator*	Red-breasted Merganser				x	x	
1	*Colinus virginianus*	Northern Bobwhite				x	x	
1	*Gavia immer*	Common Loon					x	
1	*Podilymbus podiceps*	Pied-billed Grebe				x	x	
2	*Podiceps auritus*	Horned Grebe				x		likely to be seen from/at WIP during the winter, just no meta-data - DS 9 Apr 09
1	*Pelecanus erythrorhynchos*	American White Pelican				x	x	
1	*Pelecanus occidentalis*	Brown Pelican	S3		SSC	x	x	
1	*Phalacrocorax auritus*	Double-crested Cormorant				x	x	
1	*Anhinga anhinga*	Anhinga				x	x	
1	*Fregata magnificens*	Magnificent Frigatebird	S1			x	x	
1	*Botaurus lentiginosus*	American Bittern					x	"Accidental; has been recorded 1 or 2 times"
1	*Ixobrychus exilis*	Least Bittern	S4				x	
1	*Ardea herodias*	Great Blue Heron				x	x	
1	*Ardea alba*	Great Egret	S4			x	x	
1	*Egretta thula*	Snowy Egret	S3		SSC	x	x	
1	*Egretta caerulea*	Little Blue Heron	S4		SSC	x	x	
1	*Egretta tricolor*	Tricolored Heron	S4		SSC	x	x	
1	*Egretta rufescens*	Reddish Egret	S2		SSC	x	x	
1	*Bubulcus ibis*	Cattle Egret	S2				x	
1	*Butorides virescens*	Green Heron				x	x	
1	*Nycticorax nycticorax*	Back-crowned Night Heron	S3			?	x	
1	*Nyctanassa violacea*	Yellow-crowned Night Heron	S3			?	x	11 reported on IMBC 15 Sep 2007
1	*Eudocimus albus*	White Ibis	S4		SSC	x	x	
2	*Plegadis falcinellus*	Glossy Ibis				x		
1	*Platalea ajaja*	Roseate Spoonbill	S2		T	x	x	
1	*Mycteria americana*	Wood Stork	S2	E	E	x	x	
1	*Coragyps atratus*	Black Vulture				x	x	
1	*Cathartes aura*	Turkey Vulture				x	x	
1	*Pandion haliaetus*	Osprey	S3S4			x	x	
1	*Elanoides forficatus*	Swallow-tailed Kite	S2S3				x	
1	*Haliaeetus leucocephalus*	Bald Eagle	S3			x	x	
1	*Circus cyaneus*	Northern Harrier				x	x	
1	*Accipiter striatus*	Sharp-shinned Hawk					x	
1	*Accipiter cooperii*	Cooper's Hawk	S3			x	x	

Weedon Island Preserve Bird List

Confidence	Scientific Name [a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
1	*Buteo lineatus*	Red-shouldered Hawk				x	x	
1	*Buteo jamaicensis*	Red-tailed Hawk				x	x	
1	*Falco sparverius*	American Kestrel			?	x	x	State T if correct subspecies *F. s. paulus*)
1	*Falco columbarius*	Merlin	SU			x	x	
1	*Falco peregrinus*	Peregrine Falcon	S2		E	x	x	
1	*Rallus longirostris*	Clapper Rail					x	
1	*Rallus elegans*	King Rail					x	
1	*Rallus limicola*	Virginia Rail					x	
1	*Porzana carolina*	Sora					x	
1	*Gallinula chloropus*	Common Moorhen					x	
1	*Fulica americana*	American Coot					x	
1	*Pluvialis squatarola*	Black-bellied Plover				x	x	
1	*Charadrius wilsonia*	Wilson's Plover					x	
1	*Charadrius semipalmatus*	Semipalmated Plover				x	x	
1	*Charadrius vociferus*	Killdeer				x	x	
1	*Haematopus palliatus*	American Oystercatcher	S3		SSC	x	x	
1	*Himantopus mexicanus*	Black-necked Stilt					x	
1	*Actitis macularius*	Spotted Sandpiper				x	x	
1	*Tringa solitaria*	Solitary Sandpiper					x	
1	*Tringa melanoleuca*	Greater Yellowlegs					x	
1	*Tringa semipalmata*	Willet				x	x	
1	*Tringa flavipes*	Lesser Yellowlegs					x	
1	*Arenaria interpres*	Ruddy Turnstone				x	x	
1	*Calidris canutus*	Red Knot					x	
1	*Calidris alba*	Sanderling				x	x	
1	*Calidris pusilla*	Semipalmated Sandpiper					x	
1	*Calidris mauri*	Western Sandpiper				x	x	
1	*Calidris minutilla*	Least Sandpiper				x	x	
1	*Calidris melanotos*	Pectoral Sandpiper					x	"Accidental; has been recorded 1 or 2 times"
1	*Calidris alpina*	Dunlin				x	x	
1	*Calidris himantopus*	Stilt Sandpiper					x	"Accidental; has been recorded 1 or 2 times"
1	*Limnodromus griseus*	Short-billed Dowitcher				x	x	
1	*Gallinago delicata*	Wilson's Snipe					x	
2	*Gallinago gallinago*	Common Snipe						
1	*Phalaropus tricolor*	Wilson's Phalarope					x	
1	*Leucophaeus atricilla*	Laughing Gull				x	x	
1	*Larus delawarensis*	Ring-billed Gull				x	x	
1	*Larus argentatus*	Herring Gull				x	x	
1	*Sternula antillarum*	Least Tern	S3		T	x	x	
1	*Hydroprogne caspia*	Caspian Tern	S2				x	
1	*Chlidonias niger*	Black Tern					x	

Weedon Island Preserve Bird List

Confidence	Scientific Name [a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
1	*Sterna hirundo*	Common Tern					x	
1	*Sterna forsteri*	Forster's Tern				x	x	
1	*Thalasseus maximus*	Royal Tern	S3			x	x	
1	*Thalasseus sandvicensis*	Sandwich Tern	S2			x	x	
1	*Rynchops niger*	Black Skimmer	S3		SSC	x	x	
1	*Streptopelia decaocto*	Eurasian Collared-Dove					x	
1	*Zenaida asiatica*	White-winged Dove					x	"Accidental; has been recorded 1 or 2 times"
1	*Zenaida macroura*	Mourning Dove				x	x	
1	*Columbina passerina*	Common Ground-Dove				x	x	
1	*Myiopsitta monachus*	Monk Parakeet				x	x	
1	*Coccyzus americanus*	Yellow-billed Cuckoo				x	x	
1	*Coccyzus minor*	Mangrove Cuckoo	S3			x	x	
1	*Tyto alba*	Barn Owl					x	
1	*Megascops asio*	Eastern Screech-Owl				x	x	
1	*Bubo virginianus*	Great Horned Owl					x	
1	*Chordeiles minor*	Common Nighthawk				x	x	
1	*Caprimulgus carolinensis*	Chuck-will's-widow					x	
1	*Caprimulgus vociferus*	Whip-poor-will					x	
1	*Chaetura pelagica*	Chimney Swift				x	x	
1	*Archilochus colubris*	Ruby-throated Hummingbird					x	"Accidental; has been recorded 1 or 2 times"
1	*Megaceryle alcyon*	Belted Kingfisher				x	x	
1	*Melanerpes erythrocephalus*	Red-headed Woodpecker						Observed by Scott Patterson (as gleaned from BRDBRAIN archive by D. Stillwaugh under Subject: "Tierra Verde, Red-Headed woodpecker" dated 19 Jan 2007
1	*Melanerpes carolinus*	Red-bellied Woodpecker				x	x	
1	*Sphyrapicus varius*	Yellow-bellied Sapsucker					x	
1	*Picoides pubescens*	Downy Woodpecker				x	x	
1	*Colaptes auratus*	Northern Flicker				x	x	
1	*Dryocopus pileatus*	Pileated Woodpecker				x	x	
2	*Contopus virens*	Eastern Wood-Pewee				x		
1	*Sayornis phoebe*	Eastern Phoebe				x	x	
1	*Myiarchus crinitus*	Great Crested Flycatcher				x	x	
1	*Tyrannus verticalis*	Western Kingbird					x	"Accidental; has been recorded 1 or 2 times"
1	*Tyrannus tyrannus*	Eastern Kingbird				x	x	
1	*Tyrannus dominicensis*	Gray Kingbird				x	x	
1	*Lanius ludovicianus*	Loggerhead Shrike				x	x	
1	*Vireo griseus*	White-eyed Vireo				x	x	
1	*Vireo solitarius*	Blue-headed Vireo					x	
1	*Vireo olivaceus*	Red-eyed Vireo					x	

Weedon Island Preserve Bird List

Confidence	Scientific Name [a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
								one heard by Margie Wilkinson in the late 1980's (as related to DS by Ron Smith in an E-mail dated 16 April 2008; listed by Smith as "extirpated"
1	*Vireo altiloquus*	Black-wiskered Vireo					x	
1	*Cyanocitta cristata*	Blue Jay				x	x	
1	*Corvus ossifragus*	Fish Crow				x	x	
1	*Progne subis*	Purple Martin					x	
1	*Tachycineta bicolor*	Tree Swallow					x	
1	*Stelgidopteryx serripennis*	Northern Rough-winged Swallow					x	
1	*Hirundo rustica*	Barn Swallow					x	
2	*Poecile carolinensis*	Carolina Chickadee				x		
2	*Baeolophus bicolor*	Tufted Titmouse				x		
1	*Thryothorus ludovicianus*	Carolina Wren				x	x	
1	*Troglodytes aedon*	House Wren				x	x	
1	*Cistothorus platensis*	Sedge Wren					x	
1	*Cistothorus palustris*	Marsh Wren					x	
1	*Regulus calendula*	Ruby-crowned Kinglet					x	
1	*Polioptila caerulea*	Blue-gray Gnatcatcher				x	x	
1	*Catharus ustulatus*	Swainson's Thrush					x	
1	*Catharus guttatus*	Hermit Thrush					x	
1	*Turdus migratorius*	American Robin				x	x	
1	*Dumetella carolinensis*	Gray Catbird				x	x	
1	*Mimus polyglottos*	Northern Mockingbird				x	x	
1	*Toxostoma rufum*	Brown Thrasher				x	x	
1	*Sturnus vulgaris*	European Starling				x	x	
1	*Bombycilla cedrorum*	Cedar Waxwing					x	
1	*Vermivora celata*	Orange-crowned Warbler					x	
1	*Parula americana*	Northern Parula				x	x	
1	*Dendroica petechia*	Yellow Warbler					x	
1	*Dendroica magnolia*	Magnolia Warbler					x	
1	*Dendroica caerulescens*	Black-throated Blue Warbler					x	
1	*Dendroica coronata*	Yellow-rumped Warbler				x	x	
1	*Dendroica virens*	Black-throated Green Warbler					x	
1	*Dendroica dominica*	Yellow-throated Warbler				x	x	
1	*Dendroica pinus*	Pine Warbler					x	
1	*Dendroica discolor*	Prairie Warbler				x	x	
1	*Dendroica palmarum*	Palm Warbler				x	x	
1	*Dendroica striata*	Blackpoll Warbler				x	x	
1	*Mniotilta varia*	Black-and-white Warbler				x	x	
1	*Setophaga ruticilla*	American Redstart	S3				x	
1	*Seiurus aurocapilla*	Ovenbird					x	

Weedon Island Preserve Bird List

Confidence	Scientific Name [a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
1	*Seiurus noveboracensis*	Northern Waterthrush					x	
1	*Seiurus motacilla*	Louisiana Waterthrush	S3				x	
1	*Geothlypis trichas*	Common Yellowthroat				x	x	
1	*Wilsonia citrina*	Hooded Warbler					x	
1	*Pipilo erythrophthalmus*	Eastern Towhee				x	x	
1	*Pooecetes gramineus*	Vesper Sparrow					x	"Accidental; has been recorded 1 or 2 times"
1	*Passerculus sandwichensis*	Savannah Sparrow					x	
1	*Melospiza melodia*	Song Sparrow					x	"Accidental; has been recorded 1 or 2 times"
1	*Melospiza lincolnii*	Lincoln's Sparrow					x	"Accidental; has been recorded 1 or 2 times"
1	*Melospiza georgiana*	Swamp Sparrow					x	
1	*Cardinalis cardinalis*	Northern Cardinal				x	x	
1	*Passerina cyanea*	Indigo Bunting					x	
1	*Dolichonyx oryzivorus*	Bobolink					x	
1	*Agelaius phoeniceus*	Red-winged Blackbird				x	x	
1	*Sturnella magna*	Eastern Meadowlark					x	listed by Smith as "extirpated"
1	*Quiscalus quiscula*	Common Grackle				x	x	
1	*Quiscalus major*	Boat-tailed Grackle				x	x	
1	*Molothrus ater*	Brown-headed Cowbird				x	x	
1	*Carduelis tristis*	American Goldfinch					x	
1	*Passer domesticus*	House Sparrow					x	

1 Verified Records

2 Unverified Records

[a] Nomenclature follows American Ornithologists' Union Check-list of North American Birds, Seventh Edition
http://www.aou.org/checklist/index.php3#psit

[b] Florida Natural Areas Inventory

S1 - critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.

S2 - imperiled in Florida because of rarity (6 or 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction from other factors.

S3 - either very rare and local throughout its range (21-100 occurrence or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.

S4 - apparently secure in Florida (may be rare in parts of range).

[c] Federal Rank - http://www.fws.gov/endangered/wildlife.html#Species

E - Endangered

T - Threatened

Weedon Island Preserve Bird List

Scientific Name [a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments	Confidence

SAT - Threatened due to similarity of appearance to a species which is federally listed and enforcement has difficulty differentiating betwee listed and unlisted spp.

[d] State Rank - http://www.myfwc.com/docs/WildlifeHabitats/Threatened_Endangered_Species.pdf (May 2008)

E - Endangered

T - Threatened

SSC - Species of Special Concern

[e] Weedon Island Preserve Resource Management Plan - Final Report April 25, 2002

[f] Floral and Faunal Inventory of Weedon Island and other County Preserves - Second Progress Report - June 2003 by Steven P. Christman, Ph.D.; Appendix B - A Checklist of the Birds of WIP compiled by Ron Smith, June 2003

QAQC by D. Stillwaugh 9 April 2009

Table 1. Numbers of each species collected during sampling by the Fisheries-Independent Monitoring program in the vicinity of the Weedon Island Preserve from 2012–2020. Species are sorted in alphabetical order and some of the species that are of direct recreational and/or commercial importance are shaded. The number in parenthesis (e.g., n=243) under the gear description identifies the number of collections made with that gear. An asterisk (*) in the Scientific Name column indicates a species not encountered during FIM sampling in Weedon Island Preserve prior to 2012–2020.

Scientific Name	Common Name	9.1-m center bag seine (n=140)	21-m center bag seine (n=243)	183-m haul seine (n=180)	6.1-m otter trawl (n=36)	All Gears (n=599)
Acanthostracion quadricornis	Scrawled Cowfish	0	3	6	13	22
Achirus lineatus	Lined Sole	3	109	2	33	147
Adinia xenica	Diamond Killifish	37	9	0	0	46
Alpheidae spp.	Snapping Shrimp	0	2	0	0	2
Aluterus schoepfii	Orange Filefish	0	1	0	0	1
Anarchopterus criniger	Fringed Pipefish	0	1	0	0	1
Anchoa cubana	Cuban Anchovy	0	3	0	0	3
Anchoa hepsetus	Striped Anchovy	0	30	0	0	30
Anchoa mitchilli	Bay Anchovy	51	28929	0	2115	31095
Anchoa spp.	Anchovies	0	2	0	0	2
Archosargus probatocephalus	Sheepshead	18	69	692	30	809
Ariopsis felis	Hardhead Catfish	0	64	622	9	695
Bagre marinus	Gafftopsail Catfish	0	0	17	0	17
Bairdiella chrysoura	Silver Perch	0	918	168	27	1113
Bathygobius soporator	Frillfin Goby	0	5	0	0	5
Brevoortia spp.	Menhadens	9	0	60	0	69
*Calamus penna**	Sheepshead Porgy	0	1	0	0	1
Callinectes sapidus	Blue Crab	15	75	98	121	309
Caranx hippos	Crevalle Jack	0	0	74	0	74
*Carcharhinus leucas**	Bull Shark	0	0	1	0	1
Centropomus undecimalis	Common Snook	40	3	753	0	796
Chaetodipterus faber	Atlantic Spadefish	0	6	383	14	403
Chasmodes saburrae	Florida Blenny	0	90	0	4	94

Scientific Name	Common Name	9.1-m center bag seine (n=140)	21-m center bag seine (n=243)	183-m haul seine (n=180)	6.1-m otter trawl (n=36)	All Gears (n=599)
Chilomycterus schoepfii	Striped Burrfish	0	8	18	32	58
Chloroscombrus chrysurus	Atlantic Bumper	0	1	0	0	1
*Cichlasoma urophthalmus**	Mayan Cichlid	9	2	0	0	11
Cynoscion arenarius	Sand Seatrout	0	7	30	34	71
Cynoscion nebulosus	Spotted Seatrout	0	357	102	10	469
Cyprinodon variegatus	Sheepshead Minnow	43	136	0	0	179
Dasyatis americana	Southern Stingray	0	0	2	0	2
Dasyatis sabina	Atlantic Stingray	0	9	349	36	394
Dasyatis say	Bluntnose Stingray	0	0	11	1	12
*Diapterus auratus**	Irish Pompano	0	0	11	0	11
*Diplodus holbrookii**	Spottail Pinfish	0	0	6	0	6
*Dorosoma petenense**	Threadfin Shad	0	0	1	0	1
Echeneis neucratoides	Whitefin Sharksucker	0	0	1	1	2
Echeneis sp.	Sharksuckers	0	0	0	1	1
*Elacatinus macrodon**	Tiger Goby	0	0	0	9	9
Elops saurus	Ladyfish	14	0	786	0	800
Eucinostomus gula	Silver Jenny	0	1,802	3,326	100	5,228
Eucinostomus harengulus	Tidewater Mojarra	35	625	1,991	2	2,653
Eucinostomus spp.	*Eucinostomus*	50	6,846	0	174	7,070
Eugerres plumieri	Striped Mojarra	117	158	29	0	304
Farfantepenaeus duorarum	Pink Shrimp	0	585	23	80	688
Floridichthys carpio	Goldspotted Killifish	116	2,838	5	0	2,959
Fundulus confluentus	Marsh Killifish	4	0	0	0	4
Fundulus grandis	Gulf Killifish	53	93	4	0	150
Fundulus similis	Longnose Killifish	1	44	1	0	46
Fundulus sp.	Assorted Killifish	1	0	0	0	1
Gambusia holbrooki	Eastern Mosquito Fish	231	1	0	0	232
Gobiesox strumosus	Skilletfish	0	1	0	1	2

Scientific Name	Common Name	9.1-m center bag seine (n=140)	21-m center bag seine (n=243)	183-m haul seine (n=180)	6.1-m otter trawl (n=36)	All Gears (n=599)
Gobiosoma bosc	Naked Goby	7	2	0	0	9
Gobiosoma robustum	Code Goby	8	224	0	11	243
Gobiosoma spp.	Gobiosoma Gobies	1	179	0	20	200
Gymnura micrura	Smooth Butterfly Ray	0	0	7	1	8
Harengula jaguana	Scaled Sardine	0	936	110	0	1,046
Hemiramphidae spp.	Halfbeaks	0	4	0	0	4
Heterandria formosa	Least Killifish	6	0	0	0	6
Hippocampus erectus	Lined Seahorse	0	3	0	2	5
Hippocampus sp.	Hippocampus Seahorses	0	1	0	0	1
Hippocampus zosterae	Dwarf Seahorse	0	31	0	0	31
*Hypleurochilus caudovittatus**	Zebratail Blenny	0	0	0	1	1
Hyporhamphus meeki	False Silver Halfbeak	0	12	4	0	16
Hyporhamphus sp.	Halfbeaks	0	1	0	0	1
Hyporhamphus unifasciatus	Halfbeak	0	0	1	0	1
*Hypsoblennius hentz**	Feather Blenny	0	3	0	1	4
Lagodon rhomboides	Pinfish	0	1,671	16,346	18	18,035
Leiostomus xanthurus	Spot	36	83	147	8	274
Lepomis macrochirus	Bluegill	4	0	0	0	4
*Lepomis microlophus**	Redear Sunfish	1	0	0	0	1
Lepomis sp.	Sunfishes	1	0	0	0	1
Limulus polyphemus	Horseshoe Crab	0	3	6	0	9
*Lobotes surinamensis**	Tripletail	0	0	1	0	1
*Lophogobius cyprinoides**	Crested Goby	0	8	0	124	132
Lucania parva	Rainwater Killifish	1,072	15,708	0	0	16,780
Lutjanus griseus	Gray Snapper	0	14	26	3	43
Lutjanus synagris	Lane Snapper	0	1	2	1	4
Membras martinica	Rough Silverside	1	48	0	0	49
Menidia spp.	*Menidia* Silversides	1,098	7,727	0	0	8,825

Scientific Name	Common Name	9.1-m center bag seine (n=140)	21-m center bag seine (n=243)	183-m haul seine (n=180)	6.1-m otter trawl (n=36)	All Gears (n=599)
Menippe spp.	Stone Crab	0	0	1	46	47
Menticirrhus americanus	Southern Kingfish	0	8	0	21	29
Menticirrhus saxatilis	Northern Kingfish	0	1	0	1	2
Microgobius gulosus	Clown Goby	254	4,446	0	70	4,770
Micropogonias undulatus	Atlantic Croaker	0	0	0	1	1
Micropterus salmoides	Largemouth Bass	10	0	0	0	10
Mugil cephalus	Striped Mullet	3	12	744	0	759
Mugil curema	White Mullet	0	0	154	0	154
Mugil trichodon	Fantail Mullet	3	3	75	0	81
Mycteroperca microlepis	Gag	0	0	1	0	1
Ogcocephalus cubifrons	Polka-dot Batfish	0	0	0	2	2
Oligoplites saurus	Leatherjacket	13	123	27	0	163
Opisthonema oglinum	Atlantic Thread Herring	0	567	490	0	1,057
Opsanus beta	Gulf Toadfish	1	13	16	25	55
Oreochromis/Sarotherodon spp.	Tilapias	6	173	0	0	179
Orthopristis chrysoptera	Pigfish	0	242	384	23	649
Palaemonetes intermedius	Brackish Grass Shrimp	405	0	0	0	405
Palaemonetes pugio	Daggerblade Grass Shrimp	2,497	0	0	0	2,497
Palaemonetes sp.	Grass Shrimp	1	0	0	0	1
Paralichthys albigutta	Gulf Flounder	0	18	26	26	70
Poecilia latipinna	Sailfin Molly	163	11	0	0	174
Pogonias cromis	Black Drum	0	0	22	0	22
Portunus spp.	Portunus Crabs	0	0	0	69	69
Prionotus scitulus	Leopard Searobin	0	11	9	63	83
Prionotus tribulus	Bighead Searobin	0	5	3	17	25
Rhinoptera bonasus	Cownose Ray	0	0	130	0	130
Sarotherodon melanotheron	Blackchin Tilapia	1	5	62	0	68
Sciaenops ocellatus	Red Drum	24	292	209	0	525

Scientific Name	Common Name	9.1-m center bag seine (n=140)	21-m center bag seine (n=243)	183-m haul seine (n=180)	6.1-m otter trawl (n=36)	All Gears (n=599)
Scomberomorus maculatus	Spanish Mackerel	0	0	5	0	5
Selene vomer	Lookdown	0	0	13	1	14
Sphoeroides nephelus	Southern Puffer	3	101	161	9	274
Sphoeroides sp.	*Sphoeroides* Pufferfish	0	1	0	0	1
Sphyrna tiburo	Bonnethead	0	1	11	0	12
Stephanolepis hispidus	Planehead Filefish	0	4	0	2	6
Strongylura marina	Atlantic Needlefish	1	5	15	0	21
Strongylura notata	Redfin Needlefish	13	193	616	0	822
Strongylura spp.	Needlefishes	0	5	0	0	5
Strongylura timucu	Timucu	0	2	0	0	2
Symphurus plagiusa	Blackcheek Tonguefish	0	9	0	8	17
Syngnathus floridae	Dusky Pipefish	0	36	0	1	37
Syngnathus louisianae	Chain Pipefish	0	46	0	2	48
Syngnathus scovelli	Gulf Pipefish	2	479	0	13	494
Synodus foetens	Inshore Lizardfish	0	106	25	38	169
Trachinotus carolinus	Florida Pompano	0	0	12	0	12
Trachinotus falcatus	Permit	0	0	6	0	6
Trinectes maculatus	Hogchoker	16	10	0	3	29
Urophycis floridana	Southern Hake	0	1	0	1	2
	Total	6,498	77,421	29,439	3,479	116,837

Weedon Island Preserve Amphibian and Reptile List

Confidence	Scientific Name[a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
	Frogs and Toads							
1	*Bufo quercicus*	oak toad					x	one record from WIP
1	*Eleutherodactylus planirostris*	greenhouse frog (exotic)					x	
1	*Gastrophryne carolinensis*	eastern narrow-mouthed toad					x	
2	*Hyla cinerea*	green treefrog				x		
2	*Hyla squirella*	squirrel treefrog				x		
1	*Osteopilus septentrionalis*	Cuban treefrog (exotic)				x	x	
2	*Rana capito aesopus*	Florida gopher frog	S3		SSC	x		
1	*Rana sphenocephala utricularia*	Southern leopard frog					x	
	Crocodilians							
2	*Alligator mississippiensis*	American alligator	S4	SAT	SSC	x		
	Amphisbeanian							
1	*Rhineura floridana*	Florida worm lizard					x	one record on Googe
	Lizards							
1	*Anolis carolinensis*	green anole					x	
1	*Anolis sagrei sagrei*	Cuban brown anole (exotic)					x	
1	*Cnemidophorus sexlineatus sexlineatus*	Eastern six-lined racerunner				x	x	
1	*Hemidactylus garnotii*	Indo-Pacific gecko (exotic)					x	
2	*Ophisaurus ventralis*	Eastern glass lizard				x		
1	*Eumeces inexpectatus*	Southeastern five-lined skink				x	x	
2	*Salvator merianae*	Argentine black and white tegu						
	Turtles and Tortoises							
2	*Chelydra serpentina osceola*	Florida snapping turtle				x		
1	*Gopherus polyphemus*	gopher tortoise	S3		T	x	x	Christman includes an incidental sighting on Googe
2	*Malaclemys terrapin macrospilota*	ornate diamond-backed terrapin				x		
1	*Terrapene carolina bauri*	Florida box turtle					?	trapped or incidentally sighted in body of text; DS sighting date ?
2	*Terrapene carolina major*	Gulf Coast box turtle				x		
	Snakes - nonvenomous							
1	*Cemophora coccinea coccinea*	Florida scarletsnake					x	two records on Googe
1	*Coluber constrictor priapus*	Southern black racer					x	
1	*Diadophis punctatus punctatus*	Southern ring-necked snake					x	
1	*Drymarchon couperi*	Eastern indigo snake	S3	T	T	x		Observed by Dale Pierce (1970) as told to Paul Moler (1981); C. Heuegl sighting as described to DS on 11/10/07 "small adult at picnic table near canoe launch back within a yr of when we (ELD) took over management"
1	*Elaphe guttata guttata*	cornsnake, red ratsnake					x	one record on Ross
1	*Lampropeltis getula floridana*	Florida Kingsnake	S2S3					Two records from Keith Thompson's Raodkill data - 1995 & 1996

Weedon Island Preserve Amphibian and Reptile List

Confidence	Scientific Name[a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
2	*Masticophis flagellum flagellum*	Eastern coachwhip				x		listed in Appendix A of Christman as confirmed, but not trapped or incidentally sighted in body of text; Roadkill specimen found by D. Stillwaugh on 11 August 2009
1	*Nerodia clarkii*	mangrove saltmarsh snake				x	?	and confirmed by K. Krysko.
2	*Pituophis melanoleucus mugitus*	Florida pinesnake	S3		SSC		?	listed in Appendix A of Christman as confirmed, but not trapped or incidentally sighted in body of text
1	*Thamnophis sauritus sackenii*	peninsula ribbonsnake					x	one record from WIP
	Snakes - venomous							
1	*Agkistrodon piscivorus conanti*	Florida cottonmouth					x	one record from WIP
1	*Crotalus adamanteus*	Eastern diamond-backed rattlesnake	S3			x	x	Christman includes an incidental sighting on Googe; Keith T. has 17 individual roadkills logged between 1995 - 1999.
1	*Micrurus fulvius*	Eastern coralsnake, Harlequin coralsnake					x	two records from WIP

[a] Nomenclature follows the The Society for the Study of Amphibians and Reptiles *Scientific and Standard English Names of Amphibians and Reptiles of North American North of Mexico, with Comments Regarding Confidence in Our Understanding* (SSAR Circular Number 29; 2001) - http://www.herplit.com/SSAR/circulars/HC29/Crother.html

1 Verified Records
2 Unverified Records

[b] Florida Natural Areas Inventory - http://www.fnai.org/trackinglist.cfm

S1 - Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 - Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 - Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 - Apparently secure in Florida (may be rare in parts of range).

[c] Federal Rank - http://www.fws.gov/endangered/wildlife.html#Species

E - Endangered
T - Threatened
SAT - Threatened due to similarity of appearance to a species which is federally listed and enforcement has difficulty differentiating between listed and unlisted spp.

[d] State Rank - http://www.myfwc.com/docs/WildlifeHabitats/Threatened_Endangered_Species.pdf (May 2008)

E - Endangered
T - Threatened
SSC - Species of Special Concern

[e] Weedon Island Preserve Resource Management Plan - Final Report April 25, 2002

[f] Floral and Faunal Inventory of Weedon Island and other County Preserves - Second Progress Report - June 2003 by Steven P. Christman, Ph.D.

QAQC - D. Stillwaugh 7 Apr 2009

Weedon Island Preserve Amphibian and Reptile List

Confidence	Scientific Name[a]	Common Name	FNAI State Rank[b]	Federal Rank[c]	State Rank[d]	WIP Mgmt Plan 2002[e]	Christman Study 2003[f]	Comments
	Last Updated by D. Stillwaugh on 13 August 2009 - "upgraded" N. clarkii							
	Updated by Pam Leasure August 2021							

Weedon Island Preserve Butterfly List

Scientific Name	Common Name	Family Name	Generic Family Description
Eurytides marcellus	Zebra swallowtail	Papilionidae	Swallowtails
Papilio polyxenes	Black swallowtail	Papilionidae	Swallowtails
Papilio cresphontes	Giant swallowtail	Papilionidae	Swallowtails
Papilio troilus	Spicebush swallowtail	Papilionidae	Swallowtails
Papilio glaucus	Eastern tiger swallowtail	Papilionidae	Swallowtails
Papilio palamedes	Palamedes swallowtail	Papilionidae	Swallowtails
Ascia monuste	Great southern white	Pieridae	Whites and sulphurs
Phoebis sennae	Cloudless sulphur	Pieridae	Whites and sulphurs
Phoebis philea	Orange-barred sulphur	Pieridae	Whites and sulphurs
Phoebis agarithe	Large orange sulphur	Pieridae	Whites and sulphurs
Aphrissa statira	Statira sulphur	Pieridae	Whites and sulphurs
Eurema daira	Barred yellow	Pieridae	Whites and sulphurs
Eurema lisa	Little yellow	Pieridae	Whites and sulphurs
Eurema nicippe	Sleepy orange	Pieridae	Whites and sulphurs
Nathalis iole	Dainty sulphur	Pieridae	Whites and sulphurs
Strymon melinus	Gray hairstreak	Lycaenidae	Gossamer-wing butterflies
Brephidium isopthalma	Eastern pygmy blue	Lycaenidae	Gossamer-wing butterflies
Leptotes cassius	Cassius blue	Lycaenidae	Gossamer-wing butterflies
Hemiargus ceraunus	Ceraunus blue	Lycaenidae	Gossamer-wing butterflies
Agraulis vanillae	Gulf fritillary	Nymphalidae	Brush-footed butterflies
Heliconius charithonia	Zebra heliconian	Nymphalidae	Brush-footed butterflies
Phyciodes phaon	Phaon crescent	Nymphalidae	Brush-footed butterflies
Phycoides tharos	Pearl crescent	Nymphalidae	Brush-footed butterflies
Vanessa atalanta	Red admiral	Nymphalidae	Brush-footed butterflies
Junonia coenia	Common buckeye	Nymphalidae	Brush-footed butterflies
Junonia evarete	Mangrove buckeye	Nymphalidae	Brush-footed butterflies
Anartia jatrophae	White peacock	Nymphalidae	Brush-footed butterflies
Limenitis archippus	Viceroy	Nymphalidae	Brush-footed butterflies
Hermeuptychia sosybius	Carolina satyr	Nymphalidae	Brush-footed butterflies
Danaus plexippus	Monarch	Nymphalidae	Brush-footed butterflies
Phocides pigmalion	Mangrove skipper	Hesperiidae	Skippers
Urbanus proteus	Long-tailed skipper	Hesperiidae	Skippers
Urbanus dorantes	Dorantes skipper	Hesperiidae	Skippers
Erynnis horatius	Horace's duskywing	Hesperiidae	Skippers
Pygus oileus	Tropical checkered skipper	Hesperiidae	Skippers
*Pyrgus communis**	Common checkered skipper*	Hesperiidae	Skippers
Pyrgus albescens	White checkered skipper	Hesperiidae	Skippers
Copaeodes minimus	Southern skipperling	Hesperiidae	Skippers
Hylephilia phyleus	Fiery skipper	Hesperiidae	Skippers
Polites vibex	Whirlabout	Hesperiidae	Skippers
Wallengrenia otho	Southern broken-dash	Hesperiidae	Skippers
Atalopedes campestris	Sachem	Hesperiidae	Skippers
Panoquina ocola	Ocola skipper	Hesperiidae	Skippers

* all specimens of *P. communis* taken in Florida over the last 10 years are currently under review

Updated by Pam Leasure August 2021

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Florida Natural Areas Inventory

Managed Area Element Summary

Weedon Island Preserve

SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status
PLANTS					
Chrysopsis floridana	Florida goldenaster	G3	S3	E, PDL	E
REPTILES					
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G3	S3	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S2?	T	FT
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
BIRDS					
Platalea ajaja	Roseate Spoonbill	G5	S2	N	ST

Note: *Summary includes all documented and likely species occurrence records currently in the FNAI database.*

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Florida Natural Areas Inventory

Managed Area Element Summary

Weedon Island Preserve

SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4 = Apparently secure globally (may be rare in parts of range).
G5 = Demonstrably secure globally.
GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
GX = Believed to be extinct throughout range.
GXC = Extirpated from the wild but still known from captivity or cultivation.
G#? = Tentative rank (e.g., G2?).
G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q = Same as above, but validity as subspecies or variety is questioned.
GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
GNA = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
GNR = Element not yet ranked (temporary).
GNRTNR = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 = Apparently secure in Florida (may be rare in parts of range).
S5 = Demonstrably secure in Florida.
SH = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
SX = Believed to be extirpated throughout Florida.
SU = Unrankable; due to a lack of information no rank or range can be assigned.
SNA = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
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FEDERAL LEGAL STATUS

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Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
LE = Endangered: species in danger of extinction throughout all or a significant portion of its range.
LE, LT = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
LE, PDL = Species currently listed endangered but has been proposed for delisting.
LE, PT = Species currently listed endangered but has been proposed for listing as threatened.
LE, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
LT = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

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Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
F(XN) = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future. (ST* for Ursus americanus floridanus (Florida black bear) indicates that this status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. ST* for Neovison vison pop.1 (Southern mink, South Florida population) indicates that this status applies to the Everglades population only.)
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* indicates that a species has SSC status only in selected portions of its range in Florida. SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: http://www.doacs.state.fl.us/pi/.

LE = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant

to the U.S. Endangered Species Act.
LT = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N = Not currently listed, nor currently being considered for listing.

Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

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G4 = Apparently secure globally (may be rare in parts of range).
G5 = Demonstrably secure globally.
GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
GX = Believed to be extinct throughout range.
GXC = Extirpated from the wild but still known from captivity or cultivation.
G#? = Tentative rank (e.g., G2?).
G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q = Same as above, but validity as subspecies or variety is questioned.
GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
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C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
E = Endangered: species in danger of extinction throughout all or a significant portion of its range.
E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
E, PDL = Species currently listed endangered but has been proposed for delisting.
E, PT = Species currently listed endangered but has been proposed for listing as threatened.
E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
PE = Species proposed for listing as endangered
PS = Partial status: some but not all of the species' infraspecific taxa have federal
PT = Species proposed for listing as threatened
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service
FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
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E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: http://www.natureserve.org/explorer/eorankguide.htm

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

APPENDIX 13
Florida Invasive Species Council

For more information on invasive exotic plants including links to related web pages, visit:

www.fleppc.org

FLEPPC List Definitions:

Exotic—a species introduced to Florida, purposefully or accidentally, from a natural range outside of Florida. **Native**—a species whose natural range includes Florida. **Naturalized exotic**—an exotic that sustains itself outside cultivation (it is still exotic; it has not "become" native).
Invasive exotic— an exotic that has not only naturalized, but is expanding on its own in Florida native plant communities.

Zone: N = north, **C** = central, **S** = south, Referring to each species' general distribution in regions of Florida (not its potential range in the state). Please refer to the map below.



Citation example:

FLEPPC. 2019 List of Invasive Plant Species. Florida Exotic Pest Plant Council. Internet: www.fleppc.org

The 2019 list was prepared by the FLEPPC Plant List Committee

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Florida Exotic Pest Plant Council's 2019 List of Invasive Plant Species

*The mission of the **Florida Exotic Pest Plant Council** is to reduce the impacts of invasive plants in Florida through the exchange of scientific, educational, and technical information.*

Note: The FLEPPC List of Invasive Plant Species is not a regulatory list. Only those plants listed as Federal Noxious Weeds, Florida Noxious Weeds, Florida Prohibited Aquatic Plants, or in local ordinances are regulated by law.

Purpose of the List

To provide a list of plants determined by the Florida Exotic Pest Plant Council to be invasive in natural areas of Florida and routinely update the list based upon information of newly identified occurrences and changes in distribution over time. Also, to focus attention on:

- The adverse effects exotic pest plants have on Florida's biodiversity and native plant communities,
- The habitat losses in natural areas from exotic pest plant infestations,
- The impacts on endangered species via habitat loss and alteration,
- The need for pest plant management,
- The socio-economic impacts of these plants (e.g., increased wildfires or flooding in certain areas),
- Changes in the severity of different pest plant infestations over time,
- Providing information to help managers set priorities for research and control programs.

www.fleppc.org

CATEGORY I

Invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.

Scientific Name	Common Name	Zone
Abrus precatorius	rosary pea	C, S
Acacia auriculiformis	earleaf acacia	C, S
Albizia julibrissin	mimosa, silk tree	N, C
Albizia lebbeck	woman's tongue	C, S
Ardisia crenata	coral ardisia	N, C, S
Ardisia elliptica	shoebutton ardisia	C, S
Asparagus aethiopicus	asparagus fern	N, C, S
Bauhinia variegata	orchid tree	C, S
Bischofia javanica	bishopwood	C, S
Calophyllum antillanum	Santa Maria	S
Casuarina equisetifolia	Australian-pine	N, C, S
Casuarina glauca	suckering Australian-pine	C, S
Cenchrus purpureus (*Pennisetum purpureum*)	elephantgrass, Napier grass	N, C, S
Cinnamomum camphora	camphor-tree	N, C, S
Colocasia esculenta	wild taro	N, C, S
Colubrina asiatica	latherleaf	S
Cupaniopsis anacardioides	carrotwood	C, S
Deparia petersenii	Japanese false spleenwort	N, C
Dioscorea alata	winged yam	N, C, S
Dioscorea bulbifera	air potato	N, C, S
Dolichandra unguis-cati (*Macfadyena unguis-cati*)	cat's-claw vine	N, C, S
Eichhornia crassipes	water-hyacinth	N, C, S
Eugenia uniflora	Surinam cherry	C, S
Ficus microcarpa[1]	laurel fig	C, S
Hydrilla verticillata	hydrilla	N, C, S
Hygrophila polysperma	green hygro	N, C, S
Hymenachne amplexicaulis	West Indian marsh grass	N, C, S
Imperata cylindrica	cogongrass	N, C, S
Ipomoea aquatica	water-spinach	C
Jasminum dichotomum	Gold Coast jasmine	C, S
Jasminum fluminense	Brazilian Jasmine	C, S
Lantana strigocamara[2]	lantana, shrub verbena	N, C, S
Ligustrum lucidum	glossy privet	N, C
Ligustrum sinense	Chinese privet	N, C, S
Lonicera japonica	Japanese honeysuckle	N, C, S
Ludwigia peruviana	Peruvian primrosewillow	N, C, S
Lumnitzera racemosa	black mangrove	S
Luziola subintegra	Tropical American watergrass	S
Lygodium japonicum	Japanese climbing fern	N, C, S
Lygodium microphyllum	Old World climbing fern	N, C, S
Manilkara zapota	sapodilla	S
Melaleuca quinquenervia	melaleuca, paper bark	C, S
Melinis repens	Natalgrass	C, S
Microsorum grossum[4]	serpent fern, wart fern	S
Microstegium vimineum	Japanese stiltgrass	N
Mimosa pigra	catclaw mimosa	C, S
Nandina domestica	heavenly bamboo, nandina	N, C
Nephrolepis brownii	Asian sword fern	C, S
Nephrolepis cordifolia	sword fern	N, C, S
Neyraudia reynaudiana	Burma reed	S
Nymphoides cristata	crested floatingheart	C, S
Paederia cruddasiana	sewer vine	S
Paederia foetida	skunk vine	N, C, S
Panicum repens	torpedograss	N, C, S
Pistia stratiotes	water-lettuce	N, C, S
Psidium cattleianum	stawberry guava	C, S
Psidium guajava	guava	C, S
Pueraria montana var. *lobata*	kudzu	N, C, S
Rhodomyrtus tomentosa	downy rose-myrtle	C, S
Ruellia simplex	Mexican petunia	N, C, S
Salvinia minima	water spangles	N, C, S
Scaevola taccada	beach naupaka, half-flower	N, C, S
Schefflera actinophylla	schefflera, umbrella tree	C, S
Schinus terebinthifolia	Brazilian pepper	N, C, S
Scleria lacustris	Wright's nutrush	C, S
Scleria microcarpa[*]	tropical nutrush	C, S
Senna pendula var. *glabrata*	Christmas senna, climbing cassia	C, S
Solanum tampicense	wetland night shade	C, S
Solanum viarum	tropical soda apple	N, C, S
Sporobolus jacquemontii	West Indian dropseed	C, S
Syngonium podophyllum	arrowhead vine	N, C, S
Syzygium cumini	Java plum	C, S
Tectaria incisa	incised halberd fern	S
Thelypteris opulenta	jeweled maidenhair fern	S
Thespesia populnea	seaside mahoe	C, S
Tradescantia fluminensis	small-leaf spiderwort	N, C
Tradescantia spathacea	oyster plant	C, S
Triadica sebifera (*Sapium sebiferum*)	Chinese tallow-tree	N, C, S
Urena lobata	Caesar's weed	N, C, S
Urochloa mutica	paragrass	N, C, S
Vitex rotundifolia	beach vitex	N

[1] Does not include *Ficus microcarpa* var. *fuyuensis*, which is sold as "green island ficus".

[2] Historically this non-native has been referred to as *Lantana camara,* a species not known to occur in Florida.

[3] Does not include the native endemic *Spermacoce neoterminalis.*

[4] *Microsorum grossum* has been previously misidentified as *Microsorum scolopendria*.

[*] Added to the FLEPPC List of Invasive Species in 2019.

Plant names are those published in the Atlas of Florida Plants (http://www.florida.plantatlas.usf.edu). For historical species nomenclature see "Guide to Vascular Plants of Florida Third Edition." Wunderlin and Hansen, University of Florida Press. 2011.

CATEGORY II

Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category 1 species. These species may become Category 1 if ecological damage is demonstrated.

Scientific Name	Common Name	Zone
Adenanthera pavonina	red sandalwood	S
Agave sisalana	sisal hemp	C, S
Alstonia macrophylla	devil tree	S
Alternanthera philoxeroides	alligatorweed	N, C, S
Antigonon leptopus	coral vine	N, C, S
Ardisia japonica	Japanese ardisia	N
Aristolochia elegans (*Aristolochia littoralis*)	calico flower	N, C, S
Asystasia gangetica	Ganges primrose	C, S
Begonia cucullata	wax begonia	N, C, S
Broussonetia papyrifera	paper mulberry	N, C, S
Bruguiera gymnorrhiza	large-leafed mangrove	S
Callisia fragrans	Inch plant	C, S
Casuarina cunninghamiana	river sheoak	C, S
Cecropia palmata	trumpet tree	S
Cenchrus polystachios (*Pennisetum polystachios*)	mission grass	S
Cenchrus setaceus (*Pennisetum setaceum*)	fountain grass	S
Cestrum diurnum	day jessamine	C, S
Chamaedorea seifrizii	bamboo palm	S
Clematis terniflora	Japanese clematis	N, C
Cocos nucifera	coconut palm	S
Crassocephalum crepidioides	redflower ragleaf	C, S
Cryptostegia madagascariensis	Madagascar rubbervine	C, S
Cyperus involucratus	umbrella plant	C, S
Cyperus prolifer	dwarf papyrus	C, S
Dactyloctenium aegyptium	Durban crow's-foot grass	C, S
Dalbergia sissoo	Indian rosewood, sissoo	C, S
Dalechampia scandens[*]	spurge-creeper	S
Distimake tuberosus (*Merremia tuberosa*)	Spanish arbor vine, wood-rose	C, S
Dracaena hyacinthoides (*Sansevieria hyacinthoides*)	bowstring hemp	C, S
Elaeagnus pungens	silverthorn, thorny olive	N, C
Elaeagnus umbellata	autumn olive, silverberry	N
Epipremnum pinnatum cv. *'Aureum'*	pothos	C, S
Eulophia graminea	Chinese crown orchid	C, S
Ficus altissima	council tree, false banyan	S
Flacourtia indica	governor's plum	S
Hemarthria altissima	limpograss	C, S
Heteropterys brachtiata	redwing	S
Hyparrhenia rufa	jaragua	N, C, S
Ipomoea carnea subsp *fistulosa*	shrub morning-glory	C, S
Kalanchoe x houghtonii	mother of millions	N, C, S
Kalanchoe pinnata	life plant	C, S
Koelreuteria elegans subsp. *formosana*	flamegold tree	C, S
Landoltia punctata	spotted duckweed	N, C, S
Leucaena leucocephala	leadtree	N, C, S
Limnophila sessiliflora	Asian marshweed	N,C, S
Livistona chinensis	Chinese fan palm	C, S
Macroptilium lathyroides	wild bushbean	N, C, S
Melaleuca viminalis (*Callistemon viminalis*)	bottlebrush	C, S
Melia azedarach	Chinaberry	N, C, S
Melinis minutiflora	molasses grass	C S
Mikania micrantha	mile-a-minute vine	S
Momordica charantia	balsam-apple	N, C, S
Murraya paniculata	orange-jessamine	S
Myriophyllum spicatum	Eurasian water-milfoil	N, C, S
Passiflora biflora	twin-flowered passion vine	S
Phoenix reclinata	Senegal date palm	C, S
Phyllostachys aurea	golden bamboo	N, C
Pittosporum pentandrum	Taiwanese cheesewood	S
Platycerium bifurcatum	staghorn fern	S
Praxelis clematidea	praxelis	C
Pteris vittata	Chinese brake, ladder brake	N, C, S
Ptychosperma elegans	solitary palm	S
Richardia grandiflora	largeflower Mexican clover	N, C, S
Ricinus communis	castorbean	N, C, S
Rotala rotundifolia	dwarf rotala, roundleaf toothcup	S
Ruellia blechum	green shrimp plant	N, C, S
Sesbania punicea	rattlebox	N, C, S
Sida planicaulis	mata-pasto	C, S
Solanum diphyllum	twinleaf nightshade	N, C, S
Solanum torvum	turkey berry	N, C, S
Spermacoce verticillata[3]	shrubby false buttonweed	C, S
Sphagneticola trilobata	wedelia	N, C, S
Stachytarpheta cayennensis	nettle-leaf porterweed	S
Syagrus romanzoffiana	queen palm	C, S
Syzygium jambos	Malabar plum, rose-apple	N, C, S
Taliparitiliaceum	mahoe, sea hibiscus	C, S
Terminalia catappa	tropical-almond	C, S
Terminalia muelleri	Australian–almond	C, S
Tribulus cistoides	puncture vine, burr-nut	N, C, S
Urochloa maxima (*Panicum maximum*)	Guineagrass	N, C, S
Vernicia fordii	tung-oil tree	N, C, S
Vitex trifolia	simple-leaf chastetree	C, S
Washingtonia robusta	Washington fan palm	C, S
Wisteria sinensis	Chinese wisteria	N, C
Xanthosoma sagittifolium	malanga, elephant ear	N, C, S

APPENDIX 14
Feather Sound Restoration

Project Period	4/01/2007 - 6/30/2016
Project Location Description (from Proposal)	Southwestern portion of Old Tampa Bay, Tampa Bay, Florida. Feather Sound region is bordered by the Howard Frankland Bridge to the south and the St. Pete/Clearwater Airport to the north.
Project Summary (from Proposal)	Restore approximately five acres of mangrove and marsh habitat to improve water quality in the Feather Sound region of western Old Tampa Bay. Project will implement the primary management recommendations to address poor seagrass recovery.

Summary of Accomplishments

Project construction is complete. Permits were approved, a bid document was issued, reviewed, and ranked, and a successful bidder received the construction contract in 2015. Grading, hydroblasting of side-cast spoil, and installation of native vegetation was accomplished in 2016. Spoil mounds with exotic vegetation were removed via hydroblasting to facilitate sheet flow and restore the impacted salt barren area. Construction contracting and oversight was conducted by the Southwest Florida Water Management District (SWFWMD). Construction activities, including mobilization, removal of exotic and invasive plant species, spoil mound removal, earthwork , and revegetation with native plants, are complete. A volunteer planting with Tampa Bay Watch was held in 2016 to enhance the project area. Phase 2 is providing approximately 10 additional acres of restored habitat to the Feather Sound site. Approximately 99 spoil mounds (dirt piles created during construction of mosquito ditches) were removed, four ditch blocks were repaired, a partially filled pond was excavated and graded to improve surrounding habitat, and over 9,000 native plants were installed by the contractor during this phase of the project.

Lessons Learned

The primary roadblock for this project was the changing management of the golf course and its natural areas that were at one point considered a project component. The final ownership configuration for the golf course (it changed hands at least twice during the project period) prevented its inclusion in the final project. This exemplifies the importance of long-term property ownership (in terms of stability) and continuous coordination with all partners to ensure project completion.

Final Programmatic Report Narrative

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed ten (10) pages; **do not delete the text provided below**. Once complete, upload this document into the on-line final programmatic report task as instructed.

1. Summary of Accomplishments

In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured.

Construction of the Feather Sound Habitat Restoration Project is complete. Permits were approved, a bid document was issued, reviewed, and ranked, and a successful bidder received the construction contract in 2015. Grading, hydroblasting of side-cast spoil, removal of exotic vegetation, and installation of native vegetation was accomplished, resulting in restoration and enhancement of 29.8 acres of coastal habitat in Old Tampa Bay. Water quality and fisheries monitoring were conducted by partners in parallel with the habitat restoration project. Volunteers contributed 726.5 hours of work, including plant harvesting at donor sites and installation at Feather Sound, for a value of $16,041.

2. Project Activities & Outcomes

Activities

- *Describe and quantify (using the approved metrics referenced in your grant agreement) the primary activities conducted during this grant.*
- *Briefly explain discrepancies between the activities conducted during the grant and the activities agreed upon in your grant agreement.*
- The Tampa Bay Estuary Program (TBEP) developed a formal Request for Proposals in 2009 to select a contractor to develop restoration designs and permits for the FS tidal wetland area. TBEP coordinated a review team of 11 members who recommended a consultant to the TBEP Policy Board. The Policy Board voted unanimously to select Scheda Ecological Associates, Inc. (Scheda) as the consultant.
- The Project Team, including representatives from TBEP, the Southwest Florida Water Management District (SWFWMD), Pinellas County, the Florida Wildlife Research Institute (FWRI), Tampa Bay Watch (TBW), and Scheda, met multiple times throughout the project period to share project information and provide feedback on restoration plans and opportunities. Scheda and other team members visited the public wetland area and the local Feather Sound Country Club as part of design preparation. Scheda conducted extensive field surveys, performed geotechnical investigations and modeled water circulation and flow scenarios.
- During site visits in 2009-2010, Scheda staff made contact with the Feather Sound Golf Course (FSGC), which had plans for to remove 15-30 acres of turf grass on the course and replace it with other vegetation. The Project Team conducted several rounds of discussion with managers for the golf course to develop restoration plans within the privately-owned lands, in addition to designs in the public area. Design plans (developed by Scheda) included creation of wetlands on the golf course to treat reclaimed water and stormwater runoff before it drains into Old Tampa Bay, enhancing nutrient removal. Designs also included creation of saltern habitat and exotic vegetation removal in the publicly owned wetland areas. The FSGC provided TBEP with an agreement letter stating its interest in the process and committing to elements of a Public-Private Partnership prior to construction: 1) Placing a perpetual conservation easement over all lands restored using public funds; 2) Performing perpetual post-project maintenance on publicly-funded restoration areas; and 3) Allowing public access or views of areas restored with public funds. The team also discussed the project with a nearby condominium association to assess whether lands owned by the association, including an area invested with non-native exotic vegetation, could be included in the designs. Both of these efforts were ultimately unsuccessful due to causes beyond the control of the cooperating partners. For example, the golf course changed ownership and the new owners/managers did not have the same project goals as the previous owner.
- Phase I plans included hydroblasting to remove spoil islands infested with exotic species and will also involve strategic ditch blocking to re-route flows within the mangrove system and create saltern habitat. This included exotic and nuisance plant removal within estuarine areas, a borrow pit, and spoil mounds. An approximately 9

acre saltern habitat was planned to be created through hydroblasting and strategic ditch blocking in an area that previously supported saltern habitat. Hydrologic restoration at a major outfall location that receives drainage from urban and residential areas, was planned to re-direct the stormwater flow through the mangrove system, increasing residence time and allowing for nutrient attenuation. Native planting, utilizing community volunteers, occurred following the construction phase. Permits were submitted and accepted by the Florida Department of Environmental Protection and the US Army Corps of Engineers in late 2011/early 2012.

- From 2010-2012, the FWRI conducted quarterly pre-construction monitoring of fisheries resources, while the Pinellas County Department of Environmental Management performed water quality monitoring during the same period. Post-construction (Phase 1) fisheries monitoring was conducted by FWRI in 2013-2014. Species of interest collected by FWRI included Red drum (*Sciaenops ocellatus*), Striped mullet (*Mugil cephalus)* Common snook (*Centropomis undecimalis*), Sheepshead (*Archosargus probatocephalus*), Spotted sea trout (*Cynoscion nebulosus),* and Blue crabs *(Callinectes sapidus).*
- The Southwest Florida Water Management District developed a Request for Bid document in order to contract with an environmental construction consultant. This process involved coordination and review with the Tampa Bay Estuary Program and its design consultant, Scheda Ecological Associates, Inc.
- The TBEP applied for Cooperative Funding from the Southwest Florida Water Management District for construction of restoration on the privately-owned golf course, while NFWF funds were budgeted for restoration within the publicly owned portions.
- The project team procured an environmental consultant to perform environmental restoration work on Phase 1 of the Feather Sound Tidal Wetland Restoration Project. The contractor began by removing exotic, invasive vegetation at two locations within the wetland system. Brazilian pepper, lead trees, bottlebrush, and other exotic vegetation were killed in place with herbicides. Plants surrounding the large borrow pit were cut, removed and chipped in place to create mulch for future planting events. Exotic vegetation removal also occurred in the southern portion of the wetland area. Additionally, ditch blocking and re-creation of a 9-acre salt barren area within the mangrove system was conducted during 2013.
- Multiple volunteer planting events were held from 2013 through 2016. A total of 392 citizens, including high school students, community members, and elected officials worked with staff from Pinellas County, TBEP, TBW, and Scheda Ecological Associates, Inc., to approximately 11,000 native plants. Bushes include sea grape, Florida privet, necklacepod, slash pine, and buttonwood. Marsh grasses include paspalum and sand cordgrass. The volunteers contributed 726.5 hours to the project.
- During 2013-2014, the project team created and submitted restoration designs for Phase 2 of construction. In early 2014, permits were reviewed and accepted by the Florida Department of Environmental Protection and is being reviewed by the US Army Corps of Engineers. The original restoration design was augmented to include additional hydrologic ditch blocking for water quality improvement and to facilitate recovery of the salt barren area. Construction bidding and oversight will be conducted by the Southwest Florida Water Management District (SWFWMD). SWFWMD is currently developing the bid documents and will select a contractor for the 2nd phase. Construction is scheduled for summer 2014.
- A Notice to Proceed for Phase 2 Construction of the tidal wetland restoration was given to the contractor in November 2015. Spoil mounds with exotic vegetation were removed via hydroblasting to facilitate sheet flow and restore the impacted salt barren area. Construction contracting and oversight was conducted by the Southwest Florida Water Management District (SWFWMD). Construction activities, including mobilization, removal of exotic and invasive plant species, spoil mound removal, earthwork, and revegetation with native plants, are complete. The plant palette included *Cephalanthus occidentalis, Myrica cerifera, Pinus elliottii, Spartina bakeri, and S. patens.* A volunteer planting, coordinated with TBW, was held in 2016 to enhance the project area.

Outcomes

- *Describe and quantify progress towards achieving the project outcomes described in your grant agreement. (Quantify using the approved metrics referenced in your grant agreement or by using more relevant metrics not included in the application.)*
- *Briefly explain discrepancies between what actually happened compared to what was anticipated to happen.*
- *Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.*
- Phase 1 included 17.2 acres of exotic and nuisance removal within estuarine areas, a borrow pit, and spoil mounds.
- Phase 2 provided approximately 9 additional acres of restored habitat to the Feather Sound site. Approximately 99 spoil mounds (dirt piles created during construction of mosquito ditches) were removed,

four ditch blocks were repaired, a partially filled pond was excavated and graded to improve surrounding habitat, and over 9,000 native plants were installed by the contractor during this phase of the project.
- A total of 392 citizens, including high school students, community members, and elected officials worked with staff from Pinellas County, TBEP, TBW, and Scheda to approximately 11,000 native plants. Bushes include sea grape, Florida privet, necklacepod, slash pine, and buttonwood. Marsh grasses include paspalum and sand cordgrass.
- Volunteers contributed 726.5 hours to the project with an estimated value of $16,041.
- The total area enhanced and restored during the Feather Sound project was approximately 29.8 acres.

3. Lessons Learned
Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt their projects to build upon some of these key lessons about what worked best and what did not?

The primary roadblock for this project was the changing management of the golf course and its natural areas. The final ownership configuration for the golf course (it changed hands at least twice during the project period) prevented its inclusion in the final project. This exemplifies the importance of long-term property ownership (in terms of stability) and continuous coordination with all partners to ensure project completion.

4. Dissemination
Briefly identify any dissemination of lessons learned or other project results to external audiences, such as the public or other conservation organizations.

Information regarding the Feather Sound Restoration project was disseminated through several different venues. Audiences included EPA representatives (via Powerpoint Presentation in Atlanta, GA), articles in regional newspapers, and the TBEP newsletter.

5. Project Documents
Include in your final programmatic report, via the Uploads section of this task, the following:

- *2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi and must be accompanied with a legend or caption describing the file name and content of the photos;*
  a. Photo 1 – Construction Sign w/ partner logos
  b. Photo 2 – Fisheries monitoring
  c. Photo 3 – Snook captured during fisheries monitoring
  d. Photo 4 – Exotics pre-construction (Brazilian pepper)
  e. Photo 5 – Exotics removal area
  f. Photo 6 – Hydroblasting to remove spoil mound
  g. Photo 7 – Hydroblasting completed at location
  h. Photo 8 – Volunteers installing plants (2013)
  i. Photo 9 – Volunteers installing plants (2016)
  j. Photo 10 – Volunteers installing plants (2016)
- *report publications, GIS data, brochures, videos, outreach tools, press releases, media coverage*
- a. News article on Feather Sound project (2010)
- b. TBEP newsletter announcing restoration project (2010)
- c. Presentation to EPA on Feather Sound
- d and e. Plans and Permits (2011 and 2014)
- f and g. Example reports from fisheries and water quality assessments
- *any project deliverables per the terms of your grant agreement*

POSTING OF FINAL REPORT: *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as "PROTECTED" and provide an explanation and complete citation to the statutory or regulatory source for such protection.*

APPENDIX 15
Weedon Island Salt Marsh Restoration Feasibility Study

FEASIBILITY STUDY

WEEDON ISLAND TIDAL WETLAND RESTORATION

Pinellas County PID 000083A / SWFWMD Project W217

Prepared For:

Pinellas County

Prepared By:

FALLER, DAVIS & ASSOCIATES, Inc.

September 2018

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APPENDICES

Appendix A Restoration of Dragline Ditched Coastal Wetlands: Mosquito Lagoon

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EXECUTIVE SUMMARY

The Weedon Island Tidal Wetland Restoration Feasibility Study was developed to assess viable restoration strategies for a 1,100-acre portion of the 3,190-acre Weedon Island Preserve (Preserve). Intensive mosquito ditching in the 1950's resulted in a loss of wetland area, altered local hydrology, and provided opportunities for establishment of invasive species on the mounds of spoil placed within the mangroves.

Specific restoration/enhancement activities include removal of spoil mounds, filling/dredging of mosquito ditches, implementing hydrology improvements, and treating and/or removal of nuisance and exotic species. Goals, objectives, and constraints were assessed for each strategy. Bids from similar projects were used to develop cost estimates for each approach. A cost-benefit analysis was performed to identify measurable benefits.

Study units were developed for each activity to facilitate a long-term view of restoration of the tidal wetlands as periodic projects to accommodate annual funding cycles and to minimize the amount of temporary impacts at any given time. Spoil mound removal strategies assessed include Hydroblasting and "Walk-in, Dig-out" (WIDO) approaches that have been used in Florida for restoration of mangrove habitat impacted by mosquito ditching. Nuisance species removal through repeated herbicide treatments is a strategy used on spoil mounds at other SWFWMD SWIM projects.

Hydroblasting uses a portable pump and manually-operated high-pressure nozzle to hydraulically blast the spoil mound down to adjacent elevations. The WIDO approach entails mechanical removal of select spoil mounds to create temporary access (Walk-in) for earthmoving equipment. The remaining mounds are excavated, and the spoil is trucked out of the work area. Circulation is improved by removal of the accumulated sediments within the mosquito ditches as the temporary access is removed (Dig-out). Refugia for fish and aquatic invertebrates is created thus improving the overall habitat of the Preserve.

Access affects the cost for spoil mound removal and ranges from $7,605 to $51,750 per acre for Hydroblasting and $15,831 to $16,244 per acre for WIDO. Hydroblasting has drawbacks including the indiscriminate transport of the soil and the challenges associated with achieving a desirable elevation after the work is complete. The WIDO approach has temporary impacts associated with the placement of fill for access and the dredging of the ditches to improve circulation. Similar projects have shown that the time lag for recruitment of desirable species is less than five years.

Nuisance species removal was assessed for habitat improvement in areas of the Preserve not impacted by mosquito ditching and a restoration approach within areas of ditching. Costs range from $273 to $2,429 per acre for habitat improvement and restoration respectively. Compared to spoil mound removal the cost is lower, but the spoil remains in place requiring long-term maintenance to eliminate the nuisance species that typically inhabit spoil mounds. Prescribed fire and a regular herbicide treatment of upland areas is currently performed by County staff and volunteers and is recommended as a successful strategy at a cost of $250 and $273 per acre respectively.

Improvements to hydrology include desilting of drainage pipes, removing spoil mounds that impeded flow, and creating berm openings to restore flow in areas of impounded water. The WIDO approach includes hydrology improvements as well. Pipe desilting ranges from $10 to $26 per linear foot with the ecological lift limited to the immediately adjacent area. Berm openings were estimated to cost $3,200 per opening and the benefit area varies by location.

The WIDO approach is recommended for the portion of the Preserve south and east of the Cultural and Natural History Center. The restoration of 250.6 acres is estimated to cost $4M or $16,244 per acre. This approach will involve temporary impacts to 32.4 acres of mangroves lasting an estimated five years until recovery. An additional 66.5 acres of temporary impacts to the existing mosquito ditches will have water quality improvements immediately upon project completion. Two study units are proposed for a pilot project with a cost of $455,000 that will result in 28 acres of restoration at $16,244 per acre.

Selective hydrology Improvements and nuisance species removal by herbicides is the recommended approach for 75.0 acres for a total of $248,500 or $3,313 per acre. Although the ecological lift is less than spoil mound removal, the impact to the 175 acres of cultural resources within the Preserve is much less. The recommendation for the remaining 93.7 acres of the northern portion is the WIDO approach with a cost estimate of $1,482,000 or $15,831 per acre. In areas of the northern portion with good circulation, smaller spoil mounds, and easy access the Hydroblasting approach is recommended to be considered during the design and permitting phase.

Using the Uniform Mitigation Assessment Method to assess temporary impacts and restoration benefits resulted in a temporary Functional Loss of 21.9 units and a Relative Functional Gain of 132.3 units for a net measurable benefit of 110.4 units. Using a value of $100,000 per unit at regional mitigation banks, the proposed projects would provide a net benefit of $11,040,000 worth of ecological lift at the Preserve.

1 INTRODUCTION

The Weedon Island Tidal Wetland Restoration Feasibility Study is a cooperative funding initiative with the Southwest Florida Water Management District (SWFWMD) and Pinellas County (County). The Weedon Island Preserve (Preserve) is an approximately 3,190-acre site with more than five miles of frontage to Tampa Bay, a SWFWMD Surface Water Improvement and Management (SWIM) Program priority waterbody. The Preserve consists primarily of estuarine habitats with some supporting uplands and is a sanctuary for many species of fish, birds, and small mammals.

Historically, intensive mosquito ditching resulted in a loss of wetland area, altered local hydrology, and provided opportunities for establishment of invasive species. This study identified and determined the feasibility of natural systems restoration projects within an approximately 1,100-acre portion of the Preserve (Figure 1). The project evaluated potential opportunities for future habitat restoration/enhancement projects considering existing and proposed site conditions, permitability, estimated costs, and construction phasing. Measurable benefits, budgetary constraints, and performance metrics were identified as components within a cost-benefit analysis and aided in determining the feasibility of proposed projects. Specific restoration/enhancement activities include removal of spoil mounds, filling/dredging of mosquito ditches, implementing hydrology improvements, and treating and/or removal of nuisance and exotic species within both estuarine and upland habitats.

1.1 Background

In the 1950's, mosquito ditches were constructed to inundate poorly flushed coastal wetlands and allow access for fishes that consume mosquito larvae. Figure 2 depicts Weedon Island prior to mosquito ditching in 1943 while Figures 3 and 4 depict mosquito ditching taking place within the south portion of Weedon Island in 1958 and in the north portion in 1970 respectively. The ditches were dug from the low intertidal zone into the upper intertidal area, thus connecting isolated pockets of water with sources of tidal influence and providing access for fish to the wetland.

In addition to ditches being dug to connect low and high intertidal zones, lateral or cross ditches were also dug, resulting in a checkerboard pattern (Smith et al., 2007). By-products of ditch construction included increased drainage density, expansion of mangrove forest into intertidal herbaceous marsh (E. Raabe et al., unpublished manuscript), and deposition of spoil mounds which still remain along the banks of the mosquito ditches and contain upland exotic plants (Smith et al., 2007).



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Project Location

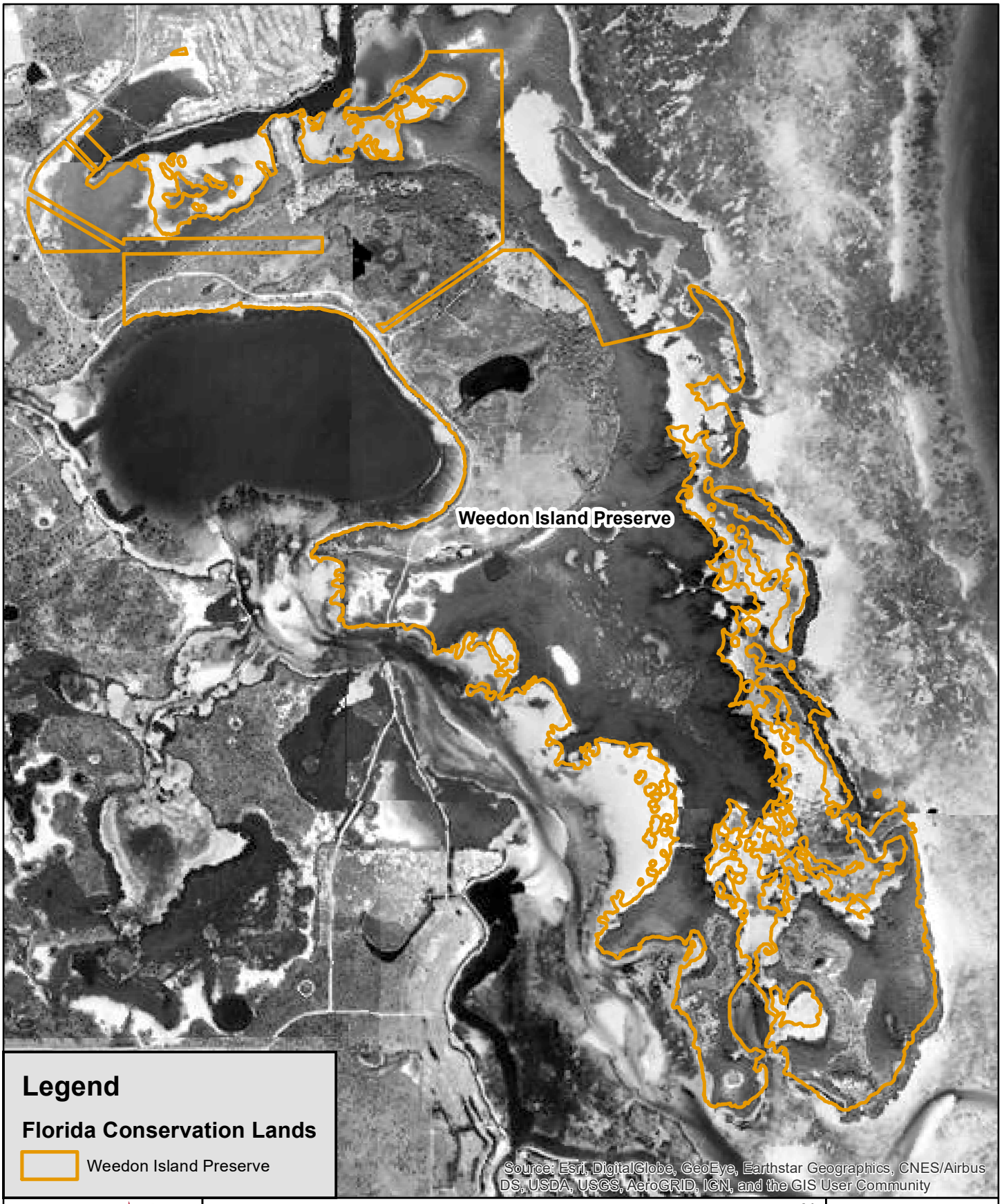
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1 inch = 5,000 feet

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Feet

Figure 1

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Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
1943 Aerial Imagery

N

1 inch = 2,000 feet

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Feet

Figure 2

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Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
1958 Aerial Imagery

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1 inch = 1,500 feet

0 750 1,500
Feet

Figure 3

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Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
1970 Aerial Imagery

N

1 inch = 1,000 feet

0 500 1,000
Feet

Figure 4

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These mounds vary in size and shape but are roughly 100 m^2 (1100 ft^2) in area and about a meter (three feet) in height. Brazilian pepper (*Schinus terebinthifolius*) and Australian pine (*Casuarina equisetifolia*), both Category I invasive exotics, frequently colonized these mounds.

1.2 Purpose and Need

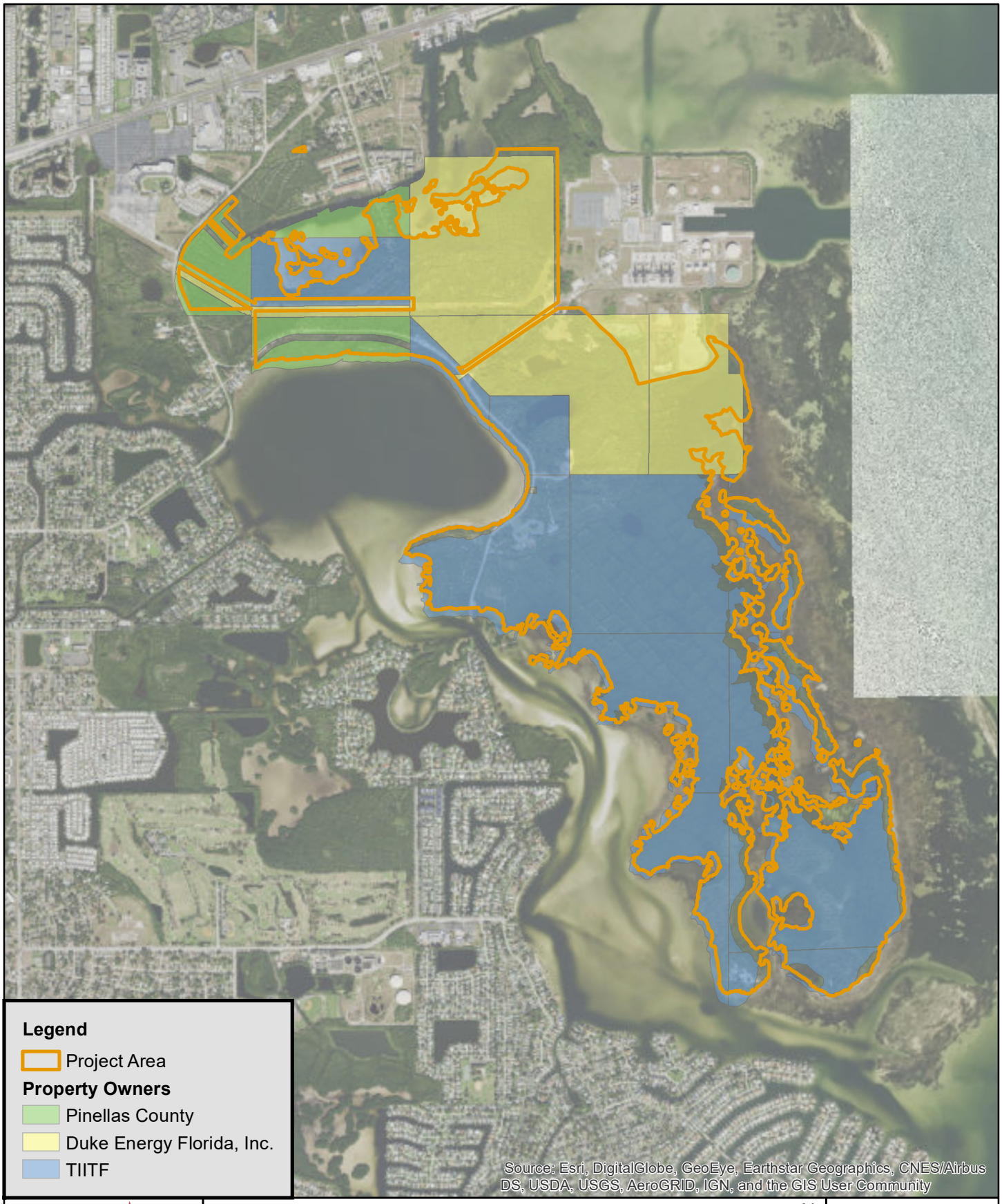
Included within the 2012 Weedon Island Preserve Management Plan are a series of goals and objectives for the Preserve that include habitat restoration and improvement, hydrologic preservation and restoration, and exotic and invasive species management and control. In general, removal of spoil mounds to eliminate exotic and invasive plant species, re-establish native species, and restore natural hydrology is a restoration priority in the Tampa Bay area (TBEP, 2006).

The purpose of the proposed projects is to provide restoration/enhancement opportunities within the Preserve in both upland and wetland habitats, thereby providing opportunities to meet the goals and objectives established within the management plan.

1.3 Study Area Description

Weedon Island Preserve is the second largest preserve in Pinellas County. The Preserve is owned by Pinellas County, the Florida Board of Trustees of the Internal Improvement Trust Fund (TIITF), and Duke Energy Florida, Inc. and managed by the Pinellas County Board of County Commissioners through the Department of Parks and Conservation Resources (PCR) (Figure 5). Pinellas County has entered into two lease agreements with TIITF to efficiently manage all adjacent preserved lands including submerged lands extending 400 feet from the mean high water line. The Duke Energy Florida, Inc. lands are managed by the County under lease agreement that restricts public access.

The study area comprises the portion of the Preserve located to the south of the Gandy Bridge. Of the 3,190 acres that comprise the Preserve, 1,100 of those areas are being evaluated as part of the study. Mangrove forest habitat dominates the landscape. Upland areas comprised of scrubby flatwoods and xeric hammock are also found within the study area, especially on Ross and Googe Islands.



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Ownership

N

1 inch = 2,500 feet

0 1,250 2,500
Feet

Figure 5

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1.4 Goals, Objectives, and Constraints

The 2012 Weedon Island Management Plan includes a series of goals, both long-term and short-term, and objectives. Constraints were identified throughout the planning process to optimize the feasibility of each identified project.

1.4.1 Goals

The goals fall under the categories of habitat restoration and improvement; exotic and invasive species management and control; hydrologic preservation and restoration; imperiled species habitat, maintenance, enhancement, restoration, or population restoration; cultural and historical resources, public access and recreational opportunities, and capital facilities and infrastructure improvements. As mentioned in Section 1.2, the feasibility study will identify opportunities to satisfy the first three categories' long-term goals as follows:

- Habitat Restoration and Improvement: Restore saltern, mangrove, and salt marsh communities; improve habitats by removing upland spoil mounds and improving circulation; and use natural resource management practices such as prescribed fire in the Preserve.
- Exotic and Invasive Species Management and Control: Reduce the extent and abundance of exotic and invasive plants in the Preserve.
- Hydrologic Preservation and Restoration: Improve hydrology in the Preserve to improve water quality and circulation.

1.4.2 Objectives

The overall objective of the feasibility study is to identify various restoration and enhancement techniques, discussed in detail in Section 3, under the categories of spoil mound removal, nuisance species removal, and hydrology improvements. The following objectives have been established:

- Increase the overall area of wetland habitat through various restoration and enhancement projects.
- Improve native wetland plant communities through the removal of upland spoil mounds, nuisance species removal, and hydrology improvements.
- Decrease nuisance species cover in both upland and wetland habitats by various methods of control.
- Identify projects and approaches that will not adversely affect significant cultural and historical resources within the study area.

1.4.3 Constraints

The project actions are limited by factors such as existing cultural and historical resources in the study area and land cover type creating restricted access. Constraints were identified throughout the process to optimize the feasibility of each identified project. The constraints of the study are listed below:

- Extensive areas of significant cultural and historical resources, discussed in detail in Section 2.3.1, are present throughout the study area, including a of the Weedon Island archaeological site (8PI1) listed in the Natural Register of Historic Places (NRHP). In addition to the listed NRHP area, portions associated with 8PI1 as well as additional known areas of resources on Weedon Island, Ross Island, and Googe Island are included (Fewkes, 1924; Weisman et. al., 2008). Many of these sites are potentially eligible for listing on the NHRP. Areas along the upland/wetland boundary and areas extending into the wetland also have the potential to contain resources as it is likely that these areas were once dry. Proposed activities must not adversely affect these resources.
    - As the NRHP boundary is rather arbitrary in shape, specific known areas of resources will be identified during design phases to help avoid and minimize impacts. Other areas, such as the Weedon Island Site, will be addressed in the same way. For areas where resource information is lacking, and significant ground disturbance is proposed, ground surveys may be required to identify the presence or absence of resources.
    - The proposed projects requiring state permits through SWFWMD or the Florida Department of Environmental Protection (FDEP) will be reviewed by the Florida Department of State, Division of Historical Resources under the provisions of Section 267.061, F.S. to determine whether the activity will adversely affect or will enhance significant historical and archaeological resources.
    - The proposed projects requiring federal permits through the U.S. Army Corps of Engineers (USACE) will be reviewed by the Advisory Council on Historic Preservation under Section 106 of the National Historic Preservation Act of 1966 to determine adverse effects to cultural and historic resources and seek ways to avoid, minimize, or mitigate adverse effects. Mitigation could range from having an on-site monitor during construction to requiring data recovery excavations prior to construction impacts if there are significant ground disturbances that cannot be avoided.

- Access to the various units within the study area varies by land cover type and distance from uplands or open water. The areas of mangrove swamp that can only be accessed through adjacent areas of mangrove swamp, as opposed to via uplands or a barge, may require significant clearing or temporary fill roads to provide access. Additionally, some techniques for the proposed restoration and enhancement activities may require staging areas that would impose additional impacts. This could include impacts to cultural and historical resources. As a result, coordination with a cultural resource specialist should be included when decisions regarding placement of staging areas is made to ensure that significant resources are avoided. Field surveys may be necessary in areas of high resource potential to ensure no significant resources are present prior to preparing the staging areas.
- An increased involvement with either cultural and historical resources or access may increase permitting complexity. For example, proposed restoration involving significant earthwork in an area of known cultural and historical resources may be cost prohibitive due to the extra steps necessary to mitigate and show no adverse effect to those resources.
- To qualify for funding through the SWFWMD SWIM Program, Cooperative Funding Initiative, restoration and enhancement projects must meet performance criteria. The amount of ecological lift, whether the creation of wetland habitat through the removal of spoil mounds or water quality improvements by increasing tidal flushing in impounded areas, must fall within a cost metric of $53,000 per acre of restoration. As a result, some individual projects may not meet performance metrics due to the high dollar amount associated with a small amount of lift. The cost-benefit analysis will determine if those projects/approaches are feasible.
- Public involvement will be required to properly educate the public of the benefits of restoration projects. The Preserve is open for public recreation including hiking, canoeing, or kayaking. Restoration activities will be visible to the public and some activities may restrict access to portions of the Preserve.

2 EXISTING CONDITIONS

2.1 Physical Environment

2.1.1 Geology

Two geologic zones comprise Weedon Island, an upper zone of unconsolidated deposits and a lower zone of consolidated rock. Commonly referred to as surficial deposits, the upper zone consists primarily of beds and layers of fine sand, gravel, sandy clay, and clay ranging in thickness from 10 feet to as much as 200 feet. The geologic units comprising these deposits are the Hawthorne formation of the Miocene age and the overlying differentiated deposits of Holocene age.

The lower zone of consolidated rocks consists mostly of beds of hard and soft limestone commonly interbedded with gypsum and dolomite in the deeper zones. These rocks extend to a depth of 10,000 feet or more (Weedon Island State Preserve Unit Management Plan, 1990).

2.1.2 Soils

Soil data was obtained from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey for Pinellas County (2003) and GIS data from 2015 (Figure 6). Soils were grouped into three categories: xeric, mesic, and hydric as shown in Table 2-1. Xeric soils correspond to sandhill, scrub, and xeric hammock and occur at the highest elevations. Mesic soils correspond to pine flatwoods or mesic hammock communities. Hydric soils correspond to the various wetland habitats on site. Hydric soils are most common and support mangrove tidal swamps that dominate Weedon Island.

2.1.3 Hydrology and Water Resources

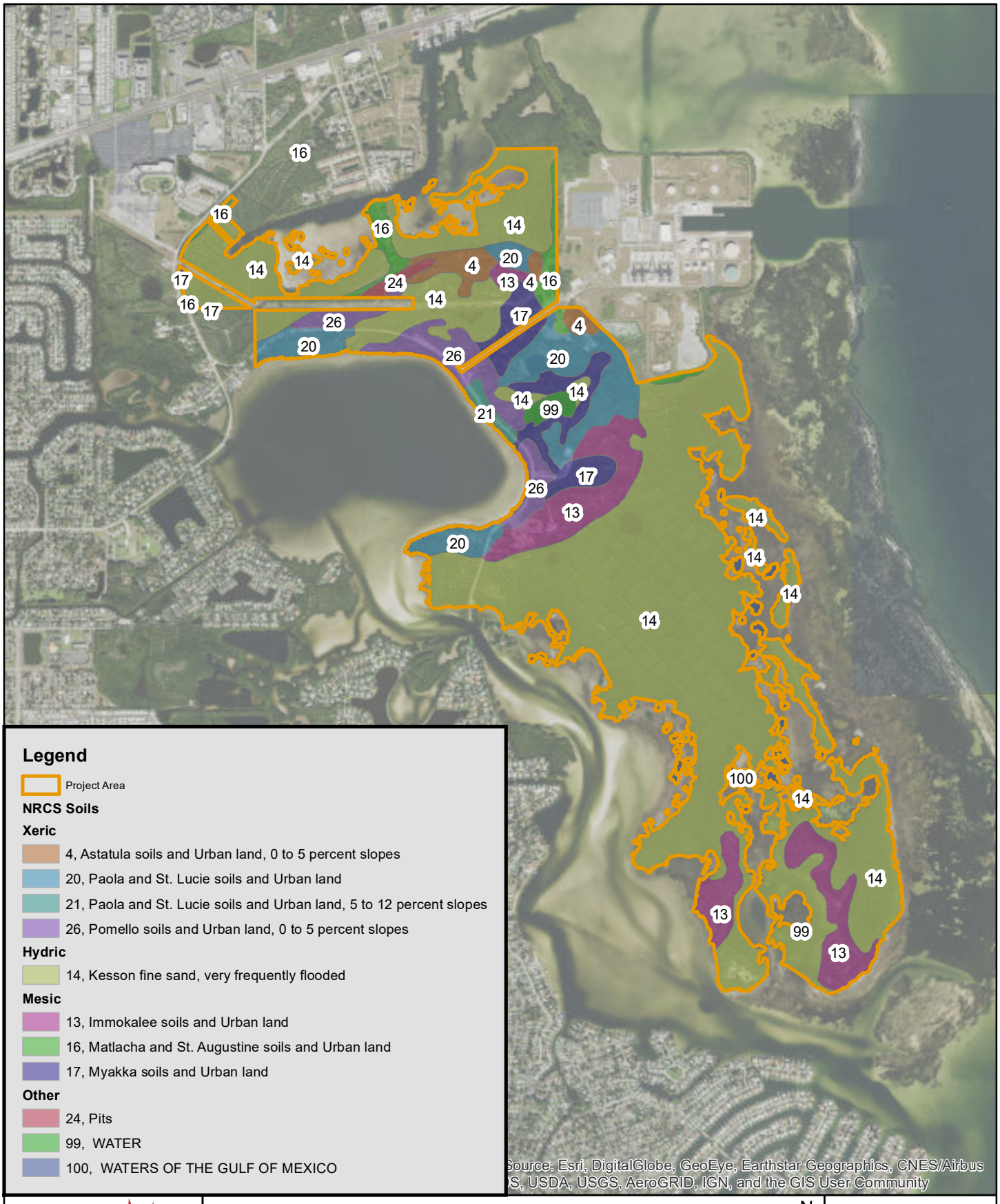
Three hydrologic factors influence Weedon Island including, semi-diurnal tides, the surficial aquifer, and the Floridan aquifer, with tidal waters and the Floridan Aquifer being the predominant forces.

Tidal waters influencing Weedon Island flow from and to Old Tampa Bay through Pappy's Bayou and Riviera Bay. As a result, water quality within Tampa Bay is of great significance to Weedon Island.

The Floridan aquifer flows west and south from Hillsborough and Pasco counties, south through Pinellas County then under Weedon Island. The aquifer is located at a depth of approximately 20 to 80 feet. With Weedon Island being located at the discharge area of the aquifer, any pollutants and/or reductions in volume would be evident and influence the surrounding waters. Little recharge of the aquifer occurs due to the short retention time of surface waters.

Table 2-1 Soils within Study Area

Map Unit	Description	Land Area	
		Acres	Percent
Xeric			
Astatula soils and Urban land, 0 to 5 percent slopes (4)	Excessively drained and nearly level to gently sloping. This soil has a seasonal high water table at a depth of more than 6 feet.	20.8	1.89
Paola and St. Lucie soils and Urban land (20)	Excessively drained, fine sandy soils that are nearly level to gently sloping. This soil has a seasonal high water table at a depth of more than 6 feet.	84.28	7.66
Paola and St. Lucie soils and Urban land, 5 to 12 percent slopes (21)	Excessively drained, fine sandy soils. This soil has a seasonal high water table at a depth of more than 6 feet.	6.73	0.61
Pomello soils and Urban land, 0 to 5 percent slopes (26)	Somewhat poorly drained or moderately well drained. This soil has a seasonal high water table at a depth of 2.5 to 3.5 feet from June through November.	50.45	4.59
Mesic			
Immokalee soils and Urban land (13)	Poorly drained soil. This soil has a seasonal high water table at a depth of 0.5 to 1.5 feet from June through November.	103.11	9.37
Matlacha and St. Augustine soils and Urban land (16)	Very poorly drained soil. This soil has a seasonal high water table at a depth of 1.5 to 3.0 feet from June through November.	25.02	2.27
Myakka soils and Urban land (17)	Poorly drained soil. This soil has a seasonal high water table at a depth of 0.5 to 1.5 feet from June through November.	49.73	4.52
Hydric			
Kesson fine sand, very frequently flooded (14)	Very poorly drained soil consisting of fine sand and shell fragments. This soil has a seasonal high water table at the soil surface to a depth of 0.5 foot from January through December.	708.23	64.39
Other			
Pits (24)	Areas where soils have been excavated for use as fill materials.	5.74	0.52
Water (99)	Water	7.87	0.72
Waters of the Gulf of Mexico (100)	Water	38.04	3.46
	Total	1,100	100.00



Legend

- Project Area

NRCS Soils

Xeric

- 4, Astatula soils and Urban land, 0 to 5 percent slopes
- 20, Paola and St. Lucie soils and Urban land
- 21, Paola and St. Lucie soils and Urban land, 5 to 12 percent slopes
- 26, Pomello soils and Urban land, 0 to 5 percent slopes

Hydric

- 14, Kesson fine sand, very frequently flooded

Mesic

- 13, Immokalee soils and Urban land
- 16, Matlacha and St. Augustine soils and Urban land
- 17, Myakka soils and Urban land

Other

- 24, Pits
- 99, WATER
- 100, WATERS OF THE GULF OF MEXICO

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Soils

N

1 inch = 2,500 feet

0 1,250 2,500

Feet

Figure 6

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The surficial aquifer is located at depths of 5 feet or less and is recharged primarily by local rainfall. The aquifer is depleted quickly by drainage, plant evapotranspiration, and evaporation as a result of shallow soils.

Weedon Island ranges in elevation from 12 feet below mean sea level (MSL) to 26 feet above MSL. These low elevations and shallow soils make Weedon Island subject to frequent flooding. The higher elevations are subject to flooding following major storm events.

Development surrounding Weedon Island has increased the tidal flow in and out of Riviera Bay. Currently, the potential detrimental effects of tidal flow, such as shifting sands, have been minimized by grass beds, marine tidal marsh, and marine tidal swamps. However, the continued growth of surrounding development and subsequent hydrologic changes have the potential to alter the natural communities.

All permanent water bodies within the Preserve have been designated as Outstanding Florida Waters (OFW) by the FDEP under Section 403.061, F.S. and is further addressed in 62-302.700, F.A.C. Additionally, the submerged portions of the Preserve have been designated as an aquatic preserve under the provision of the Florida Aquatic Preserve Act of 1975, Section 258.35, F.S.

2.1.4 Water Quality

Water quality data has been collected by the Pinellas County Department of Environment and Infrastructure's Watershed Management Division since 2003.

Two sampling strata are located adjacent to the study area; the Gandy Bridge to the mouth of the Riviera Bay and from the mouth of Riviera Bay to the 83rd Avenue bridge. Thirty-two samples are collected each year and include water quality metrics such as temperature, pH, dissolved oxygen, and conductivity in addition to the analysis for total Kjeldahl nitrogen, ammonia, nitrate-nitrite, total phosphorous, ortho-phosphorous, chlorophyll-a, chlorophyll-b, pheophytin, total suspended solids, transmissivity, and turbidity.

Around the Preserve, three trends are evident: a trend related to annual rainfall, a geographic trend, and a seasonal trend. These three trends are best described by the water quality metrics of dissolved oxygen, chlorophyll-a, and transmissivity. The more rainfall, the greater the nutrient loads of nitrogen, phosphorous, and resuspended sediments. Chlorophyll-a values were higher and transmissivity lower in years with high rainfall, indicating poorer water quality.

Geographic trends show that water quality improves in Tampa Bay waters from north to south and is better in waters just outside of Riviera Bay compared to within Riviera Bay. This is reflected in lower mean annual chlorophyll-a values and higher mean annual transmissivity values. Mean annual dissolved oxygen value also tends to be higher. Finally, water quality is better in the dry season compared to the wet season, which is reflected in higher mean annual dissolved oxygen and mean annual transmissivity values and lower mean annual chlorophyll-a values in the dry season.

In a study conducted by Brame et. al. (2005) it was noted that in a comparison to natural tidal creeks, mosquito ditched areas had greater substrate deposition and higher salinities, the latter of which results from limited freshwater influx. Additionally, although mean temperatures were similar between creeks and mosquito ditches, warmer water temperature were more frequently recorded in the mosquito ditches.

2.2 Biological Environment

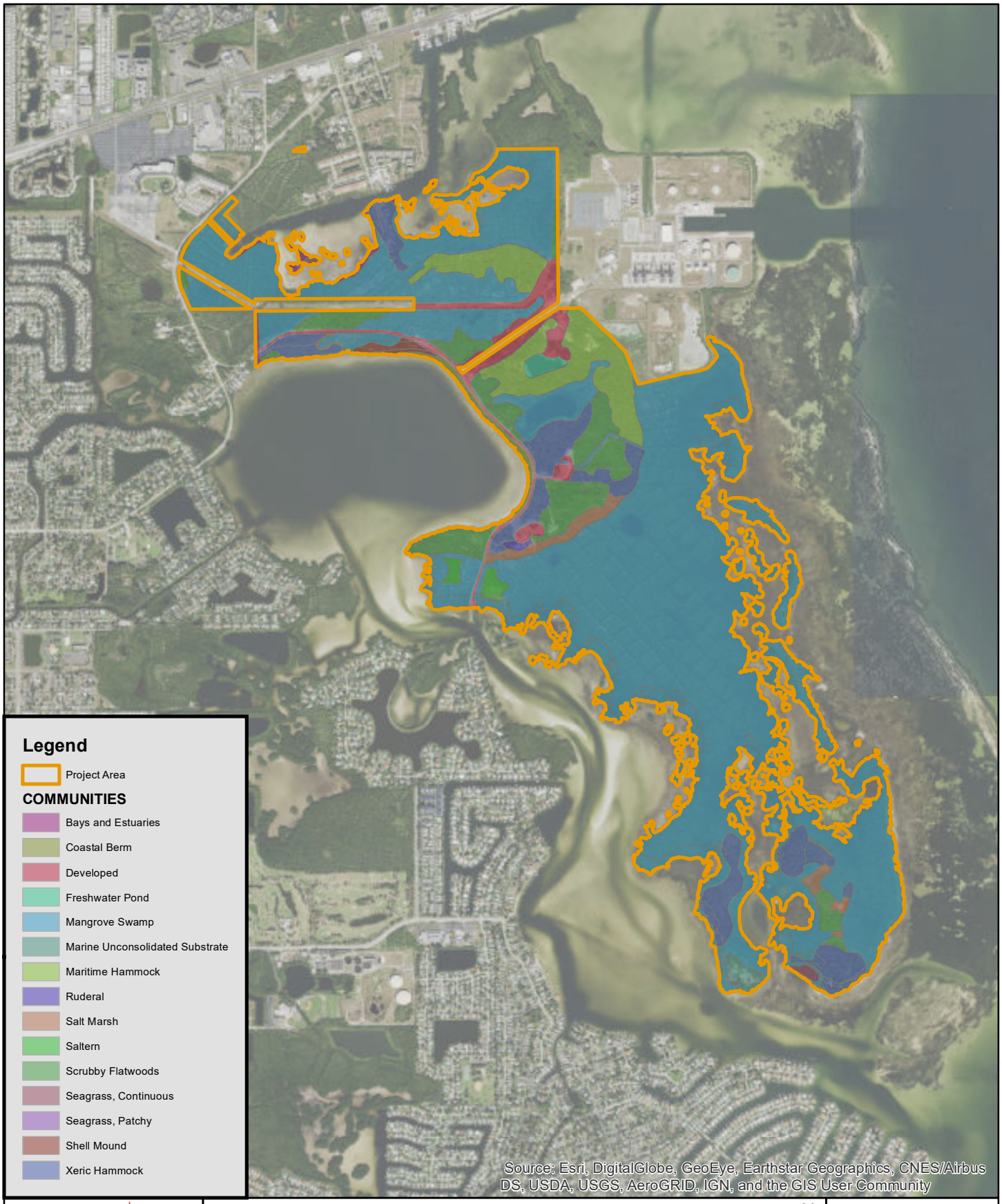
2.2.1 Aquatic and Terrestrial Communities

The communities within the Preserve were classified using the system described by the Florida Natural Areas Inventory (FNAI, 2010) (Figure 7). Areas of bays and estuaries, freshwater pond, ruderal lands, and developed lands are altered and unclassified landcover types. Table 2-2 contains a description of both the classified and unclassified landcover types.

2.2.2 Vegetation

With mangrove swamp dominating the landscape within the Preserve, dense stands of red mangroves (*Rhizophora mangle*) and black mangroves (*Avicennia germinans*) are present. White mangroves (*Laguncularia racemosa*) and buttonwood (*Conocarpus erectus)* are present in the upland/wetland fringes of the Preserve. Seagrasses, including turtle grass (*Thalassia testudinum*), shoal grass (*Halodule wrightii*), and widgeon grass (*Ruppia maritima*), are present in varying degrees of abundance and distribution in the waters surrounding the Preserve. Other common species observed throughout the Preserve are documented within Table 2-2 by the existing community type under the description.

Florida goldenaster (*Chrysopsis floridana*), a federally-protected species, was planted in 2010 to create a self-sustaining population. More than 300 specimens were provided by Bok Tower Gardens. The site was monitored intensively until 2013 and occasionally thereafter.



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Communities

N

1 inch = 2,500 feet

0 1,250 2,500
Feet

Figure 7

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Table 2-2 Existing Community Types

Community	Description	Land Area	
		Acres	Percent
Bays and Estuaries	Body of water partially enclosed by land that is directly open, or connected to the ocean; an estuary receives freshwater input from streams or rivers that mix with seawater	20.47	1.86
Coastal Berm	Old bar or storm debris with sand/shell substrate; xeric-mesic; rare or no fire; marine influence; mixed tropical herbs, shrubs, and trees	10.01	0.91
Developed	Roads, parking areas, buildings, and maintained lawns as part of recreational, business, or residential area	41.29	3.76
Freshwater Pond	Freshwater pond with Carolina willow and cattails	4.11	0.37
Mangrove Swamp	Estuarine wetland on muck/sand/limestone substrate; inundated with saltwater by daily tides; no fire; dominated by mangrove and mangrove associates	749.94	68.12
Marine Unconsolidated Substrate	Expansive subtidal, intertidal, and supratidal area composed of loose mineral matter lacking dense vegetation; cabbage palm and sedges	4.8	0.44
Maritime Hammock	Stabilized coastal dune with sand substrate; xeric-mesic; rare or no fire; marine influence; live oak, laurel oak, cabbage palm, red bay, marlberry, snowberry	69.52	6.32
Ruderal	Highly disturbed community containing bahiagrass, lantana, muscadine, and sensitive plant	1.39	0.13
Salt Marsh	Estuarine wetland on muck/sand/limestone; inundated with saltwater by daily tides; no fire; dominated by herbaceous species such as black needle rush and smooth cordgrass	14.83	1.35
Saltern	Salt marsh with much exposed bare soil on slightly higher areas within the marsh; high salinity and dry conditions; saltwort, glasswort	6.06	0.55
Scrubby Flatwoods	Flatland with sand substrate; xeric-mesic; fire every 5-15 years; laurel oak, live oak, sand live oak, longleaf pine, slash pine, cabbage palm, salt bush	77.85	7.08
Seagrass, Continuous	Expansive subtidal or intertidal area dominated primarily by rooted vascular macrophytes; turtle grass, shoal grass, and widgeon grass	7.99	0.73
Seagrass, Patchy	Expansive subtidal or intertidal area dominated primarily by rooted vascular macrophytes; turtle grass, shoal grass, and widgeon grass	3.94	0.36
Shell Mound	Small hill of shells deposited by Native Americans; mesic-xeric; rare or no fire; marine influence; cabbage palm, sand live oak, muscadine, smooth rattlebox	4.38	0.4
Xeric Hammock	Upland with deep sand substrate; xeric; rare or no fire; closed live oak, sand live oak, cabbage palm, saw palmetto, beautyberry	83.78	7.62
	Total	1,100	100.00

Floristic surveys identified 47 exotic species within the Preserve. Of these, 15 are classified as Category I and eight are classified as Category II species by the Florida Exotic Pest Plant Council (FLEPPC). The highest densities of invasive exotics are located on spoil mounds throughout the mosquito ditched areas. Other areas with high densities include access roads, firebreaks, and areas of human disturbance. Brazilian pepper (*Schinus terebinthifolius*), Australian pine (*Casuarina equisetifolia*), rosary pea (*Abrus precatorius*), and guineagrass (*Urochloa maxima*) are the most prevalent exotic species within the preserve.

2.2.3 Wildlife

Documentation from faunal surveys indicates that the Preserve supports abundant and diverse wildlife including 178 birds, 41 butterflies, 20 reptiles, 12 mammals, 6 amphibians, and 30 fish species. Multiple studies have been conducted within the ditched portions of the Preserve to identify the potential habitat value that these ditches provide in comparison to natural tidal creeks. These studies suggest that parameters such as salinity, current velocity, and vegetative structure may provide a more useful indication of habitat value as opposed to whether the habitat has been altered (Krebs et. al., 2007).

2.2.3.1 Listed Species

Several state and federal listed species have been documented within the Preserve (Table 2-3). Based on surveys, the Florida Fish and Wildlife Conservation Commission's (FWC) Florida's Imperiled Species Management Plan, and various other protection guidelines, 16 protected wildlife species have been identified (FCW, 2016). Of these 16 species, 10 are state listed, four are federally listed, and two are protected by the Migratory Bird Treaty Act. Of the four listed plant species, established by the Florida Administrative Code 5B-40.0055: Regulated Plant Index, one is federally listed.

2.3 Human Environment

2.3.1 Cultural and Historical Resources

A cluster of shell middens and sand mounds, including a burial mound, are present within Weedon Island (Figure 8). The mounds can be classified into three types; shell middens, domiciliary mounds, and the sand burial mound (Fewkes, 1924; Weisman et. al., 2008). The shell middens overlay two major relic sand dune ridges at the southern part of the Preserve. Other middens are located on Googe and Ross Islands (Figure 8).

Table 2-3 Protected Species Present within the Study Area

Common Name	Scientific Name	Listing
Mammals		
West Indian manatee	*Trichechus manatus*	FT
Birds		
Little Blue Heron	*Egretta caerulea*	ST
Reddish Egret	*Egreta rufescens*	ST
Tricolored Heron	*Egretta tricolor*	ST
Southeastern American Kestrel	*Falco sparverius paulus*	ST
American Oystercatcher	*Haematopus palliatus*	ST
Bald Eagle	*Haliaeetus leucocephalus*	None*
Wood Stork	*Mycteria americana*	FT
Osprey	*Pandion haliaetus*	None**
Roseate Spoonbill	*Platalea ajaja*	ST
Black Skimmer	*Rynchops niger*	ST
Least Tern	*Sternula antillarum*	ST
Reptiles		
American Alligator	*Alligator mississippiensis*	FT/SA
Eastern Indigo Snake	*Drymarchon couperi*	FT
Gopher Tortoise	*Gopherus polyphemus*	ST
Pine Snake	*Pituophis melanoleucus*	ST
Plants		
Sand-dune Spurge	*Chamaesyce cumulicola*	SE
Florida Goldenaster	*Chrysopsis floridana*	FE
Shell Mound Prickly-pear	*Opuntia stricta*	ST
Giant Orchid	*Pteroglossapis ecristata*	ST

F=Federally-listed; S=State-listed; E = Endangered; T = Threatened; SA = Similarity of Appearance
*Protected by Federal Migratory Bird Treaty Act (Migratory Bird Treaty Act of 1918, as amended), the Federal Bald and Golden Eagle Act (The Bald and Golden Eagle Protection Act, enacted 1940), and the State Bald Eagle Management Plan (FWC, Bald Eagle Managment Plan, 2008)
**Protected by Migratory Bird Treaty Act (16 U.S.C. 703-712) and State-protected by Chapter 68A F.A.C.

The shell deposits are comprised mostly of shell with some bone, lithic, and pottery sherd artifacts in a layered stratigraphy. The domiciliary mounds are comprised of sand, shell, and some midden and were probably used for house structures. The sand burial mound was artificially constructed and there were three layers of internment.

Human impacts during the past 100 years have had localized adverse effects on archaeological integrity. Impacts resulting from the harvest of pine trees, construction, and citrus groves, the extensive mosquito ditching, installation of gas and oil pipelines, and construction of the power plant have contributed to the archaeological impacts. Looting, especially in the cemetery area, has also been a problem.

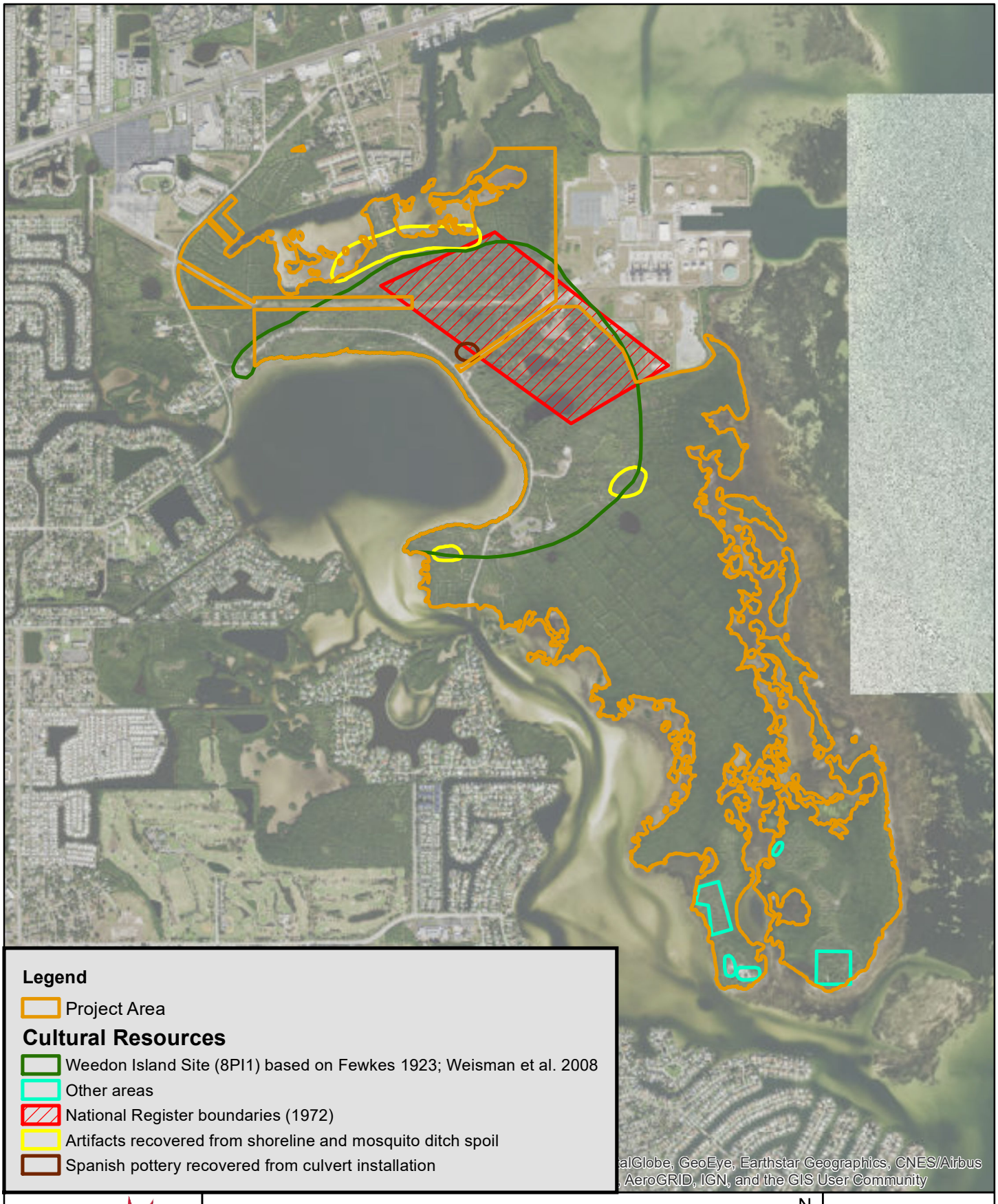
The Alliance for Weedon Island Archaeological Research and Education, Inc. (AWIARE) is a non-profit organization that has a goal to promote and facilitate long-term archaeological research, scientific exploration, and public education at the Preserve.

2.3.2 Socio-economic, Land Use, and Recreations

The Preserve is managed for the conservation and protection of natural and historical resources and for resource-based public outdoor recreation which is compatible with the conservation and protection of the Preserve.

Visitation rates within the Preserve have increased from 148,000 to above 246,000 from 2003 to 2011. Within the Preserve there are boardwalks, hiking trails, a canoe/kayak trail, observation tower, and fishing pier which provide the opportunity for hiking, nature viewing, and fishing.

Weedon Island Preserve Cultural and Natural History Center is located within the Preserve and is dedicated to reconnecting people with the environment. There is additional infrastructure within the maintenance area including a research station, three-bay workshop, and a pole barn for storage of boats and other equipment. There is a guard station at the entrance of the Preserve.



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Cultural Resources

N

1 inch = 2,500 feet

0 1,250 2,500
Feet

Figure 8

Path: H:\40608\Feasibility Study\Figures\Figure_8_Cultural_Resources.mxd

3 RESTORATION AND ENHANCEMENT TECHNIQUES

Techniques for restoration and enhancement of mangrove and salt marsh habitat impacted by mosquito ditching include spoil mound removal, nuisance species removal, and hydrology improvements. These techniques are often used in combination to provide the maximum ecological benefit. Methods discussed in this section will address one or more of the re-establishment factors associated with habitat restoration which focus on:

1. restoring structure such as hydrology and topography;
2. increasing species composition; and
3. restoring ecological processes such as nutrient cycling which in turn increases ecologic productivity (USFWS, 1999).

3.1 Spoil Mound Removal

Spoil mound removal is achieved through various techniques where upland spoil mounds created during mosquito ditching are removed, as well as associated nuisance species, and the grades lowered to that of the surrounding wetland. The removal can result in salt marsh, mangrove, or saltern habitat. Each habitat type is based on the proposed elevation that will result after removing the spoil material and the surrounding habitat.

Identification and selection of mosquito ditches to be filled with material produced during spoil mound removal will require some level of analysis during the design and permitting phase. This analysis may be in the form of water quality or circulation analysis, or on a more basic level, assessing the degree of sedimentation within each mosquito ditch. Such analysis will prioritize those ditches of low habitat value that are candidates for filling due to their lack of connection and facilitation of tidal flushing within the study area. It will also be imperative to avoid creating any closed-off areas that may become impounded and stagnant as a result of ditch filling.

Permit conditions for restoration and enhancement described in Section 3.4 may require monitoring for temporary impacts for access. It is recommended that a monitoring and assessment plan be implemented to assess the effectiveness of the approaches used to remove the spoil mounds within the study area. The monitoring and assessment plan will include pre- and post-construction monitoring to assess the hydrology and community structure improvements resulting from spoil mound removal. It is recommended that following construction, these areas be monitored at least annually for three years.

The alternative approaches proposed below are affected by access and spoil mound size. It is anticipated that a combination of approaches will be used in each effort.

3.1.1 Hydroblasting

Hydroblasting is the process of moving soil with pressurized water. This technique uses portable water pumps, specialized hoses, and high-pressure streams of water to blast mounds of spoil and selectively direct some of the resulting slurry into existing mosquito ditches. The goal of this technique both reduces the elevation of the mound to a more natural grade and increases the bottom elevation of surrounding mosquito ditches. During the design and permitting phase, the surrounding ditches will be assessed at each location to identify the best ditches for filling to promote the best habitat. Ditches that provide good circulation will not be designated for deposition of the spoil material. Ditches that exhibit stagnant conditions provide the most ecological improvements as a result of raising the bottom of the ditch to the match surrounding elevation.

Impacts to existing wetlands resulting from this technique are minimal. The equipment is moved by hand through work areas and does not require excessive vegetation clearing or use of heavy equipment. Very limited staging areas would be required for this technique. Access to areas proposed for Hydroblasting is typically on foot and the difficulty of access increases as the distance from uplands or navigable waterways increases. Temporary access can be created through walkways constructed through the mangroves.

Previous uses of Hydroblasting in Tampa Bay have had mixed results that are directly related to the amount of material removed, the elevation achieved, and the type of soil remaining (Smith *et al* 2007). Areas of historic black mangroves that were covered have propagules imbedded in the spoil material that restricts the effectiveness of removing all of the spoil to the adjacent grade, thus supporting high quality habitat for mangrove recruitment. The previous effort within Weedon Island Preserve was most successful when followed up by light equipment to achieve grades below mean high water.

Prior to Hydroblasting, invasive species growing on the mounds will be treated with herbicide via the appropriate method for the vegetation present or cut down and removed as appropriate. After Hydroblasting, two maintenance events will be conducted over the course of a year to reduce the potential for seed dispersal by any surviving invasive species.

3.1.2 Mechanical Removal

Mechanical removal is another alternative for removal of spoil mounds and selective filling of mosquito ditches. Additional discussion of improving hydrology is included in Section 3.3. Mechanical removal has been effectively performed throughout coastal Florida and includes large scale restoration projects by St. Johns River Water Management District (SJRWMD). In conjunction with the National Coastal Wetland Conservation Grants Program, SJRWMD, FWC, and USFWS partnered to restore dragline-ditched coastal wetlands in Mosquito Lagoon (Appendix A). The project involved the use of District employees with amphibious excavators to remove the spoil and place it in the ditches. Although the drag-line ditching created larger ditches and more spoil as well as smaller remnant mangrove communities, the concept of mechanical removal with temporary impacts has been successful. In less than five years, the restored areas and the temporary impacts were covered with estuarine vegetation.

The proposed approach for the Preserve includes the construction of temporary access roads for a concept of "Walk In, Dig Out" (WIDO). The access will include spoil mound removal to create the temporary fill, the use of crane mats to reduce the amount of fill used, and temporary pipes to maintain flow within the mosquito ditches that provide adequate hydrology and beneficial habitat. The linear nature of the spoil mounds facilitates the alignment of the temporary access road. The amphibious excavators include long-reach arms that enable the removal of spoil mounds in the adjacent area without crossing the ditch that is typically between the rows of mounds.



Amphibious Excavator

The access roads would be properly stabilized and strategically placed in alignment with the larger mounds, thus reducing temporary impacts. Appropriate and effective best management practices would be deployed to reduce water quality impacts during construction. Off-road trucks would be used to haul the removed spoil to a staging area for removal from the Preserve or placed in a stockpile location for County use.

Once an area has been restored, the equipment would dig the access road out as it leaves the area. This would include removal of the remaining portion of the spoil mounds to match the elevation of the adjacent mangrove habitat as well as the temporary fill placed for the access road. Hydrology improvements would be accomplished during the process of backing out of the work area.

It is envisioned that the work would be performed in a phased approach as described in Section 4. The phased approach considers the funding limitations, reduces impacts to the public, and reduces the cumulative effect from large-scale temporary impacts. The approach is anticipated to require a long-term temporary access road through the middle of the Preserve to facilitate phasing.

3.1.2.1 Vacuum Truck

In areas of suitable access, the slurry that is produced from Hydroblasting could be removed or relocated using a vacuum truck. A vacuum truck is a vehicle with a combination of a holding tank and a vacuum system used to load liquid or slurry through suction lines into the tank. This machinery can be in the form of a full- or mid-size excavator truck, or a trailer unit. The trucks are rubber-tired units that typically travel on improved roadways. Material that is removed would need to be re-deposited quickly to avoid specialized stockpile areas suitable for dewatering the slurry.

If determined to be viable, this method would be suitable in areas of easy access along existing roadways and wide trails. As a result, impacts to existing wetlands would be minimal. Vegetation removal and temporary fill in wetlands may be necessary to provide access to work areas for a vacuum truck. As with other equipment, temporary ground protection mats and staging areas could be required. It is anticipated that vacuum trucks would be used in conjunction with other removal methods.

3.1.3 Hand Removal

Hand removal of spoil mounds involves workers using hand tools such as shovels and wheelbarrows to remove spoil and transport to a stockpile area or to deposit spoil into adjacent mosquito ditches. If transported to stockpiles, a series of walkways would be constructed to facilitate assess and reduce impacts.

Impacts to existing wetlands resulting from this technique are minimal. The equipment is moved by hand through work areas and does not require excessive vegetation clearing or use of heavy equipment. Very limited staging areas would be required for this technique.

Prior to the hand removal of spoil mounds, invasive species growing on the mounds will be treated with herbicide via the appropriate method for the vegetation present or cut down. After hand removal, two maintenance events will be conducted over the course of a year to reduce the potential for seed dispersal by any surviving invasive species.

3.2 Nuisance Species Removal

The removal of nuisance species is a critical component of the restoration of Weedon Island Preserve. It is recognized that continued efforts of spot treatment are on-going by staff and volunteers. The approaches discussed below are intended to be a more focused, complete effort to remove larger areas of nuisance species or selectively remove scattered nuisance species within larger areas.

3.2.1 Hydro-Axe

Hydro-axe treatment is a technique that is used in shrubby and forested conditions to cut woody species with a trunk smaller than eight inches. This technique will knock down brush and chop the resulting debris. The equipment includes a mower-mulcher attachment that is mounted on the front arm of a tractor or a small track vehicle. Some mower-mulcher attachments can be up to about nine-feet wide. The equipment moves through the terrain and the operator directs the mower-mulcher towards vegetation to cut. This technique can move around desirable species and selectively cut and chop the resulting debris into effective mulch. Hydro-axe treatment would occur in the spring and summer when nuisance species are not in seed so that the resulting debris does not disperse the seed source.

When used for nuisance species removal on spoil mounds, impacts to existing wetlands would be moderate to high and require vegetation clearing to allow movement of the equipment between spoil mounds. It would be necessary to place temporary ground protection mats in wetlands and existing mosquito ditches to move equipment. Small-scale staging areas within the Preserve would be required for this technique.

This technique is best suited for portions of the Preserve with larger areas of contiguous Brazilian pepper cover. Nuisance species removal on Ross or Googe Islands could be facilitated through the use of a heavy-lift helicopter to transport the equipment to and from the islands.

3.2.1 Roller Chop

Roller chopping is a mechanical treatment frequently applied to wide-spread, woody vegetation during land clearing activities. The method uses a cylindrical roller or drum, often filled with water to increase the weight, equipped with several full-length blades. As the drum is towed behind a tractor across the terrain, the blades both knock down shrubs and small trees and chop the debris. This technique is generally used to treat large areas where selective treatment of vegetation is not needed.

This treatment increases groundcover and is often combined with supplemental seeding following roller chopping. This technique is not recommended for extremely muddy conditions because of the potential to get the equipment stuck or form significant ruts in the soil as the heavy drum and tractor move through the terrain.

Roller chopping would not be suitable for nuisance species removal on spoil mounds and generally is not used in wetland conditions. This technique is used in dryer, more upland conditions therefore impacts to wetlands resulting from this form of treatment would be low. It is anticipated roller chopping is not a viable option within the Preserve.

3.2.2 Herbicide

Treatment of nuisance species with appropriate herbicides is an effective method to treat existing plants and provide follow up treatment after mechanical removal. Herbicide application methods include foliar spray, basal spray, and hack and squirt.

A discussion topic during a recent land management conference included the use of Unmanned Aerial Vehicle (UAV) or drone for herbicide treatment in remote locations. As the concept is developed by the industry, UAV treatment would be an effective approach for spot treating during follow up events after initial removal.

3.2.2.1 Foliar Spray

Foliar application of herbicide involves workers equipped with backpack sprayers targeting nuisance vegetation and applying herbicide to the leaves. A mixture of herbicide and water is used to establish a concentration appropriate for the type of nuisance vegetation being targeted. Various herbicides are more effective against certain types of nuisance vegetation. Many times, a surfactant will be added to the mixture to assist in penetrating a leaf's waxy cuticle. The effects of foliar application can be seen within a week.

Typically, maintenance to follow-up on the initial treatment is scheduled for a specific number of events, or until a site reaches a self-sustaining condition. Following the initial treatment, maintenance events will be conducted quarterly for three years.

Impacts to existing wetlands would be minimal and can be limited by BMPs and experienced applicators. Spraying of foliar herbicide during high wind conditions will likely result in the herbicide contacting desirable vegetation. Weather patterns will be reviewed prior to treatments. Application of foliar spray prior to a rain event could render the treatment null. The use of backpack sprayers does not require excessive clearing of vegetation to provide access to workers. Very limited staging areas would be required for this technique.

3.2.2.2 Basal Spray

Basal spraying of herbicide involves workers equipped with backpack sprayers targeting nuisance vegetation and applying an herbicide/oil mixture to the base of larger nuisance trees and shrubs, such as Brazilian pepper. This technique is usually reserved for larger individuals for which foliar application would have little to no effect on mortality. A mixture of herbicide and mineral oil is applied to the entire circumference of the trunk and allowed to slowly penetrate the bark. The mineral oil prevents the herbicide from being washed off during rain providing a prolonged dosing. The amount of herbicide used in the mixture depends on the size and age of the nuisance vegetation being targeted.

Typically, maintenance to follow-up on the initial treatment is scheduled for a specific number of events, or until a site reaches a self-sustaining condition. Following the initial treatment, maintenance events will be conducted quarterly for three years. This may include foliar spray applications to sprouts and saplings surrounding the basal sprayed individuals.

Impacts to existing wetlands are relatively low. Mineral oil used as a carrier for the herbicide is not likely to drift in high wind conditions. Application of basal oil just prior to a rain event could render the treatment null. The use of backpack sprayers does not require excessive clearing of vegetation to provide access to workers. Very limited staging areas would be required for this technique.

3.2.2.3 Hack and Squirt

Hack and squirt, also known as frill or girdle treatments, is a technique involving workers equipped with backpack sprayers and machetes. The backpack sprayers can contain either herbicide diluted with water or basal oil.

This technique is usually reserved for large nuisance trees, such as Australian pine, and species in which the basal application will not be effective due to the thickness of the bark preventing the herbicide from penetrating, such as melaleuca. Workers use machetes to penetrate deep into the bark of a nuisance individual and then apply herbicide to the cut. This ensures the application will penetrate past any thick bark. For species such as melaleuca, complete girdling is necessary for control. The amount of herbicide used in the mixture depends on the size and age of the nuisance vegetation being targeted.

Typically, foliar or basal spray maintenance to follow-up on the initial hack and squirt treatment is scheduled for a specific number of events, or until a site reaches a self-sustaining condition. Following the initial treatment, maintenance events will be conducted quarterly for three years.

Impacts to existing wetlands are relatively low. The use of basal oil is impacted very little by high wind conditions. Application of herbicide or basal oil just prior to a rain event could render the treatment null. The use of backpack sprayers and machetes does not require excessive clearing of vegetation to provide access to workers. Very limited staging areas would be required for this technique.

3.2.3 Chainsaw

Mechanical removal of larger and more dense stands of nuisance species will involve the use of chainsaws by a crew on foot. Additional labor will be required to remove and chip the debris from the site to eliminate seed sources. Target nuisance vegetation will be selectively cut while leaving desirable species intact. This technique will be used in combination with herbicide applications to treat stumps of cut nuisance vegetation.

Impacts to existing wetlands would be minimal as the crews would travel through work areas on foot. Debris management and possible temporary storage sites would need to be considered to avoid leaving debris on-site that would provide a viable seed source. Access points and potential minimal wetland impacts would need to be considered if small trailers and light equipment are used to move debris from the site.

3.2.4 Prescribed Burn

Prescribed burn is a management tool adapted to mimic naturally-occurring fires that historically functioned to maintain habitats in Florida through releasing nutrients and increasing light penetration in burned areas.

In the absence of fire, natural succession results in the overgrowth of shrubs and small trees eventually over-shadowing and out-competing native grasses and other herbaceous vegetation.

Organic debris accumulates creating a large source of fuel that can ignite suddenly by anthropogenic sources or lighting strikes. In the absence of fire, the vegetative strata changes over time affecting niche-species who depend on a specific habitat type.

Fire has a variable effect on invasive plant species: for some species, fire is a suppressant; while for others, recently burned habitat presents an opportunity to expand an existing nuisance population. The goals of burning are to set back the succession of undesirable species and encourage the growth of desirable vegetation. Prescribed fire is typically associated with upland habitats, however burning in wetlands has been accomplished in coastal marshes as a land management technique (Southern Fire Exchange, 2013). For this study, there are no large areas of coastal marsh associated with Weedon Island, and no prescribed burning in wetlands is discussed.

Prescribed fire activities occurring in uplands would have a minimal impact on wetlands. Wetlands, canals, and ditches act as natural fire breaks which limits the impact from movement of burn trucks and other equipment.

The Preserve has 19 burn units and are delineated by existing roads, firebreaks, and ecotones between communities. Firebreaks are maintained by PCR staff by disking periodically each year. Prescribed fires are conducted by County staff and includes preparation, planning, and scheduling of fires.

Prescribed burning will continue to be an important management tool in maintaining healthy natural communities. Fire will support the goal of providing more open areas for seeds to disperse and germinate. Opportunities for additional prescribed burns will increase with additional funding and where conditions allow.

3.3 Hydrology Improvements and Water Quality

Historic ditching activity created unintended alterations to the overall ecological processes normally occurring in coastal wetlands.

Mosquito ditching resulted in the loss of ecological productivity and function such as fewer resources for fish and wildlife, the spread of nuisance or invasive species, and the loss of marsh plants or marsh grasses that serve as shelter and food sources for juvenile fish, crab, and shrimp. Marshes with historic ditching activities have been restored in other areas of Florida using a variety of techniques that improve hydrology.

Areas of stagnant water and degraded water quality result when normal water circulation is interrupted. Unnaturally high or low water levels can result, and hypersaline conditions can develop following natural evaporation of impounded waters. Often stagnant water emits a sulfur odor or exhibits unnatural water color which suggests poor water quality. Extended flooding of wetland soils triggers chemical processes that can result in the accumulation of hydrogen sulfide (H_2S). Because of the environment, the sulfide cannot be sequestered and will accumulate in the soil or in the gaseous state of H_2S. Sulfide has been established as potential natural toxin and increased loading of organic matter can intensify the conditions (Lamers, 2013). Therefore, actions to improve flushing and natural tidal regimes are key to reducing pockets of stagnant water.

Vegetation is negatively affected by such changes by either eliminating vegetation or causing changes in the vegetation type based on salinity. Other degradations to water quality include the interruption of nutrient flow between mangrove areas and adjacent waters. Impounded wetlands can both isolate and exclude salt marsh fish and invertebrates. In extreme cases, biodiversity and species abundance changes on a large scale (Hill, 2002).

Restoration of actual tidal flushing occurring in the interior areas will require drainage analysis during the design and permitting phase to determine the appropriate system of ditches or impoundments to open to achieve large-scale benefits. An analysis to demonstrate that the openings or spoil mound removal will not result in unintended flooding of adjacent property or infrastructure is recommended during final design.

Water quality monitoring plans should include both qualitative (dye studies) or quantitative data collection (sampling and chemical analysis). Reversing impairment will be immediately and qualitatively observed by increased tidal flushing and the reduction of nuisance species. Measurable

gains will be observed by comparison of aerial images over time and routine site inspections following restoration or enhancement activities.

A water quality monitoring plan is useful to assess parameters related to the impacts resulting from the historic ditching and to document improvements following restoration activities. Objectives of a water quality monitoring plan are to measure the status and trends of water quality parameters to demonstrate measurable benefit from specific restoration activities. Monitoring may involve systematic, long-term data collection and analysis to detect changes over time.

Long-term and quantitative improvements would require data collection which could be performed with multiparameter dataloggers, or sondes, deployed to monitor for example, dissolved oxygen, pH, water levels, turbidity, temperature, and salinity. Routine nutrient monitoring and lab analysis could be included. In addition, it is useful to have specific regional information for rainfall, tides, and wind which can contribute to salinity patterns in estuaries (FDEP, 2018).

Aerial interpretation of increased water quality could include tracking the extent of sea grass recruitment, color changes in water representing increased tidal flushing, and changing sedimentation or drainage patterns. It is often possible to identify nuisance species on color aerial photography, and similar to seagrass, decreases in nuisance species coverage can be qualitatively assessed over time using aerials.

3.3.1 Mosquito Ditch Filling

Filling mosquito ditches involves the placement of material into an existing ditch to raise the bottom elevation to mimic adjacent salt marsh or mangrove wetland conditions. Fill material will be provided by removal of the existing spoil mounds resulting from the original ditching activities. As described in Section 3.1, replacing spoil into ditches will be achieved by Hydroblasting or by using specialized earth moving equipment selected for the conditions. Placement of suitable organic soils will create better habitat and increase colonization of desirable species.

Impacts to surrounding wetlands will result with some impacts being more temporary in nature depending on the technique used. Hydroblasting usually results in a more minimal impact because the soils are washed into the ditches around the existing red mangrove prop roots. The equipment is smaller, moved by hand, and usually administered by a small crew of workers which will be a limitation on the amount of ditch that can be filled to match the elevations of the adjacent black mangrove habitat.

For large-scale ditch filling, equipment as large as amphibious excavators have been used to restore entire marshes in other areas of Florida, such as the Indian River Lagoon (SJRWMD, 2018). However, larger-scale restoration will result in larger-scale impacts at first which will be balanced by improved long-term gains in ecologic function. Restoration by filling of mosquito ditches has shown to be more effective when the larger area is regraded to the elevation of adjacent wetlands.

Resulting success using this technique is directly related to achieving the appropriate final grades to mimic surrounding natural wetlands. Inappropriate grades or small-scale grading will result in either pockets of stagnant water or high spots that continue to support nuisance or exotic species.

3.3.2 Dead-end Ditch/Berm Openings

Mosquito ditching has resulted in the creation of dead-end ditches or impoundments in the Preserve. A separate slew of ecological impacts tends to result from impounded water in ditched habitats. In addition to nuisance or exotic species colonizing the spoil mounds left after ditching, the spoil piles create barriers to wildlife movement and negative changes in water chemistry (SJRWMD, 2018).

Opening dead-end ditches or impounded areas can be achieved by simply removing areas of spoil or siltation that act as ditch blocks or by the installation of culverts. The chosen technique will depend on the selection of the final location and after determining the surrounding drainage patterns and ecological conditions.

Some areas of stagnant water are adjacent to existing trails. Providing new openings within the berms will improve circulation. Small pedestrian bridges will be required to maintain access.

Impacts to existing wetlands will be moderate to high and will require vegetation clearing to move equipment and provide access to selected locations. Suitable temporary ground protection mats will reduce the amount of fill necessary to provide stabilized access. Staging areas within the Preserve will be required for this technique.

3.3.3 Pipe Desilting

Culverted crossings for access roads and piped connections between wetlands periodically collect sediment or debris, and act as a barrier to natural flushing or tidal processes. The decreased function of pipes is a factor in concentrated areas of poor water quality.

The objective in desilting a pipe is to remove the silt and debris so that the drainage capacity meets the intended design capacity. Methods to perform this type of maintenance ranges from the use of vacuum trucks, high pressure water to flush material from the culverts, and hand removal.

Impacts to existing wetlands would be low with adequate best management practices (BMPs) for erosion control methods are in place to avoid sedimentation in adjacent areas.

Generally, access to pipes or culverted crossings will be available for equipment and only limited vegetation clearing will be required. Consideration should be taken to identify a long-term maintenance plan for desilting the pipes. It would also be worthwhile to assess if the pipes are sized appropriately and identify if there are any upstream contributors to the accumulation of sediments that may be remedied to prevent future sediment deposition.

3.3.4 Ditch Dredging

Hydrology restoration or enhancement will include dredging ditches or constructing channels to increase tidal flushing. Elevation of ditches are important as ditches that are too shallow can result in decreased water flow leading to reductions in water quality, while on the other extreme, wide open channels can potentially redirect discharges with negative consequences. When restoring interior ditches, connectivity to tidally influenced channels becomes important to prevent trapping upland runoff and altering salinity regimes or trapping nutrients (USFWS, 1999). Deeper water areas associated with ditch dredging create refugia for fish and mobile invertebrates during extreme low tides and during extended periods of low temperature.

Impacts to existing wetlands would be moderate to high and would require vegetation clearing to move equipment and provide access to selected ditches. Suitable temporary ground protection mats would also be needed for access. Staging areas within the Preserve would be required for this technique as well as spoil staging areas.

3.4 Environmental Permitting

Weedon Island is under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the Southwest Florida Water Management District (SWFWMD). Enhancement and restoration activities will require the following permits:

- USACE Nationwide Permit 27, Aquatic Habitat Restoration, Enhancement and Establishment Activities

- 62-330.485 General Permit to the FDEP and WMD's for Environmental Restoration or Enhancement

Compensatory mitigation is not typically required since the proposed activities are projected to result in a net increase in ecologic function and value. In future design and permitting phases, early coordination with agencies including pre-application meetings are recommended to discuss project details and to aid in the development of a conceptual concept into a final, permittable design.

4 RESTORATION AND ENHANCEMENT APPROACH

Areas identified for potential restoration and enhancement projects have been broken down into study units. Table 4-1 contains a description of the ranking system used to describe the study unit's level of involvement with various factors.

4.1 Spoil Mound Removal (SMR)

Spoil mound removal alternatives were assessed for the factors listed above as well as costs. Due to the size of the Preserve, it was determined that vacuum truck and hand removal alternatives were not feasible for spoil mound removal. Hydroblasting and mechanical removal were determined to be feasible and are discussed below.

Cultural resource areas are known to occur within the preserve boundaries. There are known locations where resources have been found in the past, and it is generally accepted that the high probability areas are located at upland/wetland ecotones. However, there is the chance to encounter resources throughout the preserve in all study units, and it was noted during a field review that there is a high probability of archaeological resources near the utility easement in the northern portion of the Preserve. In assigning high, moderate, or low values for this element, high was assigned when a study unit was within a polygon of known cultural resources. Moderate was assigned to study units with upland edges, and low was assigned to study units that were entirely wetland and outside known resource locations. It may be necessary for an archaeologist to monitor activities during spoil mound removal, and coordination with a cultural resource specialist will be required during design and permitting.

The use of Hydroblasting to remove the spoil was assessed by determining an average size of the mounds. Smith *et al* (2007) estimated that the spoil mounds created from the ditching are large in area, roughly 1100 ft^2, and higher, by roughly three feet, than the surrounding wetlands.

An aerial delineation of mounds was conducted, and an average was used to estimate the amount of spoil mounds per acre.

Based on aerial delineations, there are roughly 4.5 mounds per acre for the northern portion of the study area and 10.35 mounds per acre for the southern portion of the study area. The northern portion is described as the areas of mosquito ditched wetland to the north and directly adjacent to the south of the Duke Energy easement and the southern portion is described as the areas of mosquito ditched wetland

located to the south and east of the Cultural and Natural History Center. For the northern portion, the estimate made by Smith *et al* (2007) of 1100 ft^2 for each spoil mound seems appropriate.

Table 4-1 Ranking System

Factor	Level of Involvement
Unit Access Restrictions	**Low:** Study unit is located within or directly adjacent to uplands. It is anticipated that clearing for site access will have no effect on mangroves or other wetland habitat.
	Moderate: Study unit is located within wetlands and surrounding habitat is wetland or open water. It is anticipated that minimal clearing for site access will have no adverse effect on mangroves or other wetland habitat. A boat may be required to access the study unit.
	High: Study unit is located within wetlands and surrounding habitat is wetland. It is anticipated that significant clearing for site access may adversely affect mangroves or other wetland habitat. A boat or construction of temporary access roads may be required to access the study unit.
Cultural Resources	**Low:** No areas of historical and/or cultural significance have been identified within the study unit. It is anticipated the proposed approach will have no effect on the resources present. It is anticipated that no monitoring by an archaeologist will be required during construction; however, monitoring may be required in areas suspected of containing submerged resources particularly in wetlands adjacent to upland areas of known resources
	Moderate: Areas of historical and/or cultural significance have been identified within the study unit; however, it is anticipated that the proposed approach will have no adverse effect on the resources present. Monitoring by an archaeologist may be required during construction.
	High: Areas of historical and/or cultural significance have been identified within the study unit; it is anticipated that the proposed approach may adversely affect the resources present. If avoidance is not possible, mitigation or monitoring may be necessary depending on the type of disturbance anticipated.
Permit Complexity	**Low:** Temporary impacts to wetland habitat may need to be considered. This may include clearing and temporary access road construction within wetlands to access the study units. It is likely that UMAM scoring, additional monitoring, and special permit conditions will not be required.
	Moderate: Temporary impacts to wetland habitat may need to be considered. This may include long-term temporary access roads and clearing within wetlands to access the study units. UMAM scoring, additional monitoring, and special permit conditions may be required.
	High: Temporary impacts to wetland habitat may outweigh the benefits of the restoration/enhancement approach. This may include a combination of clearing and dredging within wetlands to access the study units. UMAM scoring, additional monitoring, and special permit conditions may be required.

Based on an estimate of 4.5 mounds per acre, this results in 0.11 acres of spoil mounds per acre. However, within the southern portion of the study area, the spoil mounds are smaller in size, roughly 550 ft^2 and more numerous. This results in 0.13 acres of spoil mounds per acre in the southern part of the Preserve.

Based on discussions with SWFWMD staff, Hydroblasting costs of $2500 to $5000 per mound were provided. Additional discussions with contractors and a review of bid sheets for a similar project were used as well. An estimate of $1690 per mound was identified as a reasonable price for preparing a cost estimate in areas of low access constraints. Therefore, the size of the Preserve and the challenges associated with access facilitated the comparison with the lowest price used for study units of easiest access to the highest price for most difficult access. Table B-1 in Appendix B details the cost estimate for each access type.

Table 4-2 identifies the study units proposed for spoil mound removal by Hydroblasting and Figure 9 provides an overview of their location. Within Table 4-2, restoration acreage is based on the estimated acreage of spoil mound to be removed within each study unit. If the Hydroblast approach were applied to all areas of mosquito ditching with the Preserve, the total cost of spoil mound removal by Hydroblasting is more than $8.9 million.

The increased cost of Hydroblasting in the southern area is a result of the increased number of mounds and difficulty of access.

The use of mechanical removal, referred to as the WIDO approach, for spoil mound removal was assessed by developing a sample work area as shown in Figure 10. Within the 14.7-acre sample work area the various approaches of temporary access road placement, spoil mound removal, mosquito ditch dredging and filling, saltern/high marsh creation, and mangrove restoration were measured. The portion of each approach within the sample work area was calculated to identify the amount of temporary impacts and proposed conditions identified in Table 4-3. Figure 11 indicates the proposed configuration after the restoration has occurred and access roads have been removed.

Equipment and labor costs were used to calculate the WIDO costs and are shown in Table B-2 in Appendix B. Equipment rental companies were contacted to develop a monthly cost. Construction time for each aspect of the WIDO approach was developed through conversations with contractors who specialize in wetland restoration projects to develop costs as shown in Table B-3 (Appendix B). Using the sample 14.7-acre project, an estimated cost per acre was developed.

As shown in Table 4-4, the total cost for mechanical removal of the spoil mounds if applied to all mosquito-ditched areas of the Preserve as a whole is estimated to be $6.7 million.

Table 4-2 Spoil Mound Removal by Hydroblasting Approach by Study Unit

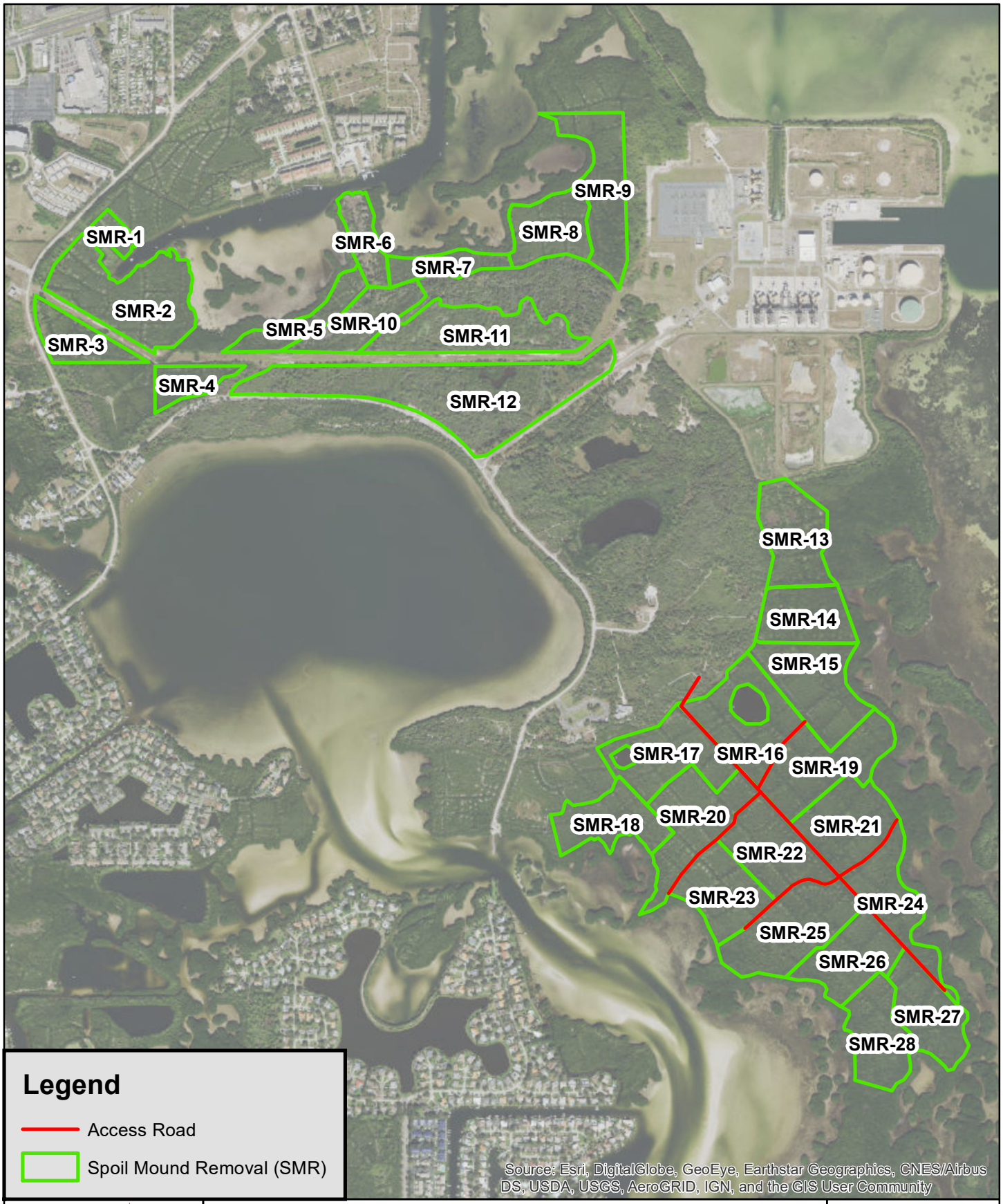
Unit ID	Size (Acre)	Price per Acre	Cost per Study Unit	Unit Access Restrictions	Cultural Resources	Permit Complexity
Northern Portion of Preserve						
SMR-1	2.62	$7,605	$19,925	Low	Low	Low
SMR-2	25.18	$7,605	$191,494	Low	Low	Low
SMR-3	8.94	$7,605	$67,989	Low	Low	Low
SMR-4	5.91	$7,605	$44,946	Low	Moderate/Low	Moderate
SMR-5	8.02	$11,250	$90,225	Moderate	High	High
SMR-6	6.89	$7,605	$52,398	Low	High	High
SMR-7	6.49	$11,250	$73,013	High	High	High
SMR-8	12.35	$11,250	$138,938	Moderate	Moderate	Low
SMR-9	17.24	$11,250	$193,950	Moderate	Moderate	Moderate
SMR-10	11.27	$22,500	$253,575	High	High	High
SMR-11	20.51	$7,605	$155,979	Low	High	High
SMR-12	43.23	$7,605	$328,764	Low	High	High
Southern Portion of Preserve						
SMR-13	15.34	$17,492	$268,327	Low	Low	Low
SMR-14	12.62	$17,492	$220,749	Low	Low	Low
SMR-15	18.62	$25,875	$481,793	Moderate	Moderate/Low	Low/Moderate
SMR-16	17.09	$17,492	$298,938	Low	Moderate/Low	Low/Moderate
SMR-17	16.30	$25,875	$421,763	Moderate	Moderate/Low	Moderate
SMR-18	12.47	$51,750	$645,323	High	Low	Moderate/High
SMR-19	18.63	$17,492	$325,876	Low	Low	Moderate
SMR-20	18.15	$25,875	$469,631	Moderate	Low	High
SMR-21	16.00	$25,875	$414,000	Moderate	Low	High
SMR-22	15.68	$25,875	$405,720	Moderate	Low	High
SMR-23	14.09	$51,750	$729,158	High	Low	High
SMR-24	13.90	$51,750	$719,325	High	Low	High
SMR-25	20.61	$25,875	$533,284	Moderate	Low	High
SMR-26	13.93	$51,750	$720,878	High	Low	High
SMR-27	13.74	$25,875	$355,523	Moderate	Low	Moderate
SMR-28	13.39	$17,492	$234,218	Low	Low	Moderate
TOTALS	**419.21**		**$8,855,698**			

Table 4-3 Sample Work Area

Existing Conditions			
	Size		
Cover Type	Square Feet	Acreage	%
Spoil Mounds	83,457	1.9	13.0%
Black Mangroves	381,517	8.8	59.4%
Red Mangroves/Mosquito Ditches	177,000	4.1	27.6%
TOTAL AREA	**641,974**	**14.7**	**100%**
Temporary Impact Quantities			
	Size		
Work Area	Square Feet	Acreage	%
Access Road Impacts (fill)	74,620	1.7	11.6%
Mosquito Ditch Impacts (fill)	7,172	0.2	1.1%
Mosquito Ditch Impacts (dredge)	170,527	3.9	26.6%
TOTAL TEMPORARY IMPACTS	**252,319**	**5.8**	**39.3%**
Proposed Conditions			
	Size		
Cover Type	Square Feet	Acreage	%
Not Impacted	306,198		
Restored Temporary Impacts	74,620		
Removed Spoil Mounds	64,022		
Black Mangroves (Total)	444,840	10.2	69.3%
Red Mangroves/Mosquito Ditches Restored	129,360	3.0	20.2%
Deeper Water Refugia	41,167	0.9	6.4%
Saltern/High Marsh	26,607	0.6	4.1%
TOTAL AREA	**641,974**	**14.7**	**100.0%**

Table 4-4 Spoil Mound Removal by Mechanical Removal Approach by Study Unit

Unit ID	Size (Acres)	Price per Acre	Cost per Study Unit	Cultural Resources	Permit Complexity
Northern Portion of Preserve					
SMR-1	2.62	$15,831	$41,477	Low	Low
SMR-2	25.18	$15,831	$398,625	Low	Low
SMR-3	8.94	$15,831	$141,529	Low	Low
SMR-4	5.91	$15,831	$93,561	Moderate/Low	Moderate
SMR-5	8.02	$15,831	$126,965	High	High
SMR-6	6.89	$15,831	$109,076	High	High
SMR-7	6.49	$15,831	$102,743	High	High
SMR-8	12.35	$15,831	$195,513	Moderate	Low
SMR-9	17.24	$15,831	$272,926	Moderate	Moderate
SMR-10	11.27	$15,831	$178,415	High	High
SMR-11	20.51	$15,831	$324,694	High	High
SMR-12	43.23	$15,831	$684,374	High	High
Southern Portion of Preserve					
SMR-13	15.34	$16,244	$249,183	Low	Low
SMR-14	12.62	$16,244	$204,999	Low	Low
SMR-15	18.62	$16,244	$302,463	Moderate/Low	Low/Moderate
SMR-16	17.09	$16,244	$277,610	Moderate/Low	Low/Moderate
SMR-17	16.30	$16,244	$264,777	Moderate/Low	Moderate
SMR-18	12.47	$16,244	$202,563	Low	Moderate/High
SMR-19	18.63	$16,244	$302,626	Low	Moderate
SMR-20	18.15	$16,244	$294,829	Low	High
SMR-21	16.00	$16,244	$259,904	Low	High
SMR-22	15.68	$16,244	$254,706	Low	High
SMR-23	14.09	$16,244	$228,878	Low	High
SMR-24	13.90	$16,244	$225,792	Low	High
SMR-25	20.61	$16,244	$334,789	Low	High
SMR-26	13.93	$16,244	$226,279	Low	High
SMR-27	13.74	$16,244	$223,193	Low	Moderate
SMR-28	13.39	$16,244	$217,507	Low	Moderate
TOTALS	**419.21**		**$6,739,995**		



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Spoil Mound Removal
Study Units

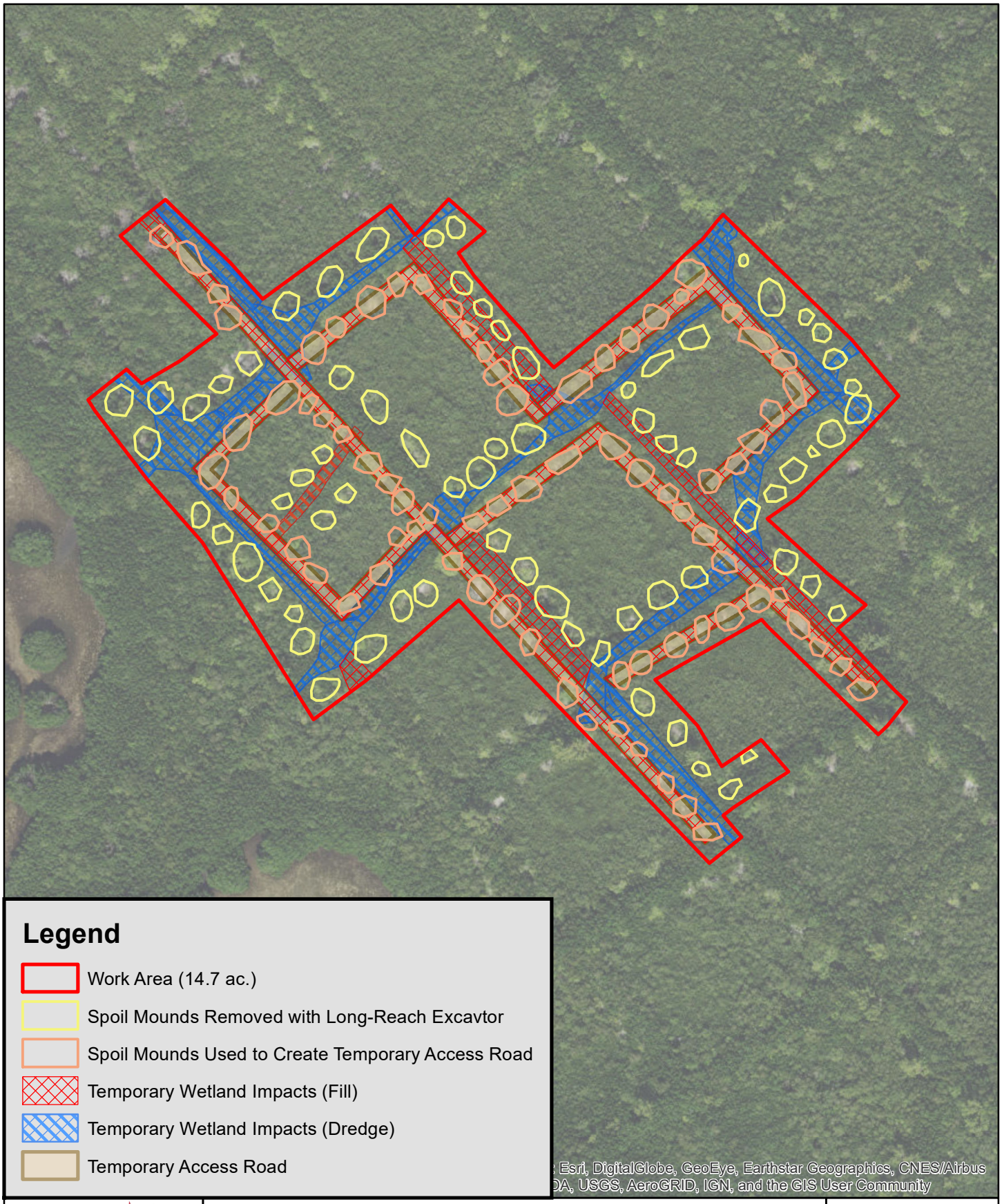
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1 inch = 1,400 feet

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Feet

Figure 9

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Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Walk In, Dig Out Sample Work Area
Temporary Impacts

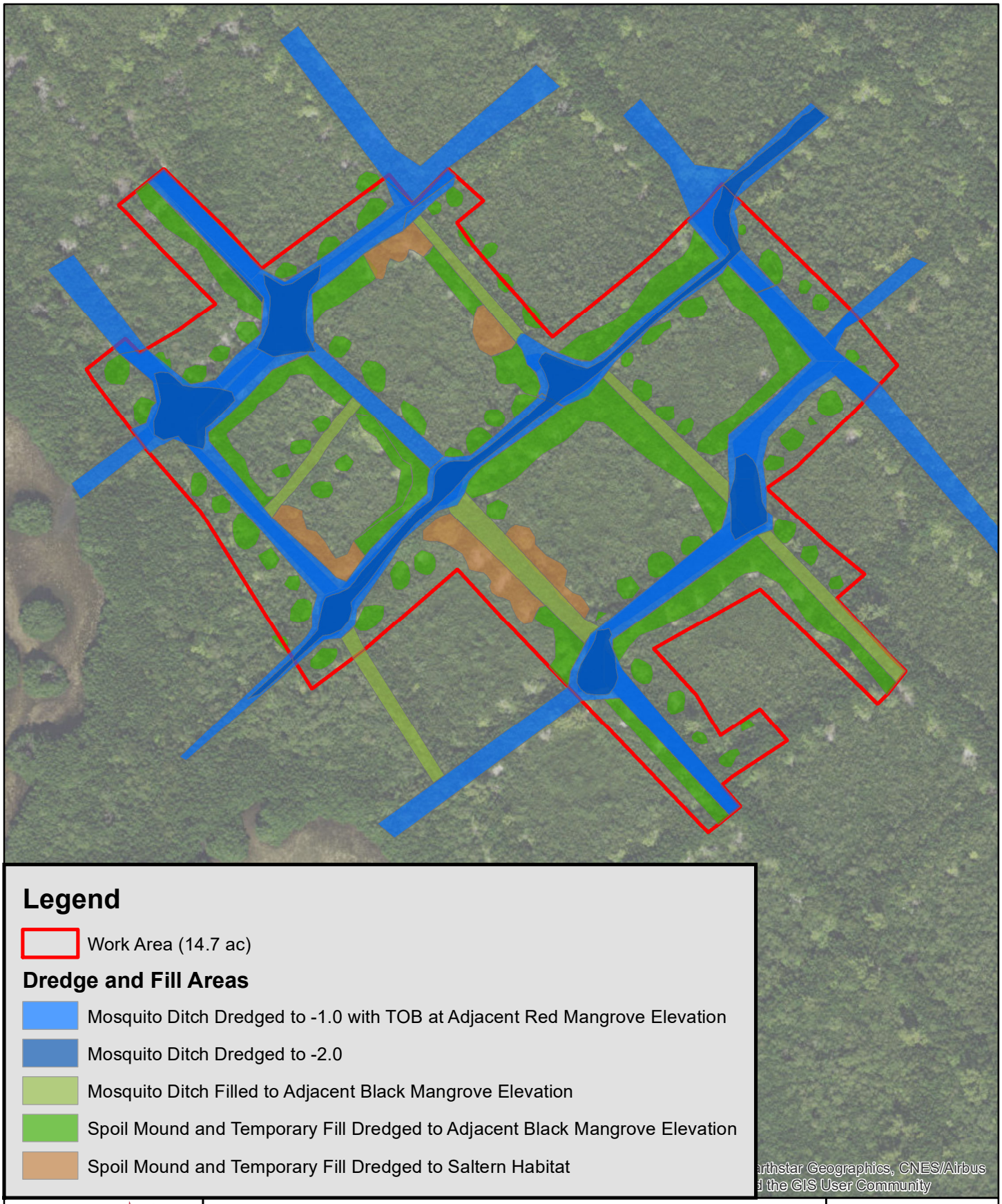
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1 inch = 200 feet

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Feet

Figure 10

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Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Walk In, Dig Out Sample Work Area
Proposed Restoration

N

1 inch = 200 feet

0 100 200 Feet

Figure 11

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Table 4-4 identifies the study units proposed for spoil mound removal by mechanical removal and Figure 9 provides an overview of their location. As a result of the use of amphibious excavators, access was determined to be similar for each study unit and was not considered a constraint. The cost of mechanical removal is $15,831 per study unit acre in the northern portion of the Preserve and $16,244 in the southern portion. The long-term temporary access road necessary to access each study unit in the southern portion accounts for the increased per acre price.

4.1.1 Discussion

Hydroblasting is labor-intensive and as one contractor indicated "it causes moral attrition." Each contractor talked about the challenges with keeping the laborers focused on the completing the task and the benefit of the smaller projects (less than 100 mounds). However, this technique mostly avoids impacts to the existing wetland habitat. Because the equipment is moved by hand, wetland impacts are minimal and more temporary in nature.

Based on reviews of other Hydroblasting projects in Tampa Bay, review of the literature, and discussions with contractors, the approach has drawbacks including the indiscriminate transport of the soil and the challenges associated with achieving a desirable elevation after the work is complete. Smith *et al* (2007) concluded that Hydroblasting "did not reduce the elevation in hydro-leveled areas to that of the surrounding wetland." Failure of marsh plants and mangroves to become established can be attributed to the poor quality of the soils that remain in spoil mounds. Additionally, much of the soil was observed to cover existing mangrove pneumatophores.

Effective construction management during Hydroblasting will increase the quality of the restoration. Performance measurement included in the contract documents will also improve the results. Similar projects have included some follow up earthwork with light equipment to achieve proposed elevations.

The cost estimate was broken into three ranges of access and used the low, moderate, and high cost estimates to develop the total costs. The lower cost of Hydroblasting in areas of easy access ($7,605 per acre) within the northern portion of the Preserve provides a viable option for restoration of 113 acres. An additional 30 acres of moderate access within the northern portion of the Preserve can be restored through Hydroblasting at a cost of $11,250 per acre. The individual study units can be combined into clusters for obtaining funding, developing the design and permit documents, and performing the construction.

A few areas of extensive ditching in the northern portion resulted in larger mounds that cannot be effectively removed through Hydroblasting and will require mechanical removal.

Mechanical removal can reduce the amount of time spent on spoil mound removal, but the footprint of impact for this technique will be higher than Hydroblasting. Accessing the interior spoil mounds will result in increasing levels of difficulty and compounding wetland impacts as equipment of any type is advanced toward the interior.

Figure 9 shows the long-term temporary access roads proposed to gain access into the interior of the Preserve. This method is especially effective since the original ditching effort created spoil mounds that line up to reduce the impacts and assist in construction of the access.

Impacts that occur through spoil mound removal by mechanical equipment is 13% of the restoration area. For the total 419.21 acres of proposed restoration, that percentage represents 54.5 acres of temporary impact from temporary fill of mangroves for access and fill of impounded, low quality mosquito ditches to restore mangrove habitat. Impacts that occur from dredging of mosquito ditches to improve circulation is 27% of the restoration area or 113.2 acres. Specific approaches to reduce temporary impacts can be addressed during the design phase of the individual projects.

The effect of temporary impacts can be reduced through strategies such as placement of filter fabric prior to placement of the spoil to create the access road. This will facilitate returning the elevation to the previous grade and maintaining the soil characteristics of the wetland, thus reducing the time necessary for recovery of the temporary impact. The use of crane mats will reduce temporary impacts and are suitable for use in areas of stabile substrate.

An additional benefit of spoil mound removal by mechanical means includes the ability of placing organics removed from the mosquito ditches onto the subgrade, except in the areas of proposed saltern/high marsh habitat. Soils with high grain sizes are preferred for those habitats.

A similar project accomplished by St. Johns River Water Management District in Volusia County involved the restoration of dragline ditches in coastal wetlands associated with Mosquito Lagoon. Although the mosquito ditching by draglines created larger spoil mounds and more intensive ditching, the restoration approach used amphibious excavators with long-reach backhoes on large aluminum pontoons with tracks. Appendix A includes excerpts from a presentation by one of the stakeholders.

The use of heavy equipment in Mosquito Lagoon was dramatic and somewhat unsettling to the public. However, the large-scale project was cost-effective ($3650 per acre) and has resulted in rapid recruitment of desirable estuarine species. The success is directly related to the ability of the earthwork equipment to achieve the proper elevations for recruitment within suitable soils.

SMR's 1, 2, 3, 4, 5, 6, 7, and 9 in the northern portion of the Preserve are adjacent to roadways or upland access points that are suitable for mechanical removal access. Either Hydroblasting or mechanical excavation would be suitable techniques in these areas.

The edges will be the most easily accessible with minimal impact, while the interiors will be more complex from the temporary access points.

SMR 6 may provide the greatest opportunity for restoration success through implementation of various approaches. This study unit has suitable accessibility via trails for light equipment and there is existing salt marsh habitat present. Spoil mound removal in this area would enhance existing habitats. Desirable vegetation with low levels of nuisance species occurs in this area and will provide a seed source for re-graded areas. There is a good opportunity in this study unit to restore hydraulic connections and potentially restore east-west flushing across the peninsula.

SMRs 10, 11, and 12 are within archaeologically significant areas and are not suitable for excavation or Hydroblasting. As a result, the best approach will be hydrologic improvements through maintenance of the cross drains under the utility easement, removing sediment plugs within existing ditches, and creating new flow-troughs by removal of small, select segments of the larger spoil mounds within those study areas.

SMR's 8 and 15-28 are generally entirely wetland and surrounded by water resources. These will require temporary access roads with either type of approach. Within this group of study units, the edges of SMR 15, 18, 19, and 23-28, could be accessed via boat if Hydroblasting were the preferred approach. Study units SMR 16, 17, 20, 21, and 22, are interior and would pose the most difficulty in access.

The study units facilitate the approach of developing individual, annual projects for funding and construction. This approach minimizes the impact to the Preserve as a whole. SMR's 13 and 14 are recommended for the first project using the WIDO approach. The access into the wetland is from existing maintenance roads, the sites are north of the canoe/kayak trail and are discrete units of 13 and 15 acres respectively.

As shown in Table 4-4, the cost for restoring 28 acres in both areas is almost $455,000, or $16,244 per acre. It should be noted that the WIDO method includes the mosquito ditch restoration providing hydrology improvements to restore the diurnal flushing for complete habitat improvement.

Based on traditional funding cycles, it is anticipated the restoration of the entire Preserve will take 10 years or more. As a result, many of the temporary impacts from the early projects will have fully recovered before construction occurs in other areas. Selection of the individual projects should include logical grouping to accommodate access as well as consider the improved hydrology.

The County's Guidance for Incorporating Sea Level Rise into Capital Projects describes four key steps for assessing and adapting to the effects of sea level rise. The first step, review the science, indicates a conservative view of a rise of 0.8 feet by 2050. The remaining three steps are vulnerability assessment, risk assessment, and adaptation planning. As the spoil mound removal approach is dependent on matching the adjacent grades of black mangroves, the vulnerability and risk are minimal, and it accommodates gradual increases in future sea level rises.

4.2 Nuisance Species Removal (NSR)

Nuisance species removal will take place in both upland and wetland habitat. Tables 4-5 and 4-6 identify the study units proposed for nuisance species removal and Figure 12 provides an overview of their location. Within Tables 4-5 and 4-6, the appropriate technique for nuisance species removal is suggested for each study unit based on multiple factors. The enhancement acreage is an estimate of the nuisance cover per study unit.

Costs estimates (Table B-4 in Appendix B) were created by comparing contract bid documents for two similar SWFWMD restoration projects (Feather Sound and Bower Tract) and one Florida Department of Transportation multi-year mitigation area maintenance contract (Appendix C). The use of herbicide as an approach for spoil mound restoration with an initial treatment and three years of quarterly follow up averaged $2,429 per acre. The use of herbicide to spot spray occasional nuisance species within areas that did not incur mosquito-ditching impacts cost an average of $273 per acre.

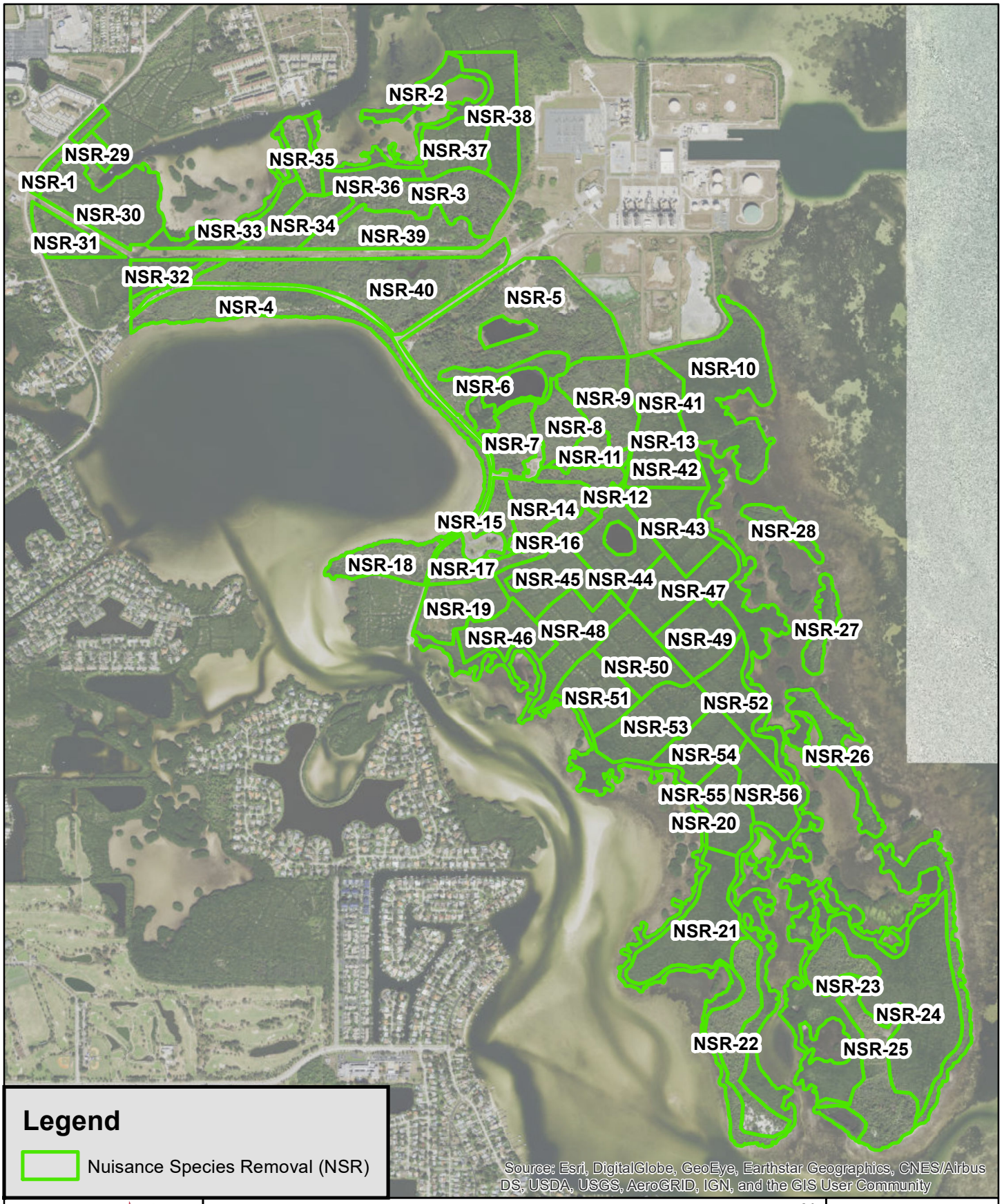
Table 4-5 Nuisance Species Removal Approach for Non-Mosquito Ditched Areas

Unit ID	Technique	Habitat	Unit Acreage	Percent Nuisance Cover	Enhancement Acreage	Cost Estimate	Unit Access Restrictions	Cultural Resources
NSR-1	Herbicide	Upland	3.99	40%	1.60	$1,089	Low	Low
NSR-2	Herbicide	Wetland	22.51	30%	6.75	$6,145	Moderate	Moderate
NSR-3	Herbicide	Upland	23.45	55%	12.90	$6,402	Low	Moderate
NSR-4	Herbicide	Wetland/ Upland	32.14	20%	6.43	$8,774	Low	Moderate
NSR-5	Herbicide	Wetland/ Upland	60.70	30%	18.21	$16,571	Low	Moderate
NSR-6	Herbicide	Wetland/ Upland	10.70	20%	2.14	$2,921	Low	Moderate
NSR-7	Herbicide	Upland	10.60	15%	1.59	$2,894	Low	Low
NSR-8	Herbicide	Upland	10.44	40%	4.18	$2,850	Low	Moderate
NSR-9	Herbicide	Wetland/ Upland	18.06	25%	4.52	$4,930	Low/ Moderate	Moderate
NSR-10	Herbicide	Wetland	40.27	20%	8.05	$10,994	Moderate/ High	Low
NSR-11	Herbicide	Upland	6.77	40%	2.71	$1,848	Low	Moderate
NSR-12	Herbicide	Upland	6.17	15%	0.93	$1,684	Low	Moderate
NSR-13	Herbicide	Wetland	2.19	10%	0.22	$598	Low	Moderate
NSR-14	Herbicide	Upland	13.04	10%	1.30	$3,560	Low	Moderate
NSR-15	Herbicide	Upland	6.38	40%	2.55	$1,742	Low	Moderate
NSR-16	Herbicide	Upland	6.89	20%	1.38	$1,881	Low	Moderate
NSR-17	Herbicide	Upland	6.66	15%	1.00	$1,818	Low	Moderate
NSR-18	Herbicide	Upland	12.45	25%	3.11	$3,399	Low	Moderate
NSR-19	Herbicide	Wetland	15.12	20%	3.02	$4,128	Low	Low
NSR-20	Herbicide	Wetland	81.72	15%	12.26	$22,310	Moderate	Low
NSR-21	Herbicide	Wetland	25.84	15%	3.88	$7,054	High	Low

Unit ID	Technique	Habitat	Unit Acreage	Percent Nuisance Cover	Enhancement Acreage	Cost Estimate	Unit Access Restrictions	Cultural Resources
NSR-22	Hydro-axe	Wetland/ Upland	20.31	20%	4.06	$6,093	Moderate	Low
NSR-22	Herbicide	Wetland/ Upland	20.31	40%	8.12	$5,545	Moderate	Low
NSR-23	Herbicide	Wetland	54.63	40%	21.85	$14,914	Moderate/ High	Low
NSR-24	Herbicide	Wetland	47.65	20%	9.53	$13,008	Moderate/ High	Low
NSR-25	Hydro-axe	Wetland/ Upland	32.88	20%	6.58	$9,864	Moderate	Low
NSR-25	Herbicide	Wetland/ Upland	32.88	40%	13.15	$8,976	Moderate	Low
NSR-26	Herbicide	Wetland	12.41	60%	7.45	$3,388	Moderate	Low
NSR-27	Herbicide	Wetland	6.40	60%	3.84	$1,747	Moderate	Low
NSR-28	Herbicide	Wetland	6.04	60%	3.62	$1,649	Moderate	Low
TOTALS			**649.6**		**176.92**	**$178,777**		

Table 4-6 Nuisance Species Removal Approach Unit for Mosquito Ditched Areas

Unit ID	Technique	Habitat	Unit Acreage	Enhancement Acreage	Cost Estimate	Unit Access Restrictions	Cultural Resources
NSR-29	Herbicide	Wetland	2.62	0.29	$6,364	Low	Low
NSR-30	Herbicide	Wetland	25.18	2.77	$61,162	Low	Low
NSR-31	Herbicide	Wetland	8.94	0.98	$21,715	Low	Low
NSR-32	Herbicide	Wetland	5.91	0.65	$14,355	Low	Moderate/ Low
NSR-33	Herbicide	Wetland	8.02	0.88	$19,481	Moderate	High
NSR-34	Herbicide	Wetland	11.27	1.24	$27,375	High	High
NSR-35	Herbicide	Wetland	6.89	0.76	$16,736	Low	High
NSR-36	Herbicide	Wetland	6.49	0.71	$15,764	High	High
NSR-37	Herbicide	Wetland	12.35	1.36	$29,998	Moderate	Low
NSR-38	Herbicide	Wetland	17.24	1.90	$41,876	Moderate	Low
NSR-39	Herbicide	Wetland	20.51	2.26	$49,819	Low	High
NSR-40	Herbicide	Wetland	43.23	4.76	$105,006	Low	High
NSR-41	Herbicide	Wetland	15.34	1.99	$37,261	Low	High/ Moderate
NSR-42	Herbicide	Wetland	12.62	1.64	$30,654	Low	High/ Moderate
NSR-43	Herbicide	Wetland	18.62	2.42	$45,228	Moderate	High/ Moderate
NSR-44	Herbicide	Wetland	17.09	2.22	$41,512	Low	High/ Moderate
NSR-45	Herbicide	Wetland	16.30	2.12	$39,593	Moderate	High/ Moderate
NSR-46	Herbicide	Wetland	12.47	1.62	$30,290	High	Low
NSR-47	Herbicide	Wetland	18.63	2.42	$45,252	Low	Low
NSR-48	Herbicide	Wetland	18.15	2.36	$44,086	Moderate	Low
NSR-49	Herbicide	Wetland	16.00	2.08	$38,864	Moderate	Low
NSR-50	Herbicide	Wetland	15.68	2.04	$38,087	Moderate	Low
NSR-51	Herbicide	Wetland	14.09	1.83	$34,225	High	Low
NSR-52	Herbicide	Wetland	13.90	1.81	$33,763	High	Low
NSR-53	Herbicide	Wetland	20.61	2.68	$50,062	Moderate	Low
NSR-54	Herbicide	Wetland	13.93	1.81	$33,836	High	Low
NSR-55	Herbicide	Wetland	13.39	1.74	$32,524	Low	Low
NSR-56	Herbicide	Wetland	13.74	1.79	$33,374	High	Low
TOTALS			**419.21**	**51.12**	**$1,018,261**		



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Nuisance Species Removal
Study Units

N

1 inch = 1,700 feet

0 850 1,700
Feet

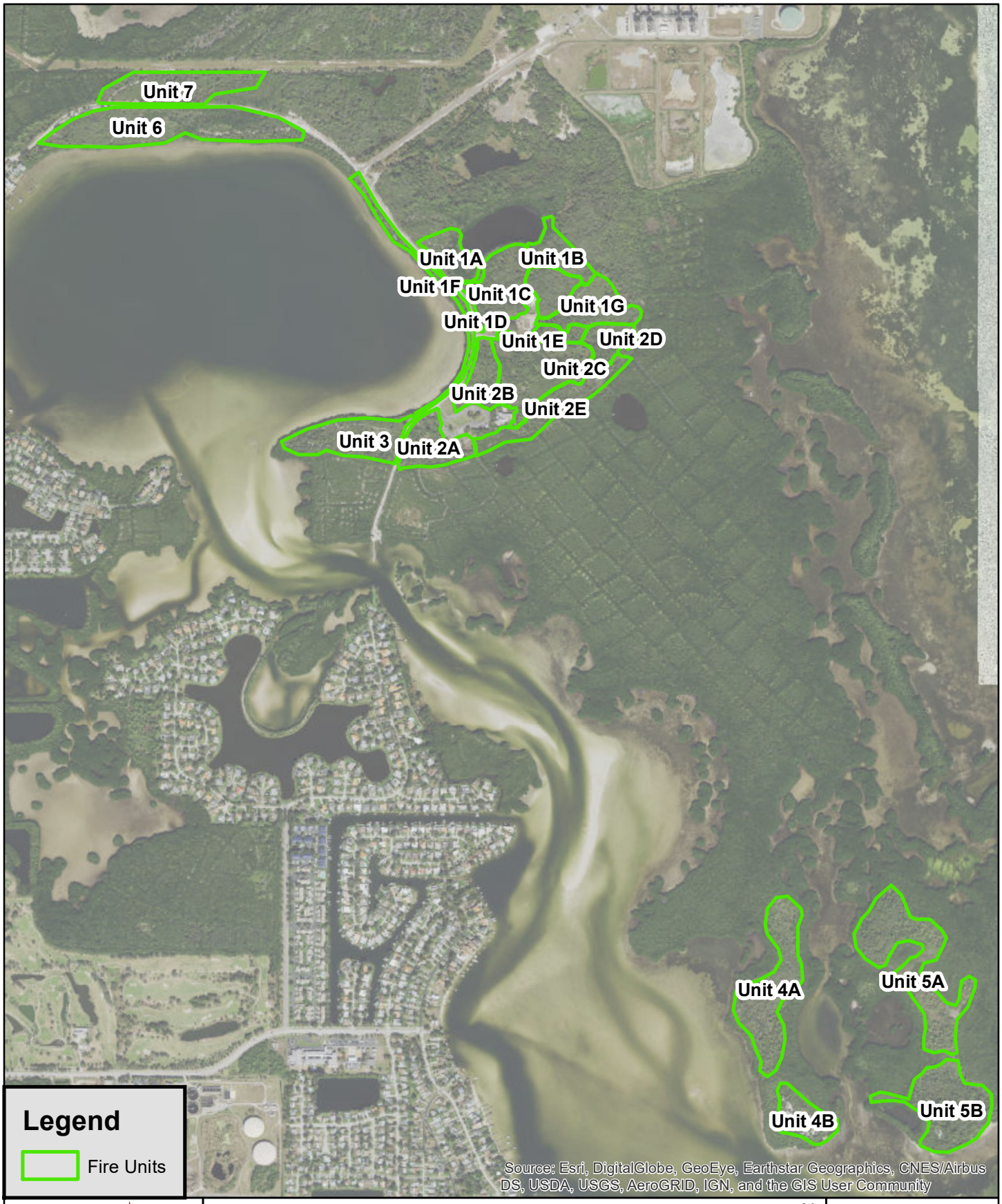
Figure 12

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Table 4-7 identifies the study units proposed for prescribed burns and Figure 13 provides an overview of their locations. These burn units are consistent with the units used by PCR staff and included in the 2012 Weedon Island Preserve Management Plan. Within the management plan is a 2012-2022 proposed burn schedule; however, the management plan mentions that opportunities for additional prescribed burns will be considered if additional resources become available and conditions allow. As a result, the cost estimate is for a one time burn for each fire unit. PCR is equipped with two 300-gallon slide-on units, two 300-gallon brush trucks, 400-gallon water buffalo, 850-gallon modified old military M35, 50-gallon spray tank for an ATV utility cart, small Honda pumps for drafting out of surface water, drip torches, backpack sprayers, and miscellaneous hand tools.

Table 4-7 Nuisance Species Removal by Prescribed Burn Approach

Unit ID	Unit Acreage	Cost Estimate	Unit Access Restrictions	Cultural Resources
1A	4.98	$1,245	Low	Moderate
1B	5.12	$1,280	Low	High
1C	9.4	$2,350	Low	Moderate
1D	4.62	$1,155	Low	Moderate
1E	1.99	$498	Low	Moderate
1F	4.13	$1,033	Low	Moderate
1G	7.16	$1,790	Low	Moderate
2A	6.5	$1,625	Low	Moderate
2B	5.09	$1,273	Low	Moderate
2C	12.98	$3,245	Low	Moderate
2D	3.82	$955	Low	Moderate
2E	8.49	$2,123	Low	Moderate
3	9.88	$2,470	Low	Moderate
4A	14.85	$3,713	Moderate	Low
4B	5.57	$1,393	Moderate	Low
5A	18.09	$4,523	Moderate	Low
5B	13.75	$3,438	Moderate	Low
6	19.78	$4,945	Low	Moderate
7	10.62	$2,655	Low	Moderate
TOTALS	**166.82**	**$41,705**		



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Fire Units

N

1 inch = 1,400 feet

0 700 1,400
Feet

Figure 13

Path: H:\40608\Feasibility Study\Figures\Figure_13_BurnUnits.mxd

4.2.1 Discussion

Although some of these proposed areas of work occur within the boundaries of cultural and historical resources, heavy equipment will not be required and there will be little to no ground disturbance. As a result, it is anticipated that nuisance vegetation treatment in these areas will have no adverse effect on the resources located within those areas.

Treatment of nuisance species on the spoil mounds is a method used at the Bower Tract in Hillsborough County. Appendix D contains a site map that shows the mosquito-ditched portion of the Bower Tract. An initial treatment is followed by quarterly treatments for three years. The approach is cost effective but may not completely eliminate nuisance species and require repeated, long-term application. The approach does not provide any restoration of adjacent mosquito ditches, but does not incur any temporary impacts. The spoil mounds will still be present providing opportunities for recruitment of occasional desirable upland plants. For NSR 29-56 this approach would be considered enhancement and not restoration, and as a result is not recommended.

Mangrove habitat within the Preserve that was not ditched has limited nuisance species cover and would require limited removal effort.

For NSR 4, 7, 8, 11-18 and portions of NSR 5, 6, and 40 a phase-based management plan is recommended. The use of controlled burning in these areas can aid in the natural succession of the habitat and initial clearing of nuisance species and combined with the burn units. After controlled burning, the area will be open for the use of herbicide. The use of basal spray should not be needed at this point due to larger nuisance individuals being destroyed during the controlled burning process. Herbicide treatment of saplings and sprouts should occur on a routine basis quarterly for one year to ensure complete nuisance species removal.

4.2.1.1 NSR 22 and NSR 25

NSR 22 and NSR 25 are areas specific to Googe Island and Ross Island. A recommended three-phase approach is proposed for these areas. In the first phase of nuisance removal, controlled burning will be utilized. Controlled burning clears brush and creates access for further nuisance species removal in addition to reducing the total amount of nuisance individuals on the island. In the second phase, hydro-axing will be utilized. Hydro-axing after a controlled burn will remove scrubby and dead trees, including nuisance species, throughout the area. Removing seed sources using hydro-axing will discourage new nuisance species growth.

Lastly an herbicide maintenance schedule will provide complete nuisance removal from the areas of interest. Herbicide maintenance should be quarterly for a year or until new nuisance growth ceases to persist. Transporting the hydro-axe or roller chopper to Googe and Ross Islands could be accomplished with a heavy-lift helicopter. The cost of transportation of the proper tools is likely more efficient than the additional costs of a less-efficient approach.

4.3 Hydrology Improvements (HI)

Hydrology improvements will take place within wetland habitat. Table 4-8 identifies the study units proposed for hydrology improvement and Figure 14 provides an overview of their location. The restoration acreage is an estimate of the adjacent habitat that will benefit from the hydrology improvements. Costs were assessed on a per unit price and were based on specific bids from Pinellas County maintenance contracts and FDOT state-wide averages (Table B-5 in Appendix B and Bid Sheets in Appendix C).

Table 4-8 Hydrology Improvements Approach

Unit ID	Technique	Unit Acreage	Cost Estimate	Unit Access Restrictions	Cultural Resources	Permit Complexity
HI-1	Desilt Pipes	N/A	$15,792	Low	Low/Moderate	Low
HI-2	Create Connections Across Peninsula	6.89	$20,948	Low/Moderate	Moderate/High	Moderate
HI-3	Provide New Berm Openings	20.51	$66,278	Low/Moderate	High	High
HI-3	Fill Mosquito Ditches	20.51	$28,280	Low/Moderate	High	High
HI-4	Provide New Berm Openings	N/A	$66,278	Moderate	High	Low
HI-5	Provide New Berm Openings	N/A	$66,278	Low	Low	Low
HI-6	Dredge Ditches	0.36	$18,952	Low	High	Moderate
HI-6	Bank Stabilization	2.19	$95,396	Moderate	High	Low
HI-7	Provide New Berm Openings	43.23	$66,278	Low	High	High
HI-7	Fill Mosquito Ditches	43.23	$56,560	Low	High	High



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Hydrology Improvements

N

1 inch = 1,200 feet

0 600 1,200
Feet

Figure 14

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4.3.1 Discussion

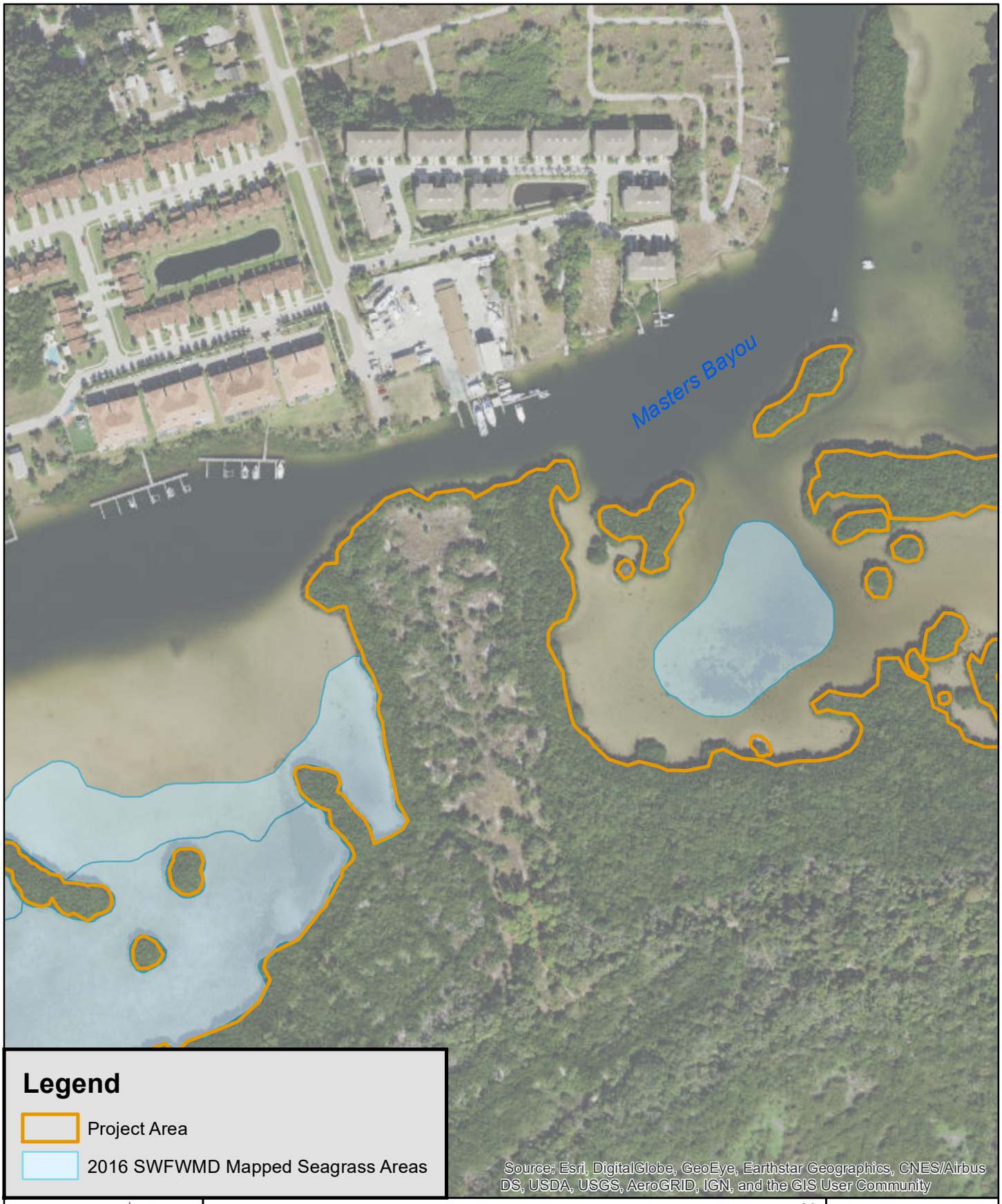
Hydrology improvements include de-silting of existing pipes/cross drains under the utility easement for the Bartow Plant, opening of impounded ditches, and filing of ditches in areas of stagnant water. Some filling of ditches associated with spoil mound removal will be accomplished to facilitate sheet flow of the tidal waters during the diurnal regime.

As discussed in Section 3.3, a water quality monitoring plan that assesses water quality parameters or an ecological monitoring plan that assesses qualitative or quantitative data collection should be in place prior to construction. The actual monitoring plan will be based on the proposed hydrology improvement approach determined during the design phase to document the measurable benefits.

Several pipes were identified, as shown in in Figure 14 as the multiple HI-1 locations, running beneath the Duke Energy easement that have varying levels of siltation and accumulated sediments at either end of the pipe. The pipes will be de-silted and accumulated sediment removed from the end of the pipes to restore flow and increase circulation and tidal flushing between the wetlands north and south of the easement. While neither water quality or ecological monitoring are recommended for this activity, a continued assessment of the levels of siltation and sediment accumulation causing potential obstruction of flow should be part of a routine maintenance program. Pipe desilting costs range from $9.73 to $26.32 per linear foot and are dependent on pipe size. The higher unit price was used for this study.

An area of previous restoration efforts is a 1,200-foot peninsula in the northern portion of the Preserve that is designated as HI-2/SMR-6/NSR-35 (Figures 9, 12, and 14). The previous efforts were done in 2014 and included removal of some spoil mounds and hydro-axing for nuisance species removal. Five to six fingers of tidally influenced wetlands extend partly across the peninsula. As shown in aerial photography in Figure 15, the seagrass areas of Snug Harbor/Masters Bayou to the east and west exhibit reduced seagrass coverage. As a result, it is anticipated that connection of the fingers will promote better flushing across the peninsula likely improving the adjacent water quality and improving seagrass habitat.

As with hydrology improvement (HI-2), spoil mound removal in this area will be facilitated by ease of access. The recommendation for this area includes heavy equipment for removing the spoil to an elevation suitable to support high marsh species such as *Paspalum vaginatum, Distichilus spicata,* and *Sporobolis virginicus*.



Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Seagrass Limits

N

1 inch = 300 feet

0 150 300
Feet

Figure 15

Path: H:\40608\Feasibility Study\Figures\Figure_15_Seagrass.mxd

These meadows will augment the existing areas of high marsh and facilitate an appropriate mosaic habitat typical of pre-settlement Tampa Bay ecosystems.

Monitoring via aerial delineation of seagrass areas is recommended to assess the success of improved hydrology to benefit seagrass habitat.

In the area designated as HI-3, there are open water areas exhibiting poor water quality and limited circulation as evidenced by floating aquatics such as *Lemna minor* and *Salvinia spp.* During field reviews, there were areas of impounded ditches that contained discolored water as well a portion of ditch along the trail where the water level at low tide was one foot higher on the north side of the trail than the south side. This area is also designated as SMR 10 and 11 as there are numerous large spoil mounds north of the utility easement. The recommendation for this area is to remove accumulated sediment to promote increased circulation, fill mosquito ditches to intertidal elevations to improve wetland habitat, and create berm openings in the spoil mounds to increase circulation and improve wetland habitat. A similar approach is recommended for the areas south of the utility easement, HI-7/SMR 12.

As this will involve some small areas of extensive ground disturbance in areas with a high potential for cultural resources, additional coordination will be required during design and permitting to assure the cultural resources are protected. Additional water quality monitoring is proposed to assess success.

The costs associated with each project location will include ditch dredging at $47 per cubic yard, channel excavation at $35 per cubic yard, and ditch filling at $14 per cubic yard. The estimates in Table 4-8 are generalizations to provide an overall estimate for improvements in hydrology.

Several sections of boardwalk are located along the Boy Scout Trail as it circles around an unnamed pond. The 1958 aerials, as shown in Figure 3, depict a smaller open water area surrounded by several mosquito ditches directly adjacent to the pond that now appears smaller due to the accommodation of the trail and increased canopy cover. HI-4 will provide additional berm openings and boardwalk crossings along the Boy Scout Trail for additional flushing to the ditched wetlands and additional smaller open water area to the east.

A water quality monitoring plan is recommended to assess change in water quality parameters from the proposed berm openings. Each berm opening was estimated to cost $3,200 and include excavation, stabilization, and twelve feet of boardwalk to cross the opening.

As Lookout Point Trail extends east, the trail runs along an elevated section of berm between two extensively ditched wetland systems. HI-5 consists of creating three berm openings and boardwalk crossings along this raised portion of the trail to provide additional circulation between the wetlands to the north and south. A water quality monitoring plan is recommended to assess change in water quality parameters in wetlands both north and south of the proposed berm openings.

HI-6 will consist of a two-phased approach. The first approach will address the erosion concerns within the picnic area and kayak launch, and the second phase will address the sedimentation of the adjacent section of the kayak trail. The upland picnic area will be stabilized with additional native plantings to reduce erosion and runoff during rain events. The crushed shell located along the kayak launch area will be removed and the launch will be stabilized with a fabric-formed concrete mat or geotextiles. This will eliminate the crushed shell from eroding into the kayak trail during rain events. Following the stabilization of the picnic area and kayak launch, the kayak trail will be dredged to remove accumulated sediment and crushed shell that has washed down the trail from the adjacent upland areas.

It should be recognized that many of the internal mosquito ditches associated with spoil mound removal units will be filled and have obstructions removed for localized hydrology improvements.

5 MEASURABLE BENEFITS/COST BENEFIT ANALYSIS

Measurable benefits can be determined by overall size of the areas restored, actual areas of upland spoil mounds removed, size of mosquito ditches either filled or dredged, or by Uniform Mitigation Assessment Methods (UMAM). Currently, SWFWMD uses a value of $53,000 per acre of project area as a measurable determination of beneficial use of public funds to restored impacted wetlands. The cost benefit analysis considers the most effective cost considering the long-term benefits.

Generally, the overall size of 420 acres of ditched mangrove wetlands will cost between $16,000 and $21,000 per acre for mechanical removal (WIDO) and Hydroblasting, respectively. This global assessment includes the removal of the upland spoil, the improved hydrology, and enhancement of remaining mangroves that exist within the work areas.

Restoration of the mosquito ditches that are included in the WIDO approach account for 113 acres of hydrology improvements. An additional 200 acres of black mangrove habitat that exist within the proposed work areas will be enhanced.

Nuisance species removal as a restoration strategy has been used at the Bower Tract in Hillsborough County. For this study, a cost of $2,400 per acre was estimated for a restoration approach. SWFWMD uses a metric of $2,300 per acre for herbicide treatment of wetland restoration to assess beneficial use of public funds. The measurable benefit is limited to the area of upland spoil which is between 11 and 13% of the total area.

Selective hydrology improvements combined with nuisance species removal within a 72-acre area in the northern portion of the Preserve will cost $3,400 per acre. However, the ecological lift is less as the upland spoil is not proposed for removal to avoid impacts to cultural resources.

The UMAM approach is used by the US Army Corps of Engineers, Florida Department of Environmental Protection, and SWFWMD to measure impacts and mitigation. The uniform method considers location and landscape support, water environmental, and vegetative/benthic communities. The scoring accounts for variations from 0 – 10 for each aspect and calculates a delta to determine Functional Loss for impacts and Relative Functional Gain for (RFG) mitigation. Appendix E contains UMAM forms developed for mechanical excavation (WIDO), Hydroblasting, and Hydrology Improvements.

The temporary impacts in the southern portion of the Preserve were calculated to have a Functional Loss of 12.78 units. A permitted project is required to offset the functional loss by buying wetland credits at mitigation banks, around $100,000 per credit for mangrove wetlands or a $1,278,000 cost. That additional cost can be added to the $4,070,000 cost for the WIDO approach in the southern portion as a comparison to the Hydroblasting method to assess the cost of temporary impacts. The comparison is $5,348,000 for WIDO or $7,245,000 for Hydroblasting.

Using UMAM to assess the measurable benefit of both provides an RFG of 88.1 for WIDO compared to 28.6 for Hydroblasting. Comparatively, the value of the restoration of the site as a wetland mitigation bank would be $8,810,000 for WIDO or $2,860,000 for Hydroblasting. The net benefit is $3,462,000 worth of ecological lift through mechanical excavation for the 420 acres of mosquito-ditched mangrove wetlands at the Preserve. The UMAM approach takes into account temporary impacts, spoil removal, hydrology improvements, and enhancement of the existing mangrove habitat.

The proposed approach for the northern portion of the Preserve involves Hydrology Improvements and Nuisance Species Removal for 75 acres for a cost of $248,500 with an RFG of 11.2. The remaining 94 acres of Spoil Mound Removal through WIDO would cost $1,482,000 for an RFG of 33.0.

The temporary impacts would have a FL of 9.1. Using a similar comparison as above for the southern portion the impacts for the northern portion would have a cost of $910,000 with a net benefit of $3,261,000 of ecological lift.

6 RECOMMENDED APPROACH

The WIDO approach entails mechanical removal of select spoil mounds to create temporary access (Walk-in) for earthmoving equipment. This method is especially effective since the original ditching effort created linear spoil mounds which will facilitate the access. The remaining mounds are excavated and the spoil is trucked out of the work area. Circulation is improved by removal of the accumulated sediments within the mosquito ditches as the temporary access is removed (Dig-out). Refugia for fish and aquatic invertebrates is created thus improving the overall habitat value of the Preserve.

Access affects the cost for spoil mound removal and ranges from $7,605 to $51,750 per acre for Hydroblasting and $15,831 to $16,244 per acre for mechanical removal. Hydroblasting has drawbacks including the indiscriminate transport of the soil and the challenges associated with achieving a desirable elevation after the work is complete. The WIDO approach has temporary impacts associated with the placement of fill for access and the dredging of the ditches to improve circulation. Similar projects have shown the time lag for recruitment of desirable species is less than five years.

Spoil mound removal by Hydroblasting in areas of easy access is a lower unit cost ($7,600/acre) than mechanical removal ($15,800/acre).

Although the results of previous Hydroblasting projects have not provided complete restoration in many cases, the reduction in temporary wetland and visual impacts makes this a viable option for parts of the Preserve. Better performance measures in the construction documents, more active construction inspection, and occasional follow up with light equipment combine to provide an effective approach in areas of easy access in the northern portion of the Preserve.

The construction of long-term temporary access roads (five to ten years) would facilitate mechanical removal in the interior parts of the southern portion of the Preserve with moderate to difficult access. Efficiencies are greatly increased over Hydroblasting and costs are reduced ($51,750 vs $15,800). However, the increase in temporary impacts and public perception would need mitigation. Increased water quality improvements would mitigate the temporary impacts and an active public involvement program will mitigate the public concerns.

Nuisance species removal projects are recommended for areas that have constraints such as archaeological resources and will likely not involve mechanical removal. For study units that are not included in the early phases it is recommended to identify areas that will have the highest return on investment. The estimated cost of $2,400 per acre for nuisance species removal on existing spoil mounds is a good investment for areas of mechanical removal that may be five to ten years in the future.

Hydrology improvements in areas of easy access and high cultural resources are recommended in the early phases of restoration. To be more effective, the WIDO approach for spoil mound removal projects will incorporate hydrology improvements.

The costs presented are estimates based on projects of similar scope. The cost of project management, permitting, design, and construction management are not included in the estimate.

Figure 16 and Table 6-1 present the overall recommendation for each study unit. Some study units have multiple approaches that accommodate the variable approaches over time. In other words, if an area is proposed for nuisance species removal and hydrology improvements the work can be done independently and not impact the follow up work. Furthermore, it is important to recognize that the WIDO approach shown as singular approach will accomplish spoil mound removal, nuisance species removal, and hydrology improvements as a single project.

Table 6-1 Approach Summary

Approach	Size (Acre)	Total Cost	Price per Acre
Hydrology Improvement	-	$148,348	-
Hydroblasting	14.51	$236,250	$16,282
Nuisance Species Removal	246.19	$68,299	$406
Nuisance Species Removal and Prescribed Burn	262.32	$73,049	$278
Nuisance Species Removal, Prescribed Burn, and Hydrology Improvements	6.89	$19,550	$2,837
Nuisance Species Removal and Hydrology Improvement	63.74	$287,380	$4,509
Walk In, Dig Out	306.11	$4,742,448	$15,493
Walk In, Dig Out and Hydrology Improvements	27.96	$520,460	$18,614
Walk In, Dig Out, Nuisance Species Removal, and Hydrology Improvements	6.89	$146,760	$21,300
TOTALS	**934.61**	**$6,242,545**	**$6,679**

Legend

- Hydrology Imrovement - Pipe Desilting or Berm Breach
- WIDO Pilot Projects

Study Unit by Recommended Approach

- Hydrology Improvement
- Hydroblasting
- Nuisance Species Removal
- Nuisance Species Removal and Prescribed Burn
- Nuisance Species Removal, Prescribed Burn, and Hydrology Improvement
- Nuisance Species Removal and Hydrology Improvement
- Walk In, Dig Out
- Walk In, Dig Out and Hydrology Improvement
- Walk In, Dig Out, Nuisance Species Removal, and Hydrology Improvement

e, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, GIS User Community

Pinellas County

Weedon Island Tidal Wetland Restoration
PID 000083A // W217
Recommended Approach by Study Unit

N

1 inch = 1,250 feet

0 625 1,250 Feet

Figure 16

Path: H:\40608\Feasibility Study\Figures\Figure_16_Summary.mxd

7 PLAN IMPLEMENTATION

Survey data collection is not recommended for restoration activities taking place within areas of limited access and dense mangrove canopy within the ditched portions of the wetlands. During spoil mound removal activities, spoil will be removed to adjacent wetland elevations. By matching existing elevation, survey will not be needed to create successful wetland restoration. Similar wetland restoration projects have obtained state and federal permits using the same methods.

Stakeholder coordination during the course of the Feasibility Study identified climate change as a concern when identifying areas of wetland restoration that may be susceptible to habitat changes resulting from sea level rise. Future design efforts should incorporate regional guidance to plan for climate change and sea level rise. The Tampa Bay Estuary Program (TBEP) and Tampa Bay Regional Planning Council (TBRPC) have worked together to provide such guidance. Incorporating the anticipation of sea level rise into design may include lowering spoil mound elevations to an elevation slightly higher than the adjacent habitat, and still at an elevation that won't promote the recruitment up nuisance and exotic upland species.

Water quality and other parameter monitoring will take place prior to design to identify mosquito ditches that are candidates for filling, dredging, or widening. Other parameters may also be used to assist in the identification of these ditches such as muck depth. Existing continuous water quality monitoring being conducted by agencies such as USGS may provide additional information to aid in the identification of these ditches.

Coordination with an archaeologist should occur early in the design process to verify the presence or absence of cultural and historical resources and assess the potential level of impact. This may include field surveys. Based on the findings, recommendations can be made for avoidance and mitigation measures.

In addition to the project being funded by SWFWMD and the County, stakeholder relationships may also provide opportunities for additional funding. Opportunities with Duke Energy Florida and Friends of Weedon Island exist for funding, and also the potential to provide stockpile locations on Duke property and for the Friends of Weedon Island to provide public outreach via education on the ongoing restoration efforts. Currently, there are no proposed impacts to Duke's pipeline easement or transmission lines which should be avoided.

Coordination will need to occur with Duke prior to the design and permitting of any activities proposed on their land. Prior to any prescribed burns taking place, coordination with Duke should occur to address any concerns to their current infrastructure and smoke intake.

To avoid unintended impacts to adjacent habitat, site-specific erosion control plans will be developed and implemented for each wetland restoration project. Should there be any seagrasses adjacent to the proposed restoration project, these limits should be clearly defined and specific Best Management Practices developed to protect the resources. Any unintended impacts to adjacent seagrass beds will require mitigation. All waters surrounding and within Weedon Island Preserve are considered Outstanding Florida Waters.

NPDES MS4 Permit limitations include herbicide application rates and should be considered before large-scale nuisance species treatment programs.

8 CONCLUSION

The Weedon Island Tidal Wetland Restoration Feasibility Study identified and determined the feasibility of natural systems restoration projects within an approximately 1,100-acre portion of the Preserve. Historically, intensive mosquito ditching resulted in a loss of wetland area, altered local hydrology, and provided opportunities for establishment of invasive species. The study considered specific restoration/enhancement activities including removal of spoil mounds, the treatment and/or removal of nuisance and exotic species within both estuarine and upland habitats, and hydrology improvements.

Spoil mound removal is achieved through various techniques where upland spoil mounds created during mosquito ditching are removed, as well as associated nuisance species, and the grades lowered to that of the surrounding wetland. The study considered Hydroblasting and mechanical removal techniques. Hydroblasting uses a portable pump and manually-operated high-pressure nozzle to hydraulically blast the spoil mound down to adjacent elevations and strategically direct some of the spoil into adjacent mosquito ditches. The WIDO approach entails removal of select spoil mounds to create temporary access (Walk-in) for earthmoving equipment. The remaining mounds are excavated and the spoil is trucked out of the work area. Circulation is improved by removal of the accumulated sediments within the mosquito ditches as the temporary access is removed (Dig-out). Refugia for fish and aquatic invertebrates is created thus improving the overall habitat value of the Preserve.

A recommended approach was identified for each study unit taking into account such factors as the presence of cultural and historical resources, access, and permitability. Nuisance species removal will take place in both upland and wetland habitat. This will be achieved through activities such as prescribed burn in specific upland fire units or various herbicide applications such as foliar and basal spray. Additional methodologies may be applied based on the habitat and need.

Hydrology improvements will include actions to improve flushing and restoration of natural tidal regimes to reduce pockets of stagnant water. Dead-end ditch/berm opening, mosquito ditch filling and dredging, and pipe desilting will take place in areas that have been identified as candidates for water quality improvements.

The total cost for restoration of almost 935 acres is estimated to be $6.25 million or approximately $6,680 per acre.

The study units facilitate the approach of developing individual, annual projects for funding and construction. This approach minimizes the impact to the Preserve as a whole as smaller, 30 to 40-acre projects, are underway at any given time. Furthermore, early projects would have completely recovered from the temporary impacts before the later projects are undertaken.

Using UMAM to assess temporary impacts and restoration benefits resulted in a temporary Functional Loss of 21.9 units and a Relative Functional Gain of 132.3 units.

Using a value of $100,000 per unit at regional mitigation banks, the proposed projects would provide a net benefit of $11,040,000 worth of ecological lift. Considering a cost-benefit analysis of the WIDO approach, the increased improvements of complete restoration of black mangrove habitat through spoil removal combined with hydrology improvements in the southern portion of the Preserve is the most effective approach.

9 REFERENCES

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Appendix A

Restoration of Dragline Ditched Coastal Wetlands:

Mosquito Lagoon

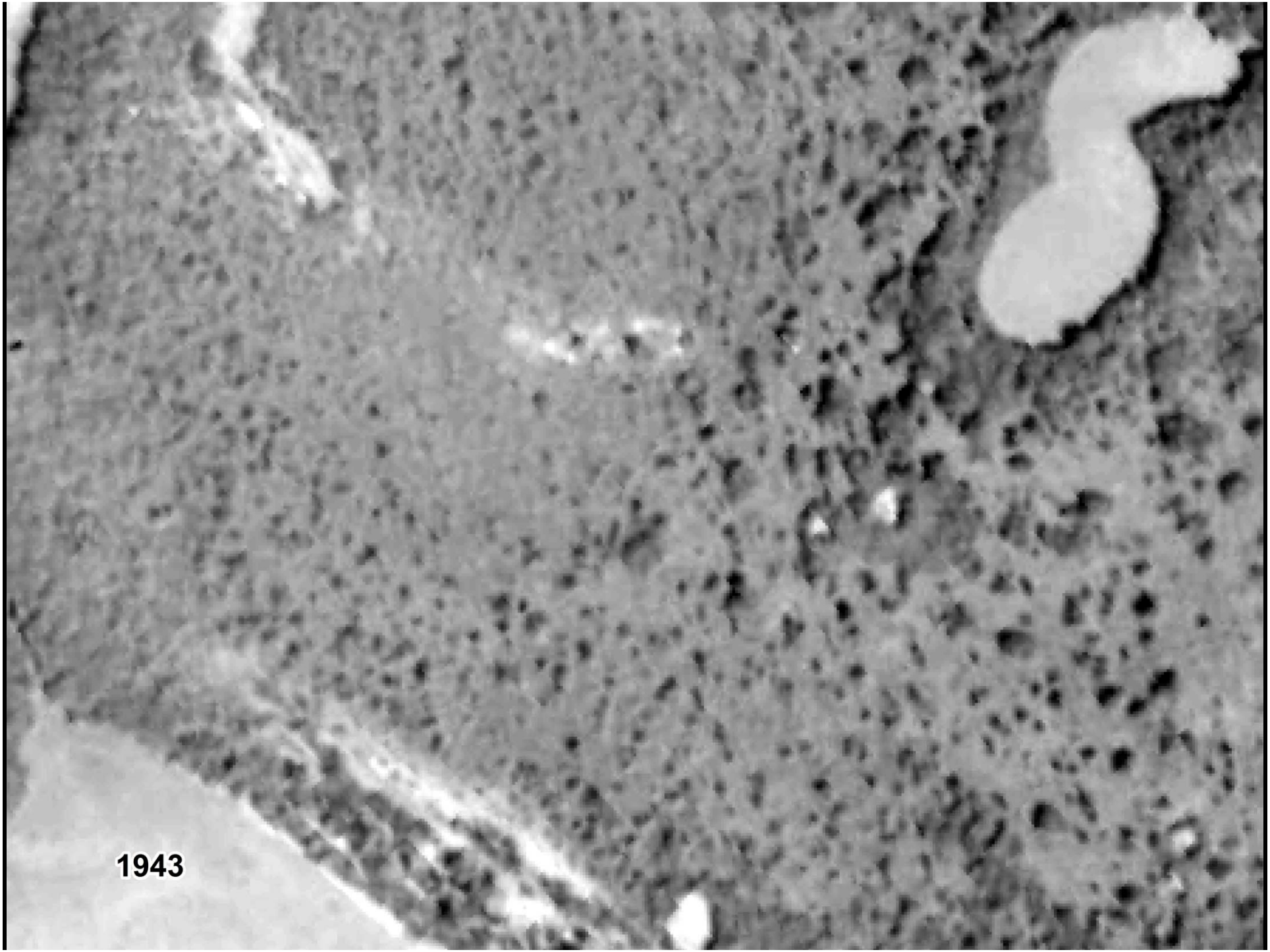
National Coastal Wetland Conservation Grants Program:

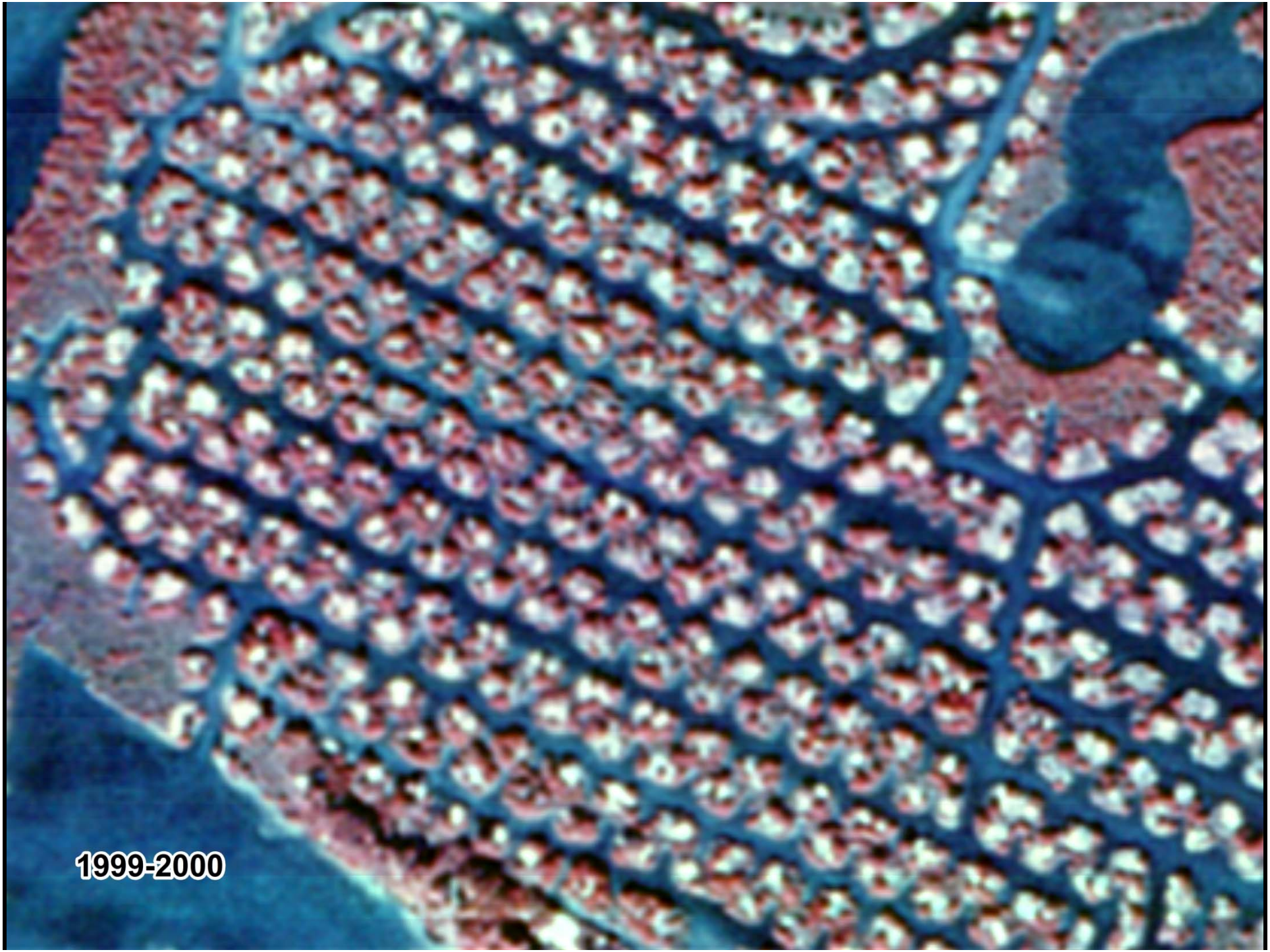
Phase 1 — Restoration of dragline ditched coastal wetlands in Volusia County, Florida








1943


1999-2000


January 2009






CAT


2011




June 2015


2015/08/11


2015/08/11

Appendix B

Cost Estimates

Table B-1 Hydroblasting Cost Estimate - Adjusted for Access Complexity				
North				
Access Restriction	LOW	MODERATE	DIFFICULT	
Size (acres)	113.28	37.61	17.76	
Price per Mound	$ 1,690	$ 2,500	$ 5,000	
Mounds per Acre	4.5	4.5	4.5	
Mound Area per Acre	0.11	0.11	0.11	
Cost per Study Unit Acre	$ 7,605	$ 11,250	$ 22,500	
Cost per Acre Restored	$ 69,136	$ 102,273	$ 204,545	
Total North Cost	**$ 861,494**	**$ 423,113**	**$ 399,600**	**$ 1,684,207**
South				
Access Restriction	LOW	MODERATE	DIFFICULT	
Size (acres)	77.07	119.1	54.39	
Price per Mound	$ 1,690	$ 2,500	$ 5,000	
Mounds per Acre	10.35	10.35	10.35	
Mound Area per Acre	0.13	0.13	0.13	
Cost per Study Unit Acre	$ 17,492	$ 25,875	$ 51,750	
Cost per Acre Restored	$ 134,550	$ 199,038	$ 398,077	
Total South Cost	**$ 1,348,070**	**$ 3,081,713**	**$ 2,814,683**	**$ 7,244,465**
Total Hydroblasting cost				**$ 8,928,672**

Table B-2 Equipment Cost Estimate		
Amphibious Excavator		
Cost Type	**Cost**	**Rate Type**
Cost per month	42,000	rental rate
Manhours	10,000	160 hours, $25 / hr, 2.5 multiplier
Fuel	3,500	50 gal/day @$3.50/gal
Maintenance	4,200	10% rental rate
Total Cost	**$ 59,700**	
Off-Road Articulating Truck		
Cost Type	**Cost**	**Rate Type**
Cost per month	10,000	rental rate
manhours	6,000	160 hours, $15 / hr, 2.5 multiplier
Fuel	1,680	24 gal/day @$3.50/gal
Maint	1,000	10% rental rate
Total Cost	**$ 18,680**	
Front-end loader		
Cost Type	**Cost**	**Rate Type**
Cost per month	2,315	rental rate
manhours	6,000	160 hours, $15 / hr, 2.5 multiplier
Fuel	1,680	24 gal/day @$3.50/gal
Maint	232	10% rental rate
Total Cost	**$ 10,227**	
Foreman		
	Cost	**Rate Type**
Total Cost	**$ 10,000**	**160 hours, $25 / hr, 2.5 multiplier**

Table B-3 WIDO Cost Estimate

Equipment Plus Labor

Cost Type	Cost	
Amphibious Excavator	59,700	
Truck	18,680	
Front-end Loader	10,227	
Foreman	10,000	
	$ 98,607	per month
	$ 4,930	per day

Construction Time

Cost Type	Days	Cost	Comment
Main Access Road	1.1	5,423	1000 feet per day
Spur Access Road	4.8	23,666	720 feet per day
Long Reach Spoil Removal	12.0	59,164	6 mounds per day
Fill Ditch	1.5	7,395	240 feet per day
Dredge Ditch	3.9	19,228	350 feet per day
Dig Out	4.8	23,666	720 feet per day removal
TOTAL	**28.1**	**$ 138,542**	

Incidentals (Reusable)

Cost Type	Quantity	Cost
temporary pipe	140	2,800
crane mats	10	5,000
TOTAL		**$ 7,800**

Other

Cost Type	Quantity	Cost
Erosion Control	10%	$ 14,634
Overhead	30%	$ 43,903
Mobilization	10%	$ 14,634
Contingency	10%	$ 13,197
		$ 86,368
	TOTAL	**$ 232,710**
	PER ACRE	**$ 15,831**

Table B-4 Nuisance Species Removal Cost Estimate				
Herbicide	**Cost (Total)**	**Size (Acres)**	**Cost (Per Acre)**	**Referenced Project**
Non-Mosquito Ditched Areas	500	1	500	Ecosystem Management Inc. - FDOT District -Wide
Foliar Spray	2000	9	222	Tampa Contracting Services, Inc. - Feather Sound
	9800	102	96	Biotech - Bower Tract
			$ 273	**Average**
Mosquito Ditch Mangroves				
Bower Tract	9,800	initial		Biotech Bid
102 acres	100,440	3 years quarterly		
	$ 110,240	Total		
	$ 1,081	**per acre**		
Feather Sound	10,000	initial		Tampa Contracting Bid
9 acres	24,000	3 years quarterly		
	$ 34,000	Total		
	$ 3,778	**per acre**		
			$ 2,429	**Average**

Table B-5 Hydrology Improvements Cost Estimate					
Mosquito ditch filling					
	$ 20.00	CY	CMS	$ 14.14	Average
	$ 8.28	CY	FDOT		
Dead-end Ditch Opening					
Channel Excavation	$ 34.75	CY	FDOT		
Berm Opening					
Excavate	$ 9.36	CY	FDOT		
Excavate (sed)	$ 12.00	CY	CMS		
Stabilization	$ 30.00	SY	CMS		
Boardwalk	$ 100.00	lf	Internet		
Pipe Desilting					
25 - 36"	$ 9.73	lf	FDOT		
37 - 48"	$ 26.32	lf	FDOT		
Ditch Dredging					
Hydraulic	$ 60.00	CY	CMS	$ 47.38	Average
Channel Excavation	$ 34.75	CY	FDOT		

Appendix C

Similar Project Bid Sheets

PINELLAS COUNTY PUBLIC WORKS WATERSHED PLANNING
2017 CONTRACT COST PROPOSAL AND INVOICE SPREADSHEET
CMS PROP xxxxxxx
Contract: 167-0385-P(LN)
Surface Water Maintenance Services Contract
WORK ORDER/JOB NAME: xxxxxxxxxx

			CMS Crawford Maintenance Services, LLC.	
Item Description	WO Quantity	**UOM**	**Unit Price**	**Total**
Mobilization		EA	$2,000.00	$ -
Mobilization, Emergencies (24-hours)		EA	$3,000.00	$ -
MOT, Advanced Arrow Warning Panel (per each per day)		DAY	$70.00	$ -
MOT - Sign, Variable Message (3 lines) Temporary (per each per day)		DAY	$90.00	$ -
MOT - Sign, Work Zone (Temporary) (per each per day)		EA	$6.00	$ -
MOT - Barricade Type I, II, III / OR in place of Type 1 & 2, a Drum w/Flashing Lights, High Intensity Type B (Temporary), (per each per day)		EA	$8.00	$ -
MOT - Off Duty Law Enforcement Officer		HR	$65.00	$ -
MOT - Flagman (per each flagman)		HR	$25.00	$ -
(A) Clearing & Grubbing (less that 1 Acre)		AC	$1,500.00	$ -
(B) Clearing & Grubbing (1 to 5 Acres)		AC	$1,500.00	$ -
(C) Clearing & Grubbing (more than 5 Acres)		AC	$1,500.00	$ -
Excavate Sediment & Debris		CY	$12.00	$ -
Excavate Vegetation		CY	$4.00	$ -
Grading, (Acre or less)		SY	$4.00	$ -
Grading, (more than 1 Acre)		SY	$4.00	$ -
Dredging, Hydraulic		CY	$60.00	$ -
Borrow material, up to 500' (CMS)		CY	$32.00	$ -
Borrow material, up to 500' (County)		CY	$20.00	$ -
Borrow material, over 500' (CMS)		CY	$37.00	$ -
Borrow material, over 500' (County)		CY	$25.00	$ -
Mixing Borrow materials		CY	$7.00	$ -
Stabilization Type B LBR 40, 9" (or assuming 12" thickness-> $40 / CY)		SY	$30.00	$ -
Aquatic Harvesting of Vegetation		HR	$150.00	$ -
Shoreline Conveyor		HR	$175.00	$ -
Tree Trimming w/Bucket Truck		HR	$100.00	$ -
Tree Trimming, Roadside		HR	$80.00	$ -
Tree Trimming, Spot		HR	$80.00	$ -
Arborist		HR	$70.00	$ -
Tree Removal (4" – 12" DBH)		EA	$275.00	$ -

PINELLAS COUNTY PUBLIC WORKS WATERSHED PLANNING
2017 CONTRACT COST PROPOSAL AND INVOICE SPREADSHEET
CMS PROP xxxxxxx
Contract: 167-0385-P(LN)
Surface Water Maintenance Services Contract
WORK ORDER/JOB NAME: xxxxxxxxxx

			CMS Crawford Maintenance Services, LLC.	
Item Description	WO Quantity	**UOM**	**Unit Price**	**Total**
Tree Removal (12" – 24" DBH)		EA	$800.00	$ -
Tree Removal (OVER 24" DBH)		EA	$3,000.00	$ -
Stump Grinding/Removal (4" -12")		EA	$75.00	$ -
Stump Grinding/Removal (12" – 24")		EA	$120.00	$ -
Stump Grinding/Removal (OVER 24")		EA	$250.00	$ -
Treat Vegetation, (Garlon 4 or equal)		GAL	$70.00	$ -
Debris Disposal, Non-vegetative		TON	$66.00	$ -
Debris Disposal, Vegetation		TON	$110.00	$ -
Debris Disposal, Sediment		TON	$58.00	$ -
Floating Turbidity Barrier		LF	$7.00	$ -
Staked Turbidity Barrier		LF	$12.00	$ -
Fence, Staked Silt FDOT Type III		LF	$2.00	$ -
Inlet Protection System		EA	$40.00	$ -
Synthetic Bales		LF	$15.00	$ -
Dewatering / bypassing of ditches ponds		DAY	$800.00	$ -
Organic Topsoil (prepared soil layer)		CY	$30.00	$ -
Furnish & Install Sod, Bahia (sand grown)		SY	$4.50	$ -
Furnish & Install Sod, St. Augustine		SY	$5.00	$ -
Furnish & Install Seed, Argentine Bahia		SY	$0.70	$ -
Furnish & Install Hydroseed, Argentine Bahia with Tackifier		SY	$1.00	$ -
Wildflower/Grass seed mix with PAM		SY	$1.50	$ -
Supplemental Charge: Hauling sod to hard to access and steep sites		SY	$2.50	$ -
Watering of Landscape Materials		1K	$100.00	$ -
Watering--Difficult Access Areas		1K	$150.00	$ -
Coconut Matting, Furnish & Install		SY	$3.00	$ -
Straw matting "S150BN"		SY	$3.00	$ -
Turf Reinforcement Mat "V350"		SY	$6.50	$ -
Concrete Cloth "Flexamat +anchors"		SY	$90.00	$ -
Riprap rubble, Concrete		TON	$120.00	$ -
Riprap rubble, Limerock		TON	$120.00	$ -

PINELLAS COUNTY PUBLIC WORKS WATERSHED PLANNING				
2017 CONTRACT COST PROPOSAL AND INVOICE SPREADSHEET				
CMS PROP xxxxxxx				
Contract: 167-0385-P(LN)				
Surface Water Maintenance Services Contract				
WORK ORDER/JOB NAME: xxxxxxxxxx				
			CMS Crawford Maintenance Services, LLC.	
Item Description	WO Quantity	**UOM**	**Unit Price**	**Total**
Laborer, General		HR	$25.00	$ -
Laborer, Skilled		HR	$40.00	$ -
Vehicle charges			$18.00	$ -
Kaiser charges, mowing, removal of cistern		HR	$175.00	$ -
OTHER BILLABLE WORK ITEMS		MISC		0.00
OTHER BILLABLE WORK ITEMS		MISC		0.00
OTHER BILLABLE WORK ITEMS		MISC		$ -
PROPOSAL TOTAL				**$ -**

EXHIBIT "C"

PRICE PROPOSAL

DISTRICT-WIDE MAINTENANCE OF MITIGATION SITES

AND STORMWATER PONDS

Item No.	Services	Unit	Unit Rate
0001	Selective Clearing and Grubbing (Herbicide Application)	Acre	$ 500.00
0002	Selective Clearing and Grubbing (Hand Pulling, Trash and Debris Removal)	Acre	$ 1,950.00
0003	Selective Clearing and Grubbing (Unstaking/Cut Ribbon Ties)	100 Trees	$ 50.00
0004	Selective Clearing and Grubbing (Tree Removal – basal diameter greater than 3")	Acre	$ 5,500.00
0005	Fertilizer	Ton	$ 800.00
0006	Mowing (80 inch mower with 50HP minimum tractor)	Acre	$ 240.00
0007	Mowing (40 inch minimum rider type mower 18HP minimum)	Acre	$ 180.00
0008	Mowing (21 inch minimum push or self-propelled mower or weed eater)	Acre	$ 825.00
0009	Ground Cover (10" to 18" height or spread)	Each	$ 1.00
0010	Ground Cover (one gallon container, Florida No. 1)	Each	$ 7.00
0011	Shrubs (19" to 36" height or spread, one gallon container)	Each	$ 9.00
0012	Trees (4' to 8' height x 12" to 24" Spread, 3 gallon container)	Each	$ 12.00
0013	Sack Trees (10" to 18" height)	Each	$ 6.00
0014	Sack Trees (3 gallon container)	Each	$ 9.00

0015	Trees (5' to 10' height x 16" to 30' spread, 7 gallon container)	Each	$40.00

NOTE: The Unit Rates shall contain all costs to include travel, labor, materials, equipment, overhead, general and administrative, incidental expenses, operating margin, and subcontractor cost, if any.

Acknowledgement: I certify that I have read and agree to abide by all terms and conditions and that I am authorized to sign for the vendor.

NOTE: In submitting a response, the proposer acknowledges they have read and agree to the solicitation terms and conditions and their submission is made in conformance with those terms and conditions.

ACKNOWLEDGEMENT: I certify that I have read and agree to abide by all terms and conditions of this solicitation and that I am authorized to sign for the proposer. I certify that the response submitted is made in conformance with all requirements of the solicitation.

Proposer: Ecosystem Management, Inc. FEID # 593432778

Address: 7970 Chaucer Dr. City, State, Zip Spring Hill, FL 34607

Authorized Signature: Charles G. Strazzullo Date: 7/29/15

Printed / Typed: Charles G. Strazzullo Title: President

Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification is attached.

Use Column I on Contracts where variable retainage for line items may apply.

Application No:
App. Date: October 12, 2015
Period to:
Project No: RFB 1506 (W335)

A	B		C		D	E	F	G		H	I
Item #	Description of Work	Unit Cost Unit Type	Schedule of Values		Work Completed From Previous Application(s)	Work Completed This Period	Materials Stored & Used Prior + Current	Total Completed and Stored To Date	%	Balance to Finish	Retainage
1	Mobilization & Demobilization	20,000.00 ls	Amt Qty	20,000.00 1.00					0.00	20,000.00 1.00	0.00
2	Spoil Mound Removal/61	80,000.00 ls	Amt Qty	80,000.00 1.00					0.00	80,000.00 1.00	0.00
3	Feather Snd Dr Pk/Rec Area exotic cont/0.31ac	10,000.00 ls	Amt Qty	10,000.00 1.00					0.00	10,000.00 1.00	0.00
4	Ditch Block REpair/4	5,000.00 ls	Amt Qty	5,000.00 1.00					0.00	5,000.00 1.00	0.00
5	Spar/Bakeri (sand c/grass 4" cell & install/600	624.00 ls	Amt Qty	624.00 1.00					0.00	624.00 1.00	0.00
6	Spar/Patens (marsh hay c/grass) 2" cell/install/600	558.00 ls	Amt Qty	558.00 1.00					0.00	558.00 1.00	0.00
7	Myrica cerifera (wax myrtle) 3 gal & install/10	85.00 ls	Amt Qty	85.00 1.00					0.00	85.00 1.00	0.00
8	Ceph/occidental (common buttonbush) 3 gal inst/10	85.00 ls	Amt Qty	85.00 1.00					0.00	85.00 1.00	0.00
9	Exotic Vegetation Maint Event	2,000.00 ls	Amt Qty	2,000.00 1.00					0.00	2,000.00 1.00	0.00
10	Pond 16 Clear & Grub	14,000.00 ls	Amt Qty	14,000.00 1.00					0.00	14,000.00 1.00	0.00
11	Pond 16 Excavation & Fill removal/300 CY	18,000.00 ls	Amt Qty	18,000.00 1.00					0.00	18,000.00 1.00	0.00
	PAGE 1 TOTAL:			150,352.00					0.00	150,352.00	0.00

A=Line Item Number B=Brief Item Description C=Total Value of Item D=Total of D and E From Previous Application(s) (If Any) E=Total Work Completed For This Application
F=Materials Purchased and Stored for Project G=Total of All Work Completed and Materials Stored for Project H=Remaining Balance of Amount to Finish I=Amount Withheld from G

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Application No:
App. Date: October 12, 2015
Period to:
Project No: RFB 1506 (W335)

A	B		C		D	E	F	G		H	I
Item #	Description of Work	Unit Cost Unit Type	Schedule of Values		Work Completed From Previous Application(s)	Work Completed This Period	Materials Stored & Used Prior + Current	Total Completed and Stored To Date	%	Balance to Finish	Retainage
12	Pond 16 Final Grading & as-built survey	10,000.00 ls	Amt Qty	10,000.00 1.00					0.00	10,000.00 1.00	0.00
13	Pone 16 Staked Silt Fence/395 LF	790.00 ls	Amt Qty	790.00 1.00					0.00	790.00 1.00	0.00
14	P16 Spar/Patens (marsh hay c/grass) 2" cell/inst/325	234.00 ls	Amt Qty	234.00 1.00					0.00	234.00 1.00	0.00
15	P16 Spar bakeri (sand c/grass) 4" cell/inst/741	771.00 ls	Amt Qty	771.00 1.00					0.00	771.00 1.00	0.00
16	P16 Pinus elliottii (slash pine) 15 gal & inst/20	1,950.00 ls	Amt Qty	1,950.00 1.00					0.00	1,950.00 1.00	0.00
17	Feather Sound Dr South Exotic Control/0.31 acres	10,000.00 ls	Amt Qty	10,000.00 1.00					0.00	10,000.00 1.00	0.00
18	Feather Sound Dr North Exotic Control/0.53 acres	10,000.00 ls	Amt Qty	10,000.00 1.00					0.00	10,000.00 1.00	0.00
19	Spar Bakeri (sand c/grass) 4" cell & inst/1600	1,664.00 ls	Amt Qty	1,664.00 1.00					0.00	1,664.00 1.00	0.00
20	Spar patens (marsh hay c/grass) 2" cell & inst/1600	1,144.00 ls	Amt Qty	1,144.00 1.00					0.00	1,144.00 1.00	0.00
21	Alternate-Spoil Mound Removal/38	50,000.00 ls	Amt Qty	50,000.00 1.00					0.00	50,000.00 1.00	0.00
	PAGE 2 TOTAL:			88,553.00					0.00	88,553.00	0.00
	GRAND TOTAL:			238,905.00					0.00	238,905.00	0.00

A=Line Item Number B=Brief Item Description C=Total Value of Item D=Total of D and E From Previous Application(s) (If Any) E=Total Work Completed For This Application
F=Materials Purchased and Stored for Project G=Total of All Work Completed and Materials Stored for Project H=Remaining Balance of Amount to Finish I=Amount Withheld from G

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Application No:
App. Date: October 12, 2015
Period to:
Project No: RFB 1506 (W335)

A	B		C		D	E	F	G		H	I
Item #	Description of Work	Unit Cost Unit Type	Schedule of Values		Work Completed From Previous Application(s)	Work Completed This Period	Materials Stored & Used Prior + Current	Total Completed and Stored To Date	%	Balance to Finish	Retainage
22	Alternate-Exotic Vegetation Maint Event	2,000.00 ls	Amt Qty	2,000.00 1.00					0.00	2,000.00 1.00	0.00
PAGE 2 TOTAL:				88,553.00					0.00	88,553.00	0.00
GRAND TOTAL:				238,905.00					0.00	238,905.00	0.00

A=Line Item Number B=Brief Item Description C=Total Value of Item D=Total of D and E From Previous Application(s) (If Any) E=Total Work Completed For This Application
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EXHIBIT "C"
SCHEDULE OF VALUES

	Bower Tract - Project W337	Bid Amount			
Cost Code	Description of Work	Unit	Quantity	Unit Price	Total
	General				
1	Mobilization/Demobilization	LS	1.00	$7,714.00	$7,714.00
	AV Documentation - Pre-Mobilization				
	AV Documentation - Post Initial Non-Native Plant Control and Removal				
	AV Documentation - Final Completion				
	Total General				**$7,714.00**
	Initial Non-Native Plant Control and Removal				
2	Non-Native Nuisance Plant Control on Mangrove/Upland Islands	LS	1.00	$4,450.00	$4,450.00
3	Non-Native Nuisance Plant Control on Mangrove Wetlands with Mosquito Ditches	LS	1.00	$9,800.00	$9,800.00
4	Non-Native Nuisance Plant Control in Mangrove Wetlands	LS	1.00	$900.00	$900.00
5	Non-Native Nuisance Plant Control in Uplands	LS	1.00	$15,000.00	$15,000.00
6	Non-Native Nuisance Plant Control on Fire Lanes	LS	1.00	$2,700.00	$2,700.00
7	Non-Native Nuisance Plant Control on Channel A Berms	LS	1.00	$6,300.00	$6,300.00
8	Removal of Earpod Trees on Eastern Channel A Berm	tree	10.00	$2,957.00	$29,570.00
	Total Initial Plant Control and Removal				**$68,720.00**
	Quarterly Plant Maintenance				
9	Year 1 Quarterly Maintenance in Uplands	event	4.00	$9,060.00	$36,240.00
10	Year 2 Quarterly Maintenance in Uplands	event	4.00	$9,060.00	$36,240.00
11	Year 3 Quarterly Maintenance in Uplands	event	4.00	$9,060.00	$36,240.00
12	Year 1 Quarterly Maintenance on Firelanes	event	4.00	$1,080.00	$4,320.00
13	Year 2 Quarterly Maintenance on Firelanes	event	4.00	$1,080.00	$4,320.00
14	Year 3 Quarterly Maintenance on Firelanes	event	4.00	$1,080.00	$4,320.00
15	Year 1 Quarterly Maintenance Mangrove/Upland Islands, Mangrove Wetlands, Mangrove Wetlands with Mosquito Ditches	event	4.00	$8,370.00	$33,480.00
16	Year 2 Quarterly Maintenance Mangrove/Upland Islands, Mangrove Wetlands, Mangrove Wetlands with Mosquito Ditches	event	4.00	$8,370.00	$33,480.00
17	Year 3 Quarterly Maintenance Mangrove/Upland Islands, Mangrove Wetlands, Mangrove Wetlands with Mosquito Ditches	event	4.00	$8,370.00	$33,480.00
18	Year 1 Quarterly Maintenance on Channel A Berms	event	4.00	$1,350.00	$5,400.00
19	Year 2 Quarterly Maintenance on Channel A Berms	event	4.00	$1,350.00	$5,400.00
20	Year 3 Quarterly Maintenance on Channel A Berms	event	4.00	$1,350.00	$5,400.00
	Total Quarterly Maintenance				**$238,320.00**
	Optional, as needed items				
21	Floating Turbidity Barrier with Installation	LS	1.00	$2,000.00	$2,000.00
22	Staked Fabric Silt Fence	LF	500.00	$1.50	$750.00
	Total Optional, as needed items				**$2,750.00**
	Sub-Total				**$317,504.00**
74	District Contingency Amount	LS	1.00	$50,000.00	$50,000.00
	Grand Total				**$367,504.00**

Appendix D

Bower Tract


N
W
E
S
Bower Tract Boundary
Mangrove Wetlands
Mangrove Upland Islands
Mangrove Mosquito Ditches
0.1 0.05 0 0.1 Miles
Rocky Creek

Appendix E

UMAM Forms

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
WEEDON ISLAND PRESERVE		Hydrology Improvements North

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size (in acres)
612	E2SS3U	Mitigation	75

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)
Tampa Bay	II	OFW

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to Tampa Bay and Rviera Bay

Assessment area description

Black mangrove (*Avicennia germinans*) area of Pinellas County Preserve previously impacts by 1950s mosquito dtiching that resulted in spoil mounds dominated by nusiance species and ditches with low flow or stagnant conditions.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tampa Bay with seagrass	Unique for large areas of mangroves and coastal hammock

Functions	Mitigation for previous permit/other historic use
	None

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Ample evidence of wildlife utilitzation observed.

Additional relevant factors:

None.

Assessment conducted by:	Assessment date(s):
B. Hasbrouck	2017 and 2018

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Weedon Island		Hydrology Improvements North
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	B. Hasbrouck	1-Jun-18

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	8	9	WITHOUT - Optimal support for most wildlife with some limitations. Minimal adverse land uses in adjacent areas. Water quality in adjacent parts of Tampa Bay are good with dense coverage of seagrass. Minimal salt marsh habitat in surrounding areas. WITH - Optimal support of all species typically present in mangrove habitat with no impact to access.
.500(6)(b)Water Environment (n/a for uplands)	4	7	WITHOUT - Poor circulation in many areas of ditched mangroves resulting in stagnant water and anoxic benthic substrate. Other areas of blocked flows exist reducing natural diurnal fluctuations of tidal waters and impacts to water quality such as temperature and dissolved oxygen. WITH - Some improvements with removal of circulation impediments.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	5	6	WITHOUT - Areas of black mangroves interspersed with upland spoil islands supporting nuisance species. WITH - Nuisance species removed, although not suitable soils or optimal elevations for mangrove recruitment remain.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.73

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =
x = **0.00**

Delta = [with-current]
0.17

If mitigation
Time lag (t-factor) = 1.14 (5 Yrs)
Risk factor = 1.0

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.149

0.149 11.2

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
WEEDON ISLAND PRESERVE		WIDO - North

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size (in acres)
612	E2SS3U	Impact (Temporary Fill)	30.4

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)
Tampa Bay	II	OFW

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to Tampa Bay and Rviera Bay

Assessment area description

Black mangrove (*Avicennia germinans*) area of Pinellas County Preserve previously impacts by 1950s mosquito dtiching that resulted in spoil mounds dominated by nusiance species and ditches with low flow or stagnant conditions.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tampa Bay with seagrass	Unique for large areas of mangroves and coastal hammock

Functions	Mitigation for previous permit/other historic use
	None

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Ample evidence of wildlife utilitzation observed.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
B. Hasbrouck	2017 and 2018

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Weedon Island		WIDO - North Portion
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	B. Hasbrouck	1-Jun-18

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	WITHOUT - Optimal support for most wildlife with some limitations. Minimal adverse land uses in adjacent areas. Water quality in adjacent parts of Tampa Bay are good with dense coverage of seagrass. Minimal salt marsh habitat in surrounding areas. WITH - Optimal support of all species typically present in mangrove habitat with no impact to access.	8	8
.500(6)(b)Water Environment (n/a for uplands)	WITHOUT - Poor circulation in many areas of ditched mangroves resulting in stagnant water and anoxic benthic substrate. Other areas of blocked flows exist reducing natural diurnal fluctuations of tidal waters and impacts to water quality such as temperature and dissolved oxygen. WITH - Temporary fill placed in black mangrove habitat.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	WITHOUT - Areas of black mangroves interspersed with upland spoil islands supporting nusinace species. WITH - Temporary impacts to fill placed on black mangroves with dredging of red mangroves within mosquito ditches.	5	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.27

Delta = [with-current]
-0.30

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres =
0.30 x 30.20 = **9.06**

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
WEEDON ISLAND PRESERVE		WIDO North

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size (in acres)
612	E2SS3U	Mitigation	94

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)
Tampa Bay	II	OFW

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to Tampa Bay and Rviera Bay

Assessment area description

Black mangrove (*Avicennia germinans*) area of Pinellas County Preserve previously impacts by 1950s mosquito dtiching that resulted in spoil mounds dominated by nusiance species and ditches with low flow or stagnant conditions.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tampa Bay with seagrass	Unique for large areas of mangroves and coastal hammock

Functions	Mitigation for previous permit/other historic use
	None

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Ample evidence of wildlife utilitzation observed.

Additional relevant factors:

None.

Assessment conducted by:	Assessment date(s):
B. Hasbrouck	2017 and 2018

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Weedon Island Preserve		WIDO - North Portion
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	B. Hasbrouck	1-Jun-18

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 8	with: 10
WITHOUT - Optimal support for most wildlife with some limitations. Minimal adverse land uses in adjacent areas. Water quality in adjacent parts of Tampa Bay are good with dense coverage of seagrass. Minimal salt marsh habitat in surrounding areas. WITH - Optimal support of all species tyoically present in mngrove habitat with no impact to access. Improved water circulation will increase water quality in adjacent seagrass areas.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 4	with: 9
WITHOUT - Poor circulation in many areas of ditched mangroves resulting in stagnant water and anoxic benthic substrate. Other areas of blocked flows exist reducing natural diurnal fluctuations of tidal waters and impacts to water quality such as temperature and dissolved oxygen. WITH - Full circulation with regular diurnal exchange of tidal waters including deeper water areas of refugia during periods of very low tides or low temperature events during low tide.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 10
WITHOUT - Areas of black mangroves interspersed with upland spoil islands supporting nusinace species. WITH - More complete coverage of black mangroves with red mangroves in tidal flow areas and improved bentic habitat in aerobic conditions		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.97

Delta = [with-current]
0.40

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) = 1.14 (5 Yrs)
Risk factor = 1.0

For impact assessment areas
FL = delta x acres =
x = **0.00**

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.351

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
WEEDON ISLAND PRESERVE		WIDO

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size (in acres)
612	E2SS3U	Impact (Temporary Fill)	42.6

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)
Tampa Bay	II	OFW

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to Tampa Bay and Rviera Bay

Assessment area description

Black mangrove (*Avicennia germinans*) area of Pinellas County Preserve previously impacts by 1950s mosquito dtiching that resulted in spoil mounds dominated by nusiance species and ditches with low flow or stagnant conditions.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tampa Bay with seagrass	Unique for large areas of mangroves and coastal hammock

Functions	Mitigation for previous permit/other historic use
	None

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Ample evidence of wildlife utilitzation observed.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
B. Hasbrouck	2017 and 2018

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Weedon Island		WIDO - South Portion
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	B. Hasbrouck	1-Jun-18

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	8	8	WITHOUT - Optimal support for most wildlife with some limitations. Minimal adverse land uses in adjacent areas. Water quality in adjacent parts of Tampa Bay are good with dense coverage of seagrass. Minimal salt marsh habitat in surrounding areas. WITH - Optimal support of all species typically present in mangrove habitat with no impact to access.
.500(6)(b)Water Environment (n/a for uplands)	4	0	WITHOUT - Poor circulation in many areas of ditched mangroves resulting in stagnant water and anoxic benthic substrate. Other areas of blocked flows exist reducing natural diurnal fluctuations of tidal waters and impacts to water quality such as temperature and dissolved oxygen. WITH - Temporary fill placed in black mangrove habitat.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	5	0	WITHOUT - Areas of black mangroves interspersed with upland spoil islands supporting nusinace species. WITH - Temporary impacts to fill placed on black mangroves with dredging of red mangroves within mosquito ditches.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.27

Delta = [with-current]
-0.30

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres =
0.30 x 42.60 = **12.78**

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
WEEDON ISLAND PRESERVE		WIDO

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size (in acres)
612	E2SS3U	Mitigation	251

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)
Tampa Bay	II	OFW

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to Tampa Bay and Rviera Bay

Assessment area description

Black mangrove (*Avicennia germinans*) area of Pinellas County Preserve previously impacts by 1950s mosquito dtiching that resulted in spoil mounds dominated by nusiance species and ditches with low flow or stagnant conditions.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tampa Bay with seagrass	Unique for large areas of mangroves and coastal hammock

Functions	Mitigation for previous permit/other historic use
	None

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Ample evidence of wildlife utilitzation observed.

Additional relevant factors:

None.

Assessment conducted by:	Assessment date(s):
B. Hasbrouck	2017 and 2018

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Weedon Island Preserve		WIDO - South Portion
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	B. Hasbrouck	1-Jun-18

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/o pres or current	with	
.500(6)(a) Location and Landscape Support	8	10	WITHOUT - Optimal support for most wildlife with some limitations. Minimal adverse land uses in adjacent areas. Water quality in adjacent parts of Tampa Bay are good with dense coverage of seagrass. Minimal salt marsh habitat in surrounding areas. WITH - Optimal support of all species tyoically present in mngrove habitat with no impact to access. Improved water circulation will increase water quality in adjacent seagrass areas.
.500(6)(b)Water Environment (n/a for uplands)	4	9	WITHOUT - Poor circulation in many areas of ditched mangroves resulting in stagnant water and anoxic benthic substrate. Other areas of blocked flows exist reducing natural diurnal fluctuations of tidal waters and impacts to water quality such as temperature and dissolved oxygen. WITH - Full circulation with regular diurnal exchange of tidal waters including deeper water areas of refugia during periods of very low tides or low temperature events during low tide.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	5	10	WITHOUT - Areas of black mangroves interspersed with upland spoil islands supporting nusinace species. WITH - More complete coverage of black mangroves with red mangroves in tidal flow areas and improved bentic habitat in aerobic conditions

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.97

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =
x = **0.00**

Delta = [with-current]
0.40

If mitigation
Time lag (t-factor) = 1.14 (5 Yrs)
Risk factor = 1.0

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.351

0.351

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
WEEDON ISLAND PRESERVE		Hydroblast

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size (in acres)
612	E2SS3U	Mitigation	251

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e. OFW, AP, other local/state/federal designation of importance)
Tampa Bay	II	OFW

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to Tampa Bay and Rviera Bay

Assessment area description

Black mangrove (*Avicennia germinans*) area of Pinellas County Preserve previously impacts by 1950s mosquito dtiching that resulted in spoil mounds dominated by nusiance species and ditches with low flow or stagnant conditions.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tampa Bay with seagrass	Unique for large areas of mangroves and coastal hammock

Functions	Mitigation for previous permit/other historic use
	None

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Ample evidence of wildlife utilitzation observed.

Additional relevant factors:

None.

Assessment conducted by:	Assessment date(s):
B. Hasbrouck	2017 and 2018

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Weedon Island		Hydroblasting - South Portion
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	B. Hasbrouck	1-Jun-18

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	WITHOUT - Optimal support for most wildlife with some limitations. Minimal adverse land uses in adjacent areas. Water quality in adjacent parts of Tampa Bay are good with dense coverage of seagrass. Minimal salt marsh habitat in surrounding areas. WITH - Optimal support of all species typically present in mangrove habitat with no impact to access.	8	9
.500(6)(b)Water Environment (n/a for uplands)	WITHOUT - Poor circulation in many areas of ditched mangroves resulting in stagnant water and anoxic benthic substrate. Other areas of blocked flows exist reducing natural diurnal fluctuations of tidal waters and impacts to water quality such as temperature and dissolved oxygen. WITH - No change.	4	4
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	WITHOUT - Areas of black mangroves interspersed with upland spoil islands supporting nusinace species. WITH - Restoration areas available for black mangroves recruitment, although not suitable soils or optimal elevations.	5	7

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.57	0.67

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =
x = **0.00**

Delta = [with-current]
0.10

If mitigation
Time lag (t-factor) = 1.14 (5 Yrs)
Risk factor = 1.0

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.114

0.114

Form 62-345.900(2), F.A.C. [effective date 02-04-2004]

APPENDIX 16
Bok Tower Gardens Florida Goldenaster
Final Draft Report 4/07/21

Demographic evaluation of wild and introduced populations of Florida goldenaster (*Chrysopsis floridana*) in west-central Florida

Scott G. Ward[1], Eric S. Menges[1], Katherine T. Charton[2], Phillip A. Gonsiska[3], Cheryl L. Peterson[4]

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[3]Marie Selby Gardens, Sarasota, FL 34236

[4]Bok Tower Gardens, Lake Wales, FL 33853

ABSTRACT

Evaluation of the success of rare plant introductions requires measurements of demographic success and management impacts. We analyze the success of ten wild and eight introductions of Florida goldenaster (*Chrysopsis floridana*) using demographic and stage class data collected over three years in west-central Florida, in plots within Florida scrub and along adjacent roadsides. We also collected microhabitat data on occupied and nearby random unoccupied plots to characterize factors associated with this species' presence and vital rates. Introduced populations had higher annual survival rates than wild populations in both years (2017-2018, 2018-2019); plants in scrub had higher survival than plants along roadsides. Relative growth rates were higher in scrub than roadside plots in one year but did not differ between wild and introduced populations in either year. Measures of fecundity tended to be higher for road plots and introduced populations, while seedling recruitment was higher in scrub plots in one year but otherwise did not differ between plot type and introduction status. Occupied plots (*C. floridana* present) tended to have lower soil nutrient and pH than unoccupied plots, but soil nutrients did not consistently vary according to introduction status. Occupied plots also had higher cover of bare sand, lichens, and forbs while unoccupied plots had higher cover of litter, shrub, and subcanopy. Microhabitat and soil variables did not consistently predict vital rates or reproductive measures, although the presence of higher litter levels (>60%) appeared to significantly lower vital rates in 2018. Vital rates on each demographically-studied population were combined into an aggregate Z-score and compared across populations. Z-score ranking suggested that a slight disadvantage exists for wild populations overall, with the two highest ranked sites both being introductions, a likely result of the higher habitat quality and management present at introduced sites. Conversely, stage-class data revealed that two wild populations had the highest consistent counts across three years of sampling, although two introductions also had consistent counts throughout. Most of the healthiest populations had received recent fire management, suggesting this management may be crucial in providing the open conditions (high bare sand, low litter and shrub cover) that promote seedling recruitment and site occupancy. More information is needed on aspects of fire management (e.g. seasonality, intensity, patchiness) and fire surrogates (various mechanical treatments) that are likely to affect the demography and distribution of this rare species.

INTRODUCTION

Rare plant introduction success can be difficult to measure, but through the use of dynamic demographic data of rare plant populations, biologists can analyze and better understand the overall health and recovery of an endangered species (Beissinger and Westphal 1998, Menges 2000). Conservation of the most endangered plant species may require translocations (Silcock et al. 2019), but actions are ultimately best informed by monitoring that better measures species restoration success (Menges 2008). Unfortunately, monitoring is often inadequate or not sustained enough to evaluate

translocations (Godefroid et al. 2011). Paramount to translocation monitoring is the collection of demographic data on similar wild populations to provide appropriate context to translocation data (Menges et al. 2016). Additionally, translocation trajectories and rare plant populations are often impacted by various land management practices and novel restoration techniques, thus it is crucial to determine which activities best promote demographic success.

Florida goldenaster (*Chrysopsis floridana*) is endemic to five counties in west-central Florida and was originally listed as federally endangered in May 1986 due to habitat loss and degradation, a limited overall distribution, and limited protection on public lands (C. floridana federal species recovery plan, figure out how to cite). Since its listing in 1986, the number of known populations of *C. floridana* has increased to approximately 39, with numerous wild and introduced populations occurring on public lands across five counties (Fig. 1). Despite the myriad information available on Florida scrub ecology, little research has been performed on the ecology of *C. floridana*, hampering the development of targeted conservation and land management measures to recover this species.

In order to further explore the population dynamics and habitat ecology of *Chrysopsis floridana*, we assessed the overall demographic health of 10 wild and eight introduced populations in west-central Florida from 2017-2019, closely monitoring trends using both intensive demographic and stage-class monitoring methods. By utilizing each population's demographic data as well as a suite of site-level and microhabitat characteristics, we attempted to answer the following questions: (A.) Which populations are the most demographically robust? (B.) How does the health of introduced populations compare to wild populations? Can habitat or microhabitat differences help to explain any potential differences in vital rates? (C.) What does stage-class data reveal about the health of populations? How do these data relate to intensive demographic data? (D.) How does land management affect population health?

METHODS

Study species

Chrysopsis floridana is an herbaceous perennial aster species that typically grows as a basal rosette until producing one to many reproductive stems containing short, tomentose-spatulate leaves with numerous showy yellow flowering heads. Seeds are achenes with a double pappus adapted to wind-dispersal (Semple 1981). Like most peninsular species of *Chrysopsis*, flowering typically occurs between the months of October-December. Current populations of *C. floridana* are restricted to west-central Florida scrub and scrub-like habitats, but populations were also known historically from Gulf coastal dunes (Ward 1979), now mostly developed. Florida scrub is a xeromorphic habitat type, dominated by low-growing palm and shrub oak species with a low to moderate sand pine (*Pinus clausa*) canopy atop deep, nutrient-poor, xeric sands (Abrahamson et al. 1984, Menges 2007). Due to habitat fragmentation and fire-management, these habitats often contain numerous sandy roads and firelanes in which *C. floridana* often also occurs. The limited research available on *C. floridana* has shown that seedling recruitment is enhanced in open sandy habitats and populations generally undergo considerable inter-annual turnover with variable mortality rates (Lambert and Menges 1996). Plants may be relatively short-lived (3-5 years), although longer demographic studies are needed to investigate maximum life-spans of individual plants.

Sampling

We collected three years of demographic (level-3 monitoring; see Menges and Gordon 1996) and stage-class data (level-2 monitoring; Menges and Gordon 1996) across 18 populations of *Chrysopsis floridana* (ten wild, eight introduced; Fig. 1) across west-central Florida each November and December from 2017-2019. For each study population, we established at least 10 randomly chosen plots in 2017 that contained *C. floridana* plants.

For demographic populations, we established 10 randomly placed $2m^2$ plots throughout each population's extent. Within plots, we tagged individual plants and followed the survival and measured growth variables of each plant from 2017-2019. Plants were categorized as seedlings (non-reproductive plants with basal rosettes < 5 cm wide), vegetative adults (non-reproductive plants with basal rosettes ≥ 5 cm wide), or reproductive adults (plants with at least one reproductive stem present). Basal rosette size was measured for vegetative plants, while reproductive plants were measured for rosette size, longest length of reproductive stems, total number of reproductive stems, and total number of flowering heads per plant (the last on a subset of about 20% of reproductive plants present). Each year, we recorded the survival status of each previously marked plant, tagged new plants present within plots, and categorized these new plants as either new seedlings or adults. If an individual plant was marked dead or missing in 2018, but then found to be alive in 2019, we assumed its survival status in 2018 was dormant and adjusted its previous survival status to reflect this dormancy.

For stage-class populations, we established 10 circular 4-m diameter plots per population at seven populations. One site, Highlands Hammock State Park (Highlands County), had a total stage-class census recorded due to the overall smaller size of the population. In each plot, we recorded the total count of all *C. floridana* plants present each year from 2017-2019. All plants were counted and categorized as either small vegetative, large vegetative, or reproductive.

Microhabitat variables

In 2018, multiple microhabitat variables were measured across 204 total plots across both stage class and demography populations. All 100 demography plots had microhabitat variables recorded. In addition, 10-14 additional random plots per population were analyzed for microhabitat variables and *C. floridana* occupancy in 2018. Within each plot, we classified and quantified the dominant litter type (forb, graminoid, oak, pine, palm, etc…), and then determined the overall percent cover of bare sand, lichen, litter, forbs, graminoids, shrubs (woody species < 1 m tall), and subcanopy (woody species 1-3 m tall) within a 50-cm circle surrounding each plot center. Percent cover values were converted into 10% bins (0-10, 10-20, etc…). We then measured the distance of plot center to the nearest woody plant of any size, and recorded the height and species of this individual. We also recorded the line intercept cover of woody individuals at least 1m in height for 50 cm in all four cardinal directions such that total percent shrub cover was calculated out of 200 cm. Within the entire 50-cm diameter microhabitat plot, we then noted the dominant species overall, regardless of growth type (woody, forb, graminoid). We also recorded the percent canopy cover using a densiometer placed in the four cardinal directions above the central plot location. A total of 204 plots that were either occupied or unoccupied by *C. floridana* had microhabitat variables collected. Soil samples were collected from 195 of the occupancy plots, and were collected immediately adjacent to plots if *C. floridana* plants were present, as to avoid disturbing plants. We analyzed for significant differences in soil and microhabitat variables on a smaller subset of plots (n=100), in which we had habitat (scrub vs. road) and population (introduction vs. wild) information. Soil samples were sent to the University of Florida IFAS Extension Soil Testing Laboratory and analyzed for pH and soil nutrients P, K, Mg, Ca, Cu, Mn, and Zn.

Later, we classified the habitat type for each demographic and stage-class plot by analyzing if its location was greater than or less than five meters from an artificial road or firelane. Plots greater than five meters from an anthropologically disturbed area were classified as scrub plots. These classifications were made using ArcGIS (10.3) and plot location data were collected with a Trimble Geo7x.

ANALYSES

Vital rates, reproductive, and microhabitat analyses

For each plot within a population, we calculated the following vital rates: annual percent survival (AS), annual percent seedling survival (SAS), Relative Growth Rate (RGR), total number of flowering heads (Heads), total number of seedlings per square meter (Seedlings), and total number of reproductive stems. RGR was calculated for two time periods (2017-2018, 2018-2019), and was calculated as the difference in the natural log of stem length for surviving reproductive plants between time 2 and time 1 (2019 vs. 2018, 2018 vs. 2017) divided by time (1 year for each time period difference). Annual survival and seedling annual survival were calculated for two time periods (from 2017-2018 and 2018-2019). To analyze for differences in each vital rate between introduced vs. wild populations and road vs. scrub plots, we performed T-tests on either natural log (fecundity, RGR) or angular transformed data (AS, SAS).

To analyze the effect of microhabitat and soil variables on *C. floridana* reproductive output, we performed General Linear Models (GLM) for each year of demographic data in years 2018 and 2019. Four dependent variables were chosen for each year (annual survival, seedling annual survival, total reproductive [total reproductive plants per quad], and total seedling output). Only quads with five or more plants were included within GLM's analyzing total reproductive and seedling output. Five total microhabitat variables were chosen as predictor variables for these models: litter, shrub, and graminoid covers, and two soil variables. Litter, shrub, and graminoid covers were converted into three equal cover categories for each variable. Soil PCA's were calculated by converting all soil nutrient data into two final variables (axes) from Principal Component Analyses. Two axes were calculated based upon variable extraction that accounted for 56.8% of the cumulative variance in soil data. PCA1 (Soil PCA1) corresponded to greater loadings in pH, P, Ca, Cu, and Zn while PCA2 (Soil PCA2) corresponded to greater loadings in K, Mg, and Mn. Differences in microhabitat variables between occupied and unoccupied plots were tested using T-tests, whereas Mann-Whitney U tests were performed on soil samples. Microhabitat and soil variable differences were compared between population type (wild vs. introduction) and plot type (road vs. scrub).

Population standardization

Using all final calculated vital rates, we then performed a Z-score standardization for all demography sites (n=10). Each separate vital rate percentage or value within each population was converted into an initial standardized Z-score. Each converted vital rate was then combined into one composite Z-score by taking the average of all Z-scores for each population. Thus, each demographic population received a final Z-score representing a cumulative average of all vital rate Z-scores calculated. These final values then provided a robust method of population comparison, such that sites with overall relativized values above zero (mean value) represented above average population health. This method of standardization has been employed in ecological studies relating covers of different biological populations (Guest et al. 2017) and has been shown to be useful in a variety of biological analyses (Wang and Chen 2012). All analyses were performed in SPSS v. 22 (SPSS Inc., IBM, Chicago, IL, USA).

RESULTS

Vital rates

Overall, *C. floridana* plants within introduced populations had 11-11.4% greater annual survival rates and 18.4-21.9% greater annual seedling survival rates than wild populations across both years (Fig. 2). Scrub plots had 10.0-20.3% greater annual survival rates and 21.6-22.9% greater seedling survival rates compared to road plots across both years (Fig. 2). Introduced populations consistently had significantly higher rates of Annual Survival (AS) in 2019: $t(1914) = -5.613$, $p < 0.001$ and 2018: $t(1788) = -5.439$, $p < 0.001$ as well as Seedling Annual Survival (SAS) in 2019: $t(1929) = -5.026$, p

< 0.001 and 2018: t (1758)= -5.803, p < 0.001 (Fig. 2). Similarly, scrub plots had significantly higher rates of AS compared to road plots in 2019: t (1914) = -4.765, p < 0.001 and 2018: t (1788) = -5.045, p < 0.001. SAS was significantly higher in scrub plots compared to road plots in 2019: t (1469) = -4.296, p < 0.001 and 2018: t (1444) = -4.826, p < 0.001.

While survival and seedling survival rates were consistent across introduction status and habitat type, vital rates related to growth, fecundity, and seedling recruitment showed less consistent patterns. For instance, Relative Growth Rate (RGR) was significantly greater for scrub plots compared to road plots only in 2018: t (1315) = -4.847, p < 0.001. There was no significant difference in RGR between introduction status for both years (Fig. 2). Fecundity patterns showed mixed patterns as well, with the total number of flowering heads found to be significantly higher in road plots compared to scrub plots in 2017: t (230) = 2.91, p = 0.004, and 2019: t (363) = 2.526 , p = 0.012, but not 2018 (Fig. 2). Total number of flowering stems per plant showed similar patterns, with significantly higher amounts of flowering stems across all three years in road plots compared to scrub plots (2017: t (631) = 2.694, p = 0.007; 2018: t (784) = 3.626, p < 0.001 ; 2019: t (682) = 2.145, p = 0.032). Fecundity analyses indicated that introductions had significantly higher amounts of flowering heads than wild populations in 2018: t (321)= -2.341, p= 0.02 and 2019: t (363) = -2.476, p = 0.014. Introductions also had significantly higher amounts of flowering stems in 2018: t (555) = -5.195, p < 0.001 and 2019: t (502) = -5.312, p < 0.001. Lastly, seedling recruitment was not significantly different between introductions and wild populations, and was only significantly higher in scrub plots for one year, 2017: t (87) = -1.79, p = 0.04 (Fig. 2). Thus, while we found no significant differences in seedling recruitment based upon introduction status and habitat type, road plots and introductions tended to have plants with higher overall fecundity compared to scrub plots and wild populations.

Soil and microhabitat results

Results from microhabitat variables across occupancy type suggest that *C. floridana* is generally associated with areas with significantly higher cover of bare sand (t (202) = -2.437, p= 0.016), lichens (t (202) = -2.83, p = 0.005), and forbs (t (202) = -5.19, p < 0.001) (Fig. 4). Unoccupied microhabitat results suggest that occupancy is less likely in areas with significantly higher covers of litter (t (202) = 3.201, p = 0.002), shrub (t (202) = 6.476, p < 0.001), and subcanopy (t (202) = 4.402, p < 0.001) (Fig. 4). Thus, plots supporting C. *floridana* tended to have higher cover of bare sand, lichens and forbs and lower cover of litter, shrub, and subcanopy (Fig. 4).

Only two microhabitat variables, litter and graminoid cover, had a significant effect on annual survival and seedling survival rates in 2017-2018 and 2018-2019 (Appendix 1a). Litter had a highly significant effect on annual survival in 201702018 but no effect in 2018-2019, and only had a significant effect on seedling survival in 2019. A Tukey post hoc test revealed that annual survival percentages from 2017-2018 was significantly lower for the highest litter cover group (61.6 ± 29.2) compared to the middle cover group (78.1 ± 22.1, p = 0.025), and the lowest litter cover group (85.3 ± 21.1, p < 0.001). There was no significant difference in 2018-2019 survival based upon litter cover. Graminoid cover was a significant predictor of vital rates in 2019 (but not other years), affecting both survival and seedling survival (Appendix 1a). No microhabitat variables helped to predict variation in reproductive and seedling output (Appendix 1b).

Survival rates of *C. floridana* from 2017-2018 tended to decrease as litter cover increased (Fig. 5). Average survival rates were typically 80% or higher when litter cover was 60% or lower, and survival rates tended to decrease substantially as litter cover increased from 60-90%. Interestingly, survival rates appeared to increase for a small number of plots with 100% cover of litter (Fig. 5). Five of the 10 demographic plots with 100% litter cover occurred in roadside plots at Rhodine Scrub, a wild population, in which survival rates were 60-100%. Mean survival rates were 59.8%, 47.8%, and

45.2% for 70%, 80% and 90% litter covers, respectively, and mean survival rates increased to 78.7% for 100% litter covers. Wild populations tended to have a higher mean cover of litter (60.4%) compared to introductions (31.9%).

Chrysopsis floridana occupancy was better predicted by soils with lower nutrient availability but higher pH levels. Among all plots, pH values ranged from 3.8-7.6, with 75% of plot pH values falling within a range of 4.4-5.1, and only 3% of plots containing a pH greater than 7. Unoccupied plots had significantly higher levels of potassium: Mdn = 11.05, U = 3827.5, p = 0.019 and magnesium: Mdn = 15.27, U = 3863, p = 0.025, while pH levels were significantly greater in occupied plots: Mdn = 4.91, U = 3469, p = 0.001 (Fig. 3). Certain soil nutrients varied between introduction status and habitat type, with the tendency for introduction nutrient levels to exceed wild populations and mixed patterns between scrub and road plots. Introductions had significantly higher pH levels compared to wild populations: Mdn: 4.98, U = 2361.5, $p < 0.001$, in addition to significantly higher levels of phosphorus (Mdn: 5.88, U = 3571, p = 0.003), calcium (Mdn: 134.5, U = 3775, p = 0.014), copper (Mdn: 0.20, U = 3296.5, $p < 0.001$), and manganese (Mdn: 2.37, U = 2164, $p < 0.001$) (Fig. 3). Scrub plots had significantly higher levels of magnesium (Mdn: 15.5, U = 3090.5, $p < 0.001$), calcium (Mdn: 132.33, U = 2780.5, $p < 0.001$), and manganese (Mdn: 1.86, U = 3591.5, p = 0.01) compared to road plots, while road plots had significantly higher phosphorus levels (Mdn: 6.67, U = 2738.5, $p < 0.001$) (Fig. 3).

Stage class and standardization results

Stage class results indicated that four of the eight populations (Balm Scrub Preserve (BSP), Lake Manatee River State Park (LMRSP), Alafia River State Park (ARSP), and McKay Creek had consistently high and stable counts of plants across all three years of sampling (Fig. 6). Of these four sites, two (BSP and LMRSP) were wild populations. Sites with consistently low counts included Bullfrog Creek (except 2017), Boyd Hill, and Cordell West (Fig. 6), of which only Bullfrog Creek represents a wild population. Total census counts at Highlands Hammock State Park (HHSP; wild) were relatively high each year (2017: 452 plants, 2018: 1469 plants, 2019: 861 plants). Overall, the two populations with the highest counts in each year were wild populations, although two introductions also had high counts.

Proportions of each stage-class type in each population tended to vary across years. For instance, ARSP initially had high proportions of small and large vegetative plants in 2017; however, this proportion decreased dramatically in 2018 and then gradually increased in 2019. It is possible that greater proportions of flowering individuals at ARSP in 2018 led to increased numbers of small and large vegetative individuals in 2019. Other sites saw a gradual decrease in both total count and flowering proportion throughout the entire sample period, such as Bullfrog Creek, while sites such as LMRSP saw an initial increase in total count from 2017-2018 but remained stable in both total counts and life-stage proportion into 2018 and 2019.

Z-score relativizations of demographic sites indicated that the two highest ranked sites were introductions, yet overall both population types ranked both above and below average (Fig. 7). Duette North was the most demographically robust within demography sites and Bell Creek was the least demographically robust. The average overall Z-score for introductions was greater at 0.12 compared to an average Z-score of 0.05 for wild populations.

DISCUSSION

This study provides foundational information on A.) the success of multiple *C. floridana* introductions and status of wild populations in west-central Florida, B.) the effects of microhabitat, soil, and site characteristics on *C. floridana* population health, C.) the overall population health throughout the limited range of *C. floridana*, and D.) the relationship between various land-management practices and *C. floridana* populations.

Our study provides first demographic evidence of the success of multiple *Chrysopsis floridana* introductions across west-central Florida and their comparative success with wild populations. While we found certain wild populations to be robust, others appear to be faring poorly from a demographic standpoint and have microhabitat conditions that were shown to discourage *C. floridana* occupancy. This suggests a need for altered management or possible augmentation into more suitable habitat at certain sites. Microhabitat analyses indicated that occupied sites and introductions contained significantly higher bare sand cover, and lower litter, shrub, and subcanopy covers, which is inevitably linked to the underlying management histories across populations. We discuss in further detail below the implications of fire and site-level characteristics on population vital rates.

Differences in habitat type also helped to explain why wild population vital rates were lower than introductions. Due to management histories and habitat changes, plants within wild populations are often now relegated to roadside plots with few interior scrub units now supporting wild plants. Although certain roadside plots support some aspects of suitable microhabitat characters, plots within our study were shown to have higher litter and shrub cover than interior plots, and these habitats are often more prone to anthropogenic disturbances used during firelane maintenance and other activities. While roadside plants may often appear robust and these habitats often simulate gap-like conditions present within interior scrub, these habitats also promote weedier growth forms in which plants grow more abundantly but are often shorter-lived (Quintana-Ascencio et al. 2007). Interestingly, road plots at Rhodine Scrub had abnormally high survival rates compared to similar habitats at other wild populations. Although vital rates in *C. floridana* were lower in road plots, the shorter duration of our study did not allow us to analyze life-span in relation to habitat type. Major seedling recruitment pulses have been observed in a congener, *Chrysopsis highlandsensis*, in firelane populations after recovering from mechanical disking (Menges et al. 2020), and *C. floridana* germination has been found to be enhanced in open sandy areas (Lambert and Menges 1996), thus the role of disturbance in *Chrysopsis* ecology warrants further study. Overall, while both roadside and wild populations contained plants with moderate annual vital rates, it was clear that introduction site selection has overall been conducive to *C. floridana* demographic success due to the inherent site quality and management conditions present within these interior habitats. Furthermore, the higher average litter cover of plots at wild populations suggests that introduction sites were preferentially chosen with lower litter and more open conditions. Overall, the relative success of introduced plant populations to reference (wild) populations is rarely studied despite concerted population restoration efforts and has only been recently studied from a demographic standpoint (Bell et al. 2003; Kirchner et al. 2006; Menges 2008; Menges et al. 2016).

While distinct vital rate differences were apparent based upon habitat and population type, microhabitat analyses indicated the importance of two variables, litter and graminoid cover, on annual survival and seedling survival rates. Litter cover, in particular, was consistently shown to negatively affect both *C. floridana* occupancy and vital rates, suggesting that plots with greater than 60% litter cover do not offer suitable microhabitat conditions for plants. Interestingly, another Florida scrub gap specialist, *Dicerandra christmanii*, has been shown to also prefer sites with canopy covers below 60% (Menges et al. 1999), suggesting a possible microhabitat limitation for other scrub herbs. Microhabitat patterns suggest that *C. floridana* vital rates may not necessarily be favored by the presence of forbs and graminoids, but by the inherent conditions that promote the success of both of these plant groups (i.e. open habitats with low shrub and litter covers) are likely promoted by frequent fire management. Previous research further supports this habitat preference, showing that *C. floridana* seedling recruitment and germination was favored in habitats with increased sand cover and overall lower litter cover (Lambert and Menges 1996). The relationship between scrub herbs and lichen cover warrants further investigation, considering *H. cumulicola* survival has been shown to be negatively related to ground cover (Quintana-Ascencio and Morales-Hernández 1997), while *C. floridana* occupancy was shown to be favored by lichen cover. The interactions between various biotic factors and gap specialist ecology suggests that while some

microhabitat conditions (e.g. shrub cover) may affect vital rates of endemic scrub herbs similarly, other conditions (e.g. lichen cover) affect species differently.

Analyses from soil data indicate the wide breadth of soil conditions in which *C. floridana* can grow, suggesting that the increased success of introductions may in part be due to their overall elevated soil nutrient availability and pH levels. Similarly, slightly elevated nutrient availability partially explained the higher rates of fecundity in road plots, which was similar to previous research in open conditions (Lambert and Menges 1996). Soil pH levels are generally acidic in Florida scrub (Abrahamson et al. 1984), and soil nutrient availability can vary substantially with time-since-fire (Schafer and Mack 2010). In some cases nutrient availability may not differ along a fire chronosequence (Abrahamson 1984, Schafer and Mack 2013), thus the dynamic interaction of *C. floridana* populations, soil nutrient fluctuations, and fire management warrants further study. Minor nutrient differences in scrub soils across the range of habitat conditions in which *C. floridana* occupies appears to have the potential to significantly affect vital rates and these subtle soil differences should be considered for future introductions or augmentations.

Fecundity and seedling recruitment results also showed mixed patterns across habitat types. It is clear that while plants in road plots may have had higher rates of fecundity this did not translate to higher seedling recruitment compared to scrub plots. While annual vital rates have not been shown to differ based upon habitat type for certain scrub herbs (e.g. *Liatris ohlingerae*; Weekley et al. 2008), other species have demonstrated diminished vital rates in disturbed firelanes compared to interior scrub sand gaps (Quintana-Ascencio et al. 2007), and some species (e.g. *Asclepias curtissii*) may benefit from shrub facilitation within early life stages (Mondo et al. 2010), thus highlighting the span of habitat tolerances and biological trends within endemic scrub herbs. Longer demographic data trends of a congener, *Chrysopsis highlandsensis*, indicate that seedling recruitment is often higher in road plots compared to scrub plots with similar annual survival vital rates between habitat types (Koontz et al. in prep). Another congener, *Chrysopsis delaneyi*, while showing somewhat low recruitment pules, has shown high annual survival rates after fire (Ward et al. 2020). Germination rates have been shown to be moderately low for *C. floridana*, with an average ex-situ germination rate of 29.8% (Bok Tower report sect. #047 2013), while in-situ germination rates for *C. highlandsensis* have been shown to be as low as 7% (Menges et al. 2016). Given the complicated nature of management, and dynamic relationship between demographic trends, habitat preferences, and *Chrysopsis* ecology, future research should seek to investigate the nature of disturbance on seedling pulses in *C. floridana* populations.

While demographic data in this study indicated that introduction vital rates were consistently higher than wild populations, stage-class results did not indicate a clear pattern between total densities and population type. For instance, the two sites with the highest densities across all three years of sampling were wild populations: Balm Scrub Preserve (BSP), Little Manatee River State Park (LMRSP), although Alafia River State Park (ARSP) and McKay Creek (both introductions) also had consistently high total counts across all three years. In general, wild populations tended to have higher densities compared to introductions, although these were statistically insignificant. It is unclear if demographic vital rates at these wild stage-class populations would also be higher, highlighting the importance of more descriptive demographic study. Nonetheless, stage-class data provided a contrasting, but limited explanation for the role of introduction status in *C. floridana* population health.

Management

Results from our study indicate that *C. floridana* demographic success was generally enhanced by proactive fire-management and diminished by aggressive or inactive management. For instance, four of the six above-average demographic populations have experienced recent fire management (less than 5 years since fire). Among these four sites,

Duette North and Duette South showed substantial spikes in seedling recruitment within the year of fire, which is not surprising given the relationship between fire characteristics and seedling germination in scrub plants (King and Menges 2017). Although the scrubby exterior at Paynes Creek was burned in April 2019, plants occur within an artificial, sandy opening with no competition from woody species, thus this population is unique among demographic sites. Conversely, Moody Branch and Alafia Scrub still ranked above average in demographic health, but did not receive recent fire-management, suggesting that inherent site-level conditions may also be important in determining *C. floridana* vital rates.

Given the difficulties for in-depth analyses of inter-annual stage-class fluctuations given incomplete management histories at numerous populations, we can only draw comparisons between management and population health at a smaller number of sites. One population (Alafia River State Park), did show a spike in flowering and recruitment in 2018 and 2019, respectively, after prescribed fire in January 2018. An increase in plant vital rates has been previously noted in Florida habitats in the year of fire (Slapcinsky et al. 2010), with many scrub herbs requiring frequent fire for long-term viability (Menges and Quintana-Ascencio 2004; Menges et al. 2006; Schafer et al. 2010). One population, Cordell West, did not see an initial spike in recruitment after a fire in May of 2019, but this site did not have high initial densities, and this population occurs at the most xeric of stage-class populations, thus site conditions may better determine population health in certain cases. Only one site, Bullfrog Creek, received mechanical treatment in the form of roller-chopping, and the effects from this management were evident in the substantial decrease in densities by 2019. Long unburned stage-class populations either saw gradual decreases throughout the three years (McKay Creek, Boyd Hill), or were mostly steady (LMRSP), which may indicate that managers looking to bolster dwindling *C. floridana* populations may need to consider implementing growing-season burns that may help to decrease shrub competition and possibly influence *C. floridana* recruitment, although this was not a primary purpose within this study. Where fire-management is infrequent, our study provided evidence that populations occurring in artificially-maintained openings or firelanes may serve as somewhat suitable refugia for *C. floridana* populations (e.g. Alafia Scrub, McKay Creek, Rhodine Scrub). Although, frequent firelane maintenance or shrub encroachment are likely to further diminish the open conditions required by gap-specialists (Jones et al. 2017). In addition, introduction of fire into long-unburned sites may eventually re-vitalize the health of various populations across longer time-periods.

Evidence from our findings showing that *C. floridana* population health is often improved by fire-management is not surprising given previous research showing that populations of scrub endemics such as *Eryngium cuneifolium* peak immediately post-fire but decrease after more than a decade without fire (Menges and Quintana-Ascencio 2004). Increased vital rates have also been shown to be enhanced in recently-burned areas compared to long-unburned areas for multiple herbaceous gap-specialists (Quintana-Ascencio and Menges 2000). The demographic success of *C. floridana* at Duette North and South speaks to the overall beneficial combination of frequent fire management, suitable habitat within intact units, and overall appropriate site conditions. The overall lower cover of litter at introductions suggests these more open habitats were selectively chosen and contributed to increased vital rates observed. Findings from these introductions are promising, although, the younger age of these populations makes it difficult to anticipate the demographic inertia inherent or lacking at sites over longer periods of time. Given longer-term sampling of *C. floridana*, we suggest studies that investigate population viabilities and microhabitat changes over time in reference to fire-management. Overall, results from populations within this study that underwent fire management suggest that re-implementation of fire into long-unburned sites will likely reinvigorate vital rates and overall population health of *C. floridana* and perhaps other scrub herbs.

CONCLUSION

This study has helped to elucidate the ecological requirements of the federally endangered Florida goldenaster, highlighting the general success of introductions that have occurred as part of this species' recovery plan. The diminishing quality of certain wild populations, however, suggests that shifts in management will be required to maintain habitat structure preferred by *C. floridana*. Our study has provided evidence of the beneficial effects of prescribed fire on *C. floridana* population health, but we suggest further research analyzing the intricacies of this relationship, especially over longer time-periods. Although *C. floridana* (and many other scrub-adapted endemic plants of Florida) have now been partly relegated to disturbed firelanes and severely anthropogenically-altered habitats, we provide further evidence that these relic habitats do not necessarily translate to demographically-healthier populations and certainly do not represent ideal conservation habitats. We suggest further introductions using microhabitat results from this study as a basis for habitat suitability and fire management results from the healthiest introductions monitored in this study as a means for planning future translocations. Ideally future introductions would occur in areas where fire management is likely.

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RESULTS AND FIGURES

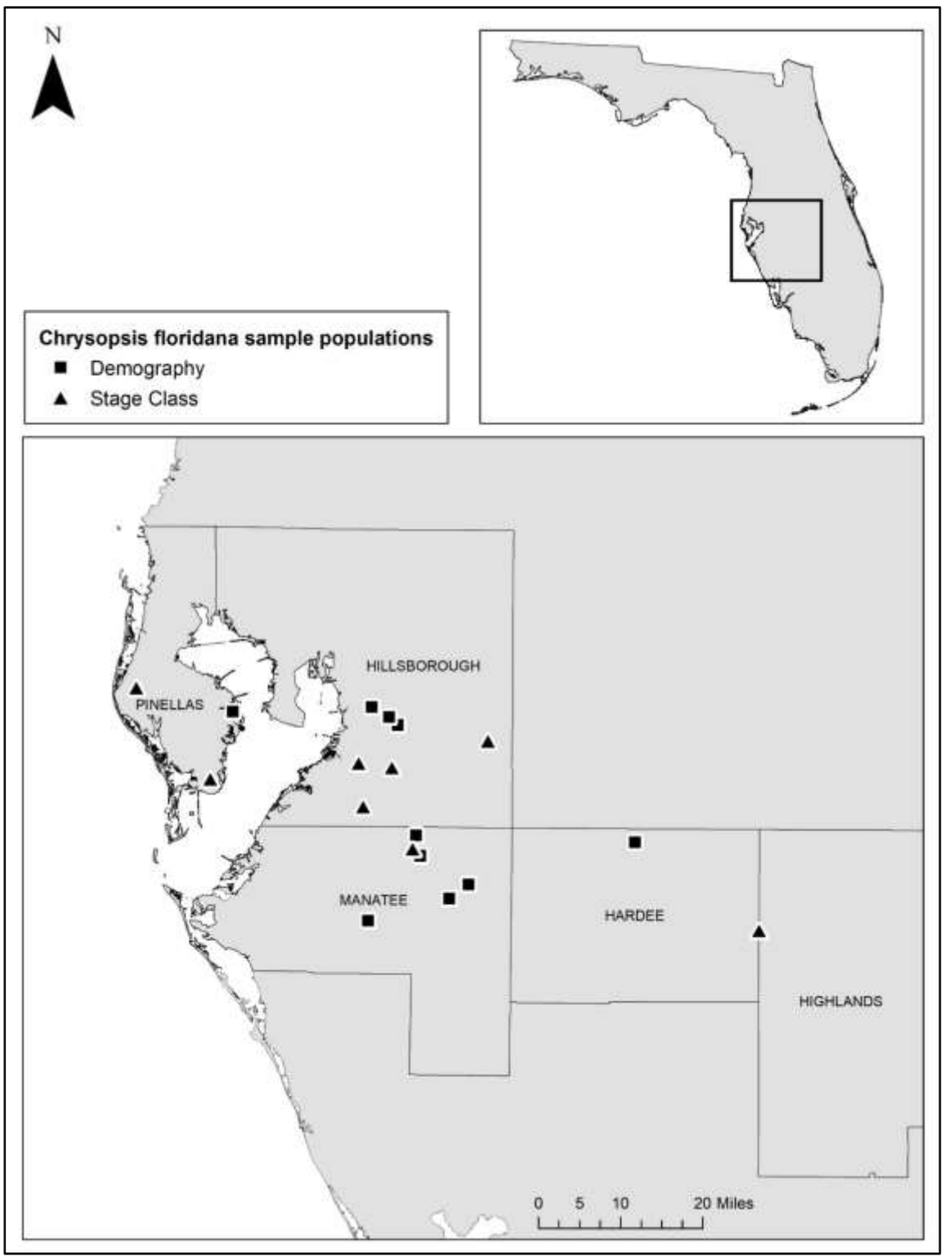


Figure 1. Introduced and wild populations of *Chrysopsis floridana* in west-central Florida sampled from 2017-2019 including populations with demographic (squares) and stage-class (triangles) monitoring protocols.

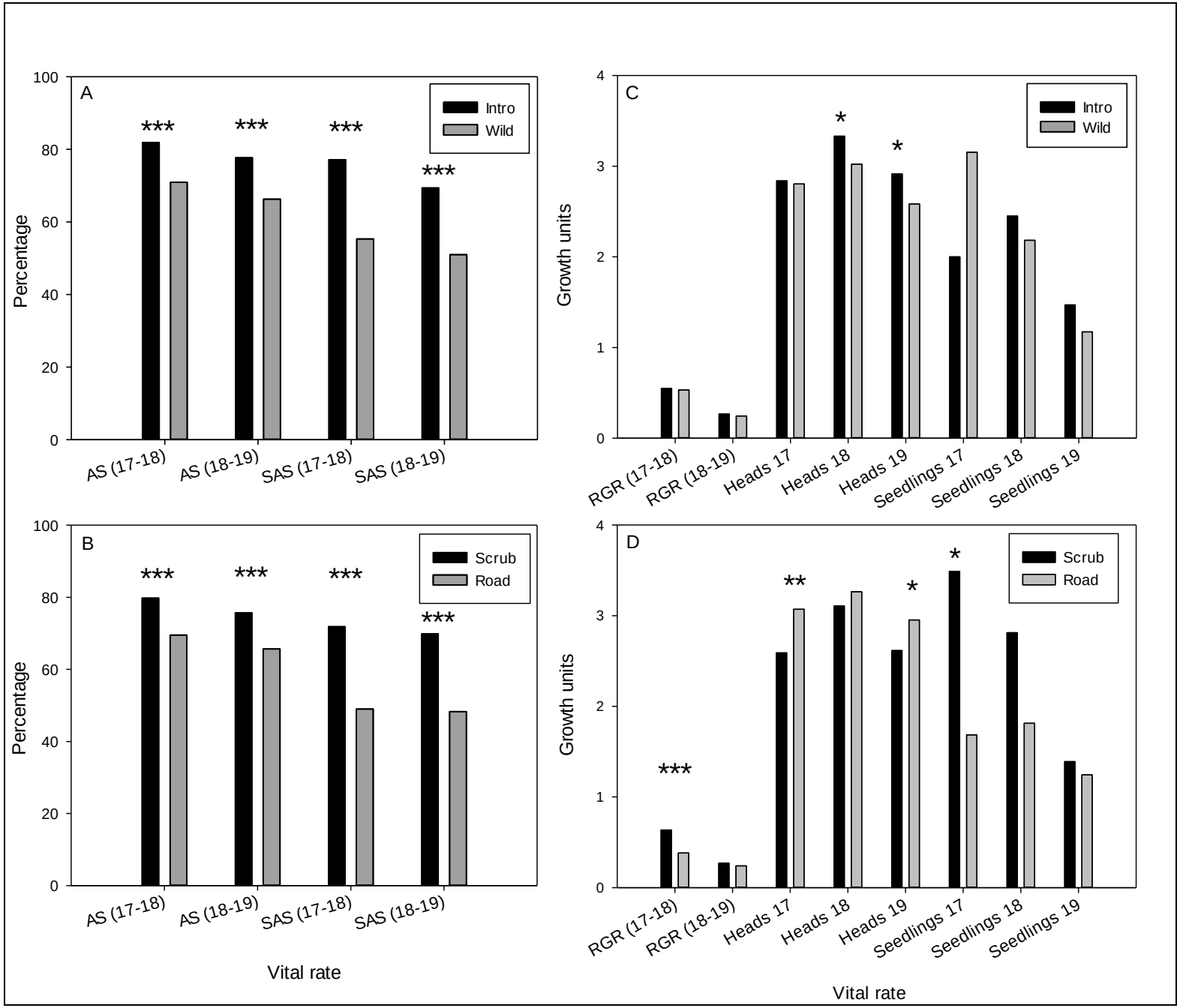

A
Intro
Wild
Percentage
100
80
60
40
20
0
***
***
***
***
AS (17-18)
AS (18-19)
SAS (17-18)
SAS (18-19)
B
Scrub
Road
Percentage
100
80
60
40
20
0
***
***
***
***
AS (17-18)
AS (18-19)
SAS (17-18)
SAS (18-19)
Vital rate
C
Intro
Wild
Growth units
4
3
2
1
0
*
*
RGR (17-18)
RGR (18-19)
Heads 17
Heads 18
Heads 19
Seedlings 17
Seedlings 18
Seedlings 19
D
Scrub
Road
Growth units
4
3
2
1
0
***
**
*
*
RGR (17-18)
RGR (18-19)
Heads 17
Heads 18
Heads 19
Seedlings 17
Seedlings 18
Seedlings 19
Vital rate

Figure 2. Vital rate percentages for *C. floridana* demography plots (n=100) across two population types (intro vs. wild) and two habitat types (scrub vs. road) from 2017-2019. Graphs A and B indicate annual survival percentages (AS) and seedling annual survival percentages (SAS) from 2017-2018 and 2018-2019 for quads within introduced vs. wild populations and scrub vs. road habitats. Asterisks above bar pairs denote significant differences between groups (*= $P < 0.05$, **= $P < 0.01$, and ***= $P < 0.001$). Graphs C and D indicate growth, seedling output, and fecundity rates for introduced vs. wild populations and scrub vs. road habitats. Growth units differ between each variable. RGR: LN height cm, heads 17-19: total flowering heads (LN transformed), Seedlings 17-19: seedlings per m^2 per site.

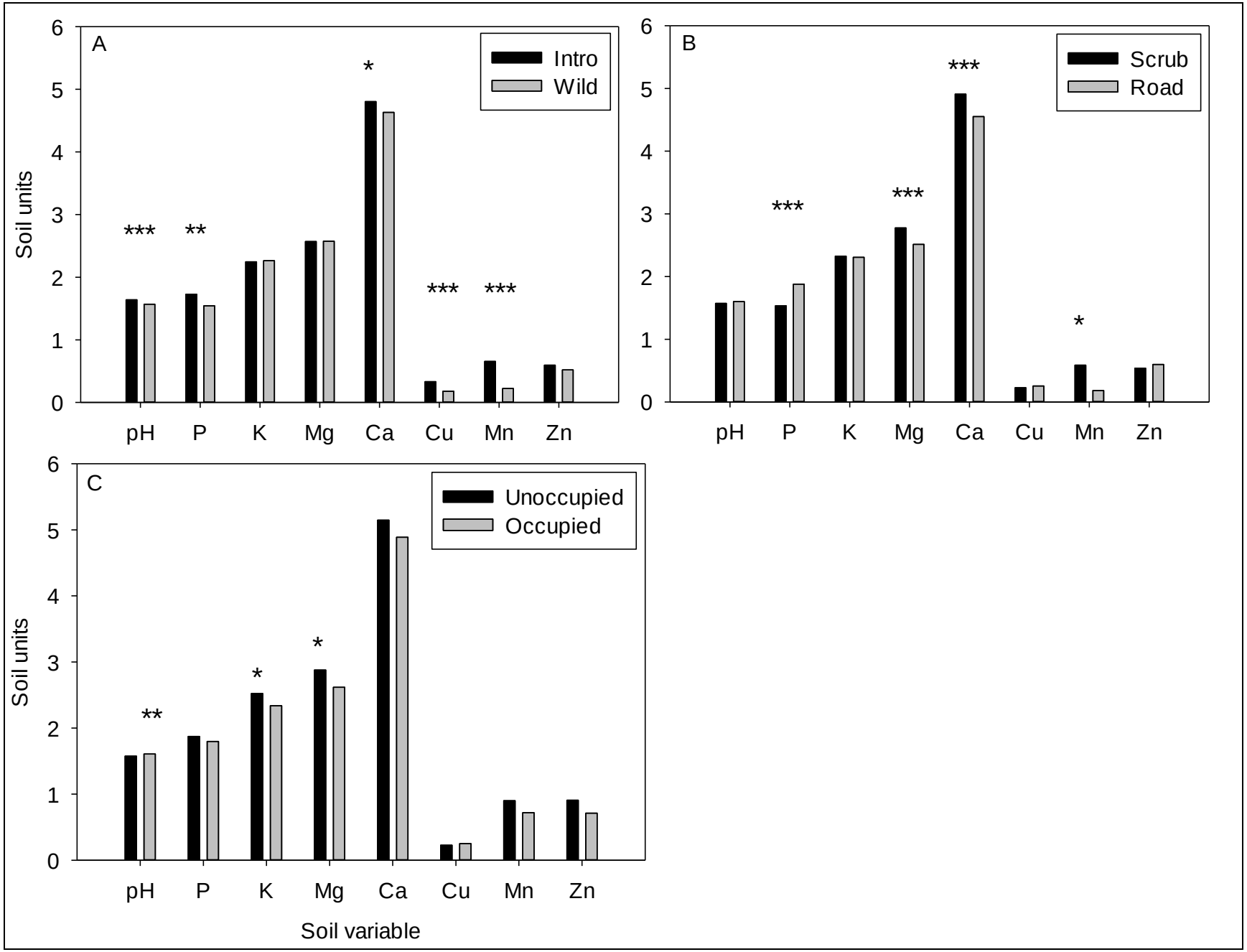

A
Intro
Wild
Soil units
pH
P
K
Mg
Ca
Cu
Mn
Zn
B
Scrub
Road
C
Unoccupied
Occupied
Soil variable

Figure 3. Mean soil nutrient and pH values for population, habitat, and occupancy types across *Chrysopsis floridana* plots. Graph A indicates soil nutrient and pH differences for quads between introduced (intro) vs. wild populations. Graph B indicates soil nutrient and pH differences for quads between scrub and road plots. Graph C indicates differences in soil variables between unoccupied (C. floridana not present) and occupied (C. floridana present) plots. Graphs A-C refer to data collected from a total of 195 plots. Non-parametric tests (Mann-Whitney U) were performed on original values for all three data-sets but figure values represent LN transformed data except for Cu values which were not transformed due to initially low values.

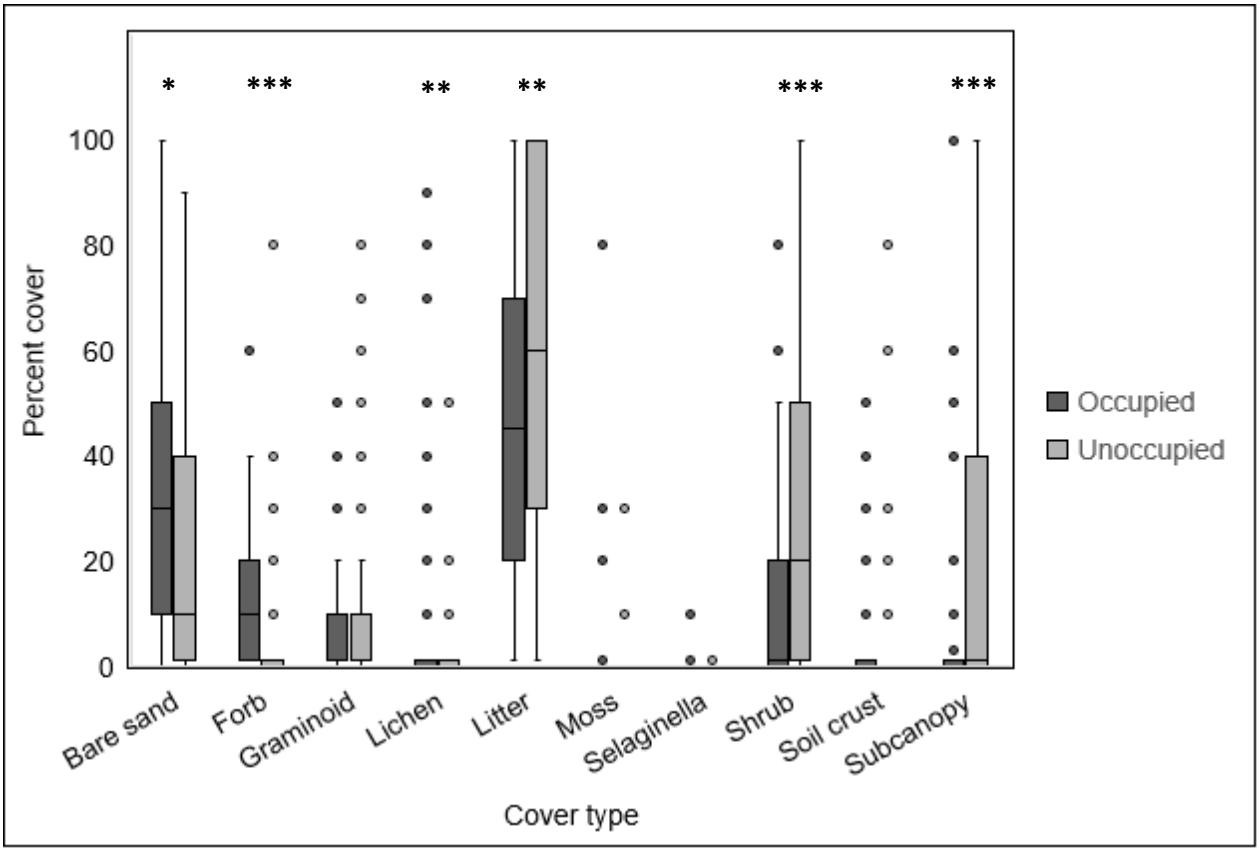


Figure 4. Percent cover of microhabitat variables in plots with Chrysopsis floridana (occupied: dark grey) and without C. floridana (unoccupied: light grey) across 204 plots at 10 populations in 2018. Midlines indicate group medians. Asterisks above bar pairs denote significant differences between occupied and unoccupied plots (*= P < 0.05, **= P< 0.01, and ***= P< 0.001).

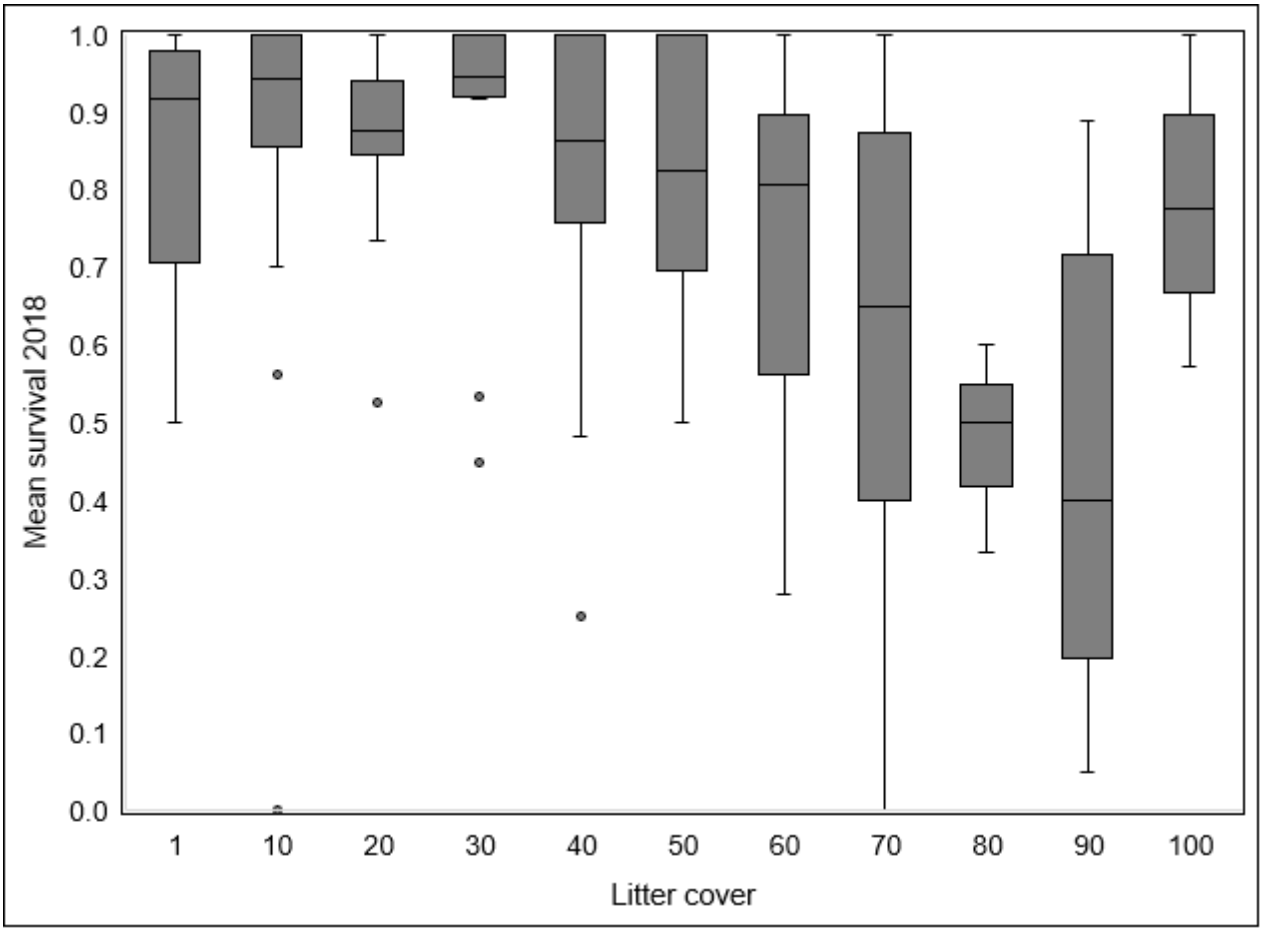


Figure 5. Mean survival rates (proportion) of *Chrysopsis floridana* demographic plots (n= 101) in 2018 according to litter cover. Boxplot midlines represent median survival rates of each litter cover category and points represent outliers within cover categories.

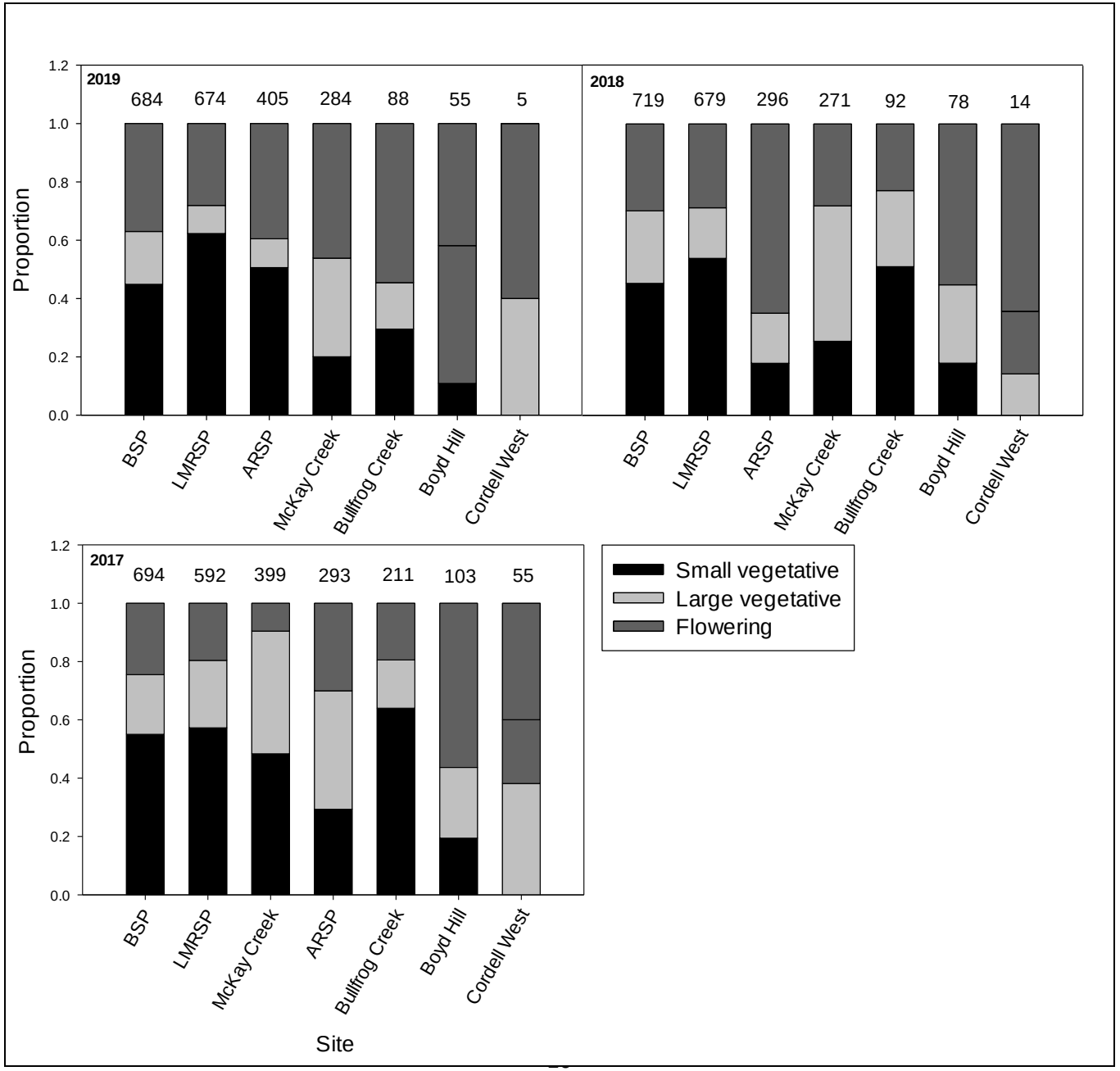

2019
684
674
405
284
88
55
5
2018
719
679
296
271
92
78
14
2017
694
592
399
293
211
103
55
Proportion
1.2
1.0
0.8
0.6
0.4
0.2
0.0
BSP
LMRSP
ARSP
McKay Creek
Bullfrog Creek
Boyd Hill
Cordell West
Small vegetative
Large vegetative
Flowering
Site

Figure 6. Stage-class results for seven sites supporting *Chrysopsis floridana* in west-central Florida across three years (2017-2019). Each year is denoted in the top left corner of each graph. Colored proportions in bars represent the total proportion of life stages of all plants present within 10 monitoring plots at each site within each year. Three life stages are small vegetative plants (darkest shading), large vegetative plants (lightest shading), and flowering plants (medium shading). Numbers above each bar indicate the total number of plants counted at each site per year. Sites are listed from highest total counts from left to right for each year. McKay Creek only exceeded ARSP for one year of count data (2017); otherwise, site order (and thus highest to lowest count) is identical across years. BSP: Balm Scrub Preserve (Hillsborough County), LMRSP: Lake Manatee River State Park (Manatee County), ARSP: Alafia River State Park (Hillsborough County).

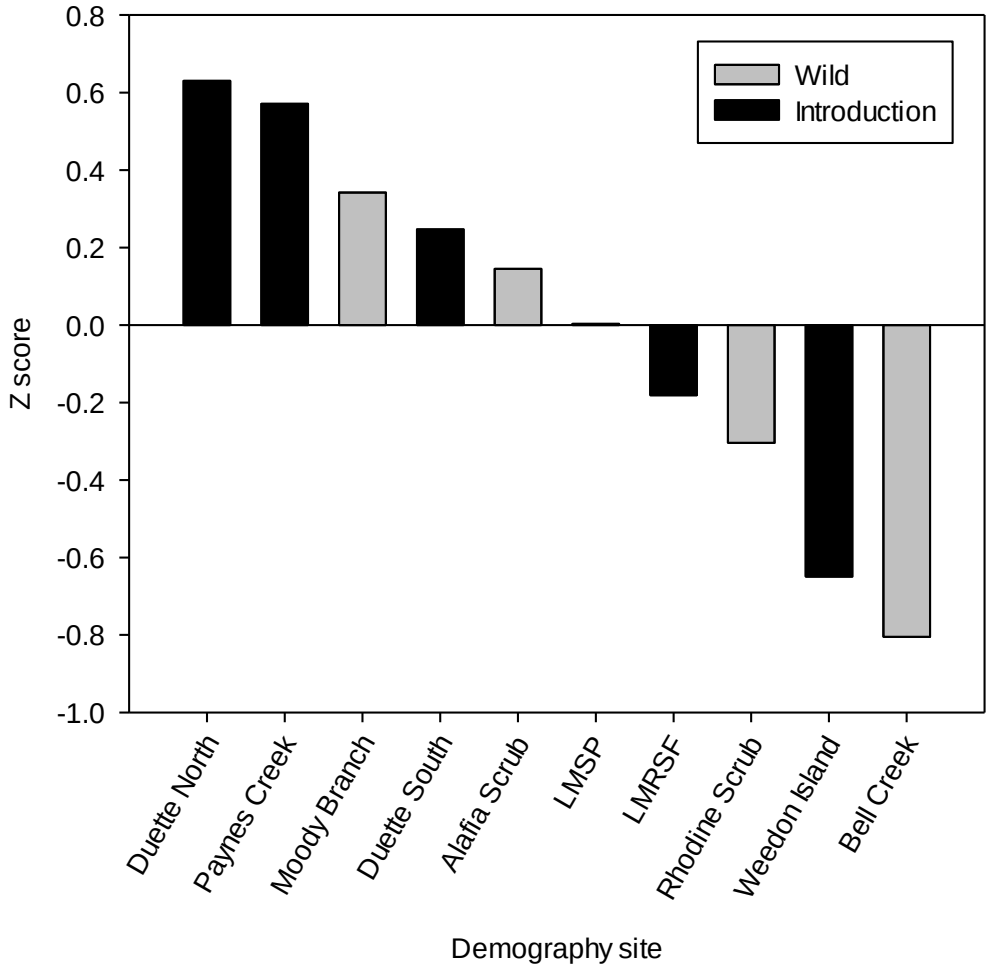


Figure 7. Overall population health of 10 *C. floridana* demography sites (five introductions and five wild populations) in west-central Florida. Population health was calculated as a standardized Z-score based upon vital rate data calculated for each site. Z-scores range from -1 to 1, such that positive scores correspond to populations with greater than average population health scores, negative scores correspond to populations with lower than average health, and scores close to zero correspond to sites with average health. LMSP: Lake Manatee State Park; LMSP is a wild population. LMRSF: Little Manatee River South Fork.

ANNUAL SURVIVAL							ANNUAL SEEDLING SURVIVAL						
2018		SS	Df	MS	F	P	2018		SS	Df	MS	F	P
Litter	Hyp	3.580	2	1.790	8.231	**.001**	Litter	Hyp	1.243	2	.622	2.235	.117
	Err	19.357	89	.217[b]				Err	14.189	51	.278[b]		
Shrub	Hyp	.124	2	.062	.285	.753	Shrub	Hyp	.446	2	.223	.802	.454
	Err	19.357	89	.217[b]				Err	14.189	51	.278[b]		
Graminoid	Hyp	.962	2	.481	2.211	.116	Graminoid	Hyp	.603	2	.301	1.084	.346
	Err	19.357	89	.217[b]				Err	14.189	51	.278[b]		
Soil PCA1	Hyp	.021	1	.021	.099	.754	Soil PCA1	Hyp	.328	1	.328	1.177	.283
	Err	19.357	89	.217[b]				Err	14.189	51	.278[b]		
Soil PCA2	Hyp	.160	1	.160	.735	.394	Soil PCA2	Hyp	.510	1	.510	1.833	.182
	Err	19.357	89	.217[b]				Err	14.189	51	.278[b]		
2019		SS	Df	MS	F	P	2019		SS	Df	MS	F	P
Litter	Hyp	.426	2	.213	.665	.517	Litter	Hyp	1.588	2	.794	3.381	**.045**
	Err	26.906	84	.320[b]				Err	8.454	36	.235[b]		
Shrub	Hyp	.050	2	.025	.078	.925	Shrub	Hyp	.263	2	.131	.559	.576
	Err	26.906	84	.320[b]				Err	8.454	36	.235[b]		
Graminoid	Hyp	1.750	2	.875	2.732	**.071**	Graminoid	Hyp	1.171	2	.585	2.493	**.097**
	Err	26.906	84	.320[b]				Err	8.454	36	.235[b]		
Soil PCA1	Hyp	.706	1	.706	2.204	.141	Soil PCA1	Hyp	.105	1	.105	.446	.508
	Err	26.906	84	.320[b]				Err	8.454	36	.235[b]		
Soil PCA2	Hyp	.514	1	.514	1.605	.209	Soil PCA2	Hyp	.070	1	.070	.300	.587
	Err	26.906	84	.320[b]				Err	8.454	36	.235[b]		

Appendix 1a. General Linear Model results for annual survival and annual seedling survival (proportions logit-transformed) across two years predicted by microhabitat cover of litter, shrub, graminoid, and two soil variables. Litter, shrub, and graminoid initial covers were each converted into three equal cover categories. Soil PCA1 (PCA axis 1) corresponded to greater loadings in pH, P, Ca, Cu, and Zn while PCA2 (PCA axis 2) corresponded to greater loadings in K, Mg, and Mn. Bolded P-values represent significant values or those approaching significance.

TOTAL REPRODUCTIVE							TOTAL SEEDLINGS						
2018		SS	Df	MS	F	P	2018		SS	Df	MS	F	P
Litter	Hyp	69.058	2	34.529	.714	.495	Litter	Hyp	39.588	2	19.794	.422	.664
	Err	2516.074	52	48.386[b]				Err	656.327	14	46.881[b]		
Shrub	Hyp	120.043	2	60.022	1.240	.298	Shrub	Hyp	172.521	2	86.261	1.840	.195
	Err	2516.074	52	48.386[b]				Err	656.327	14	46.881[b]		
Graminoid	Hyp	95.985	2	47.992	.992	.378	Graminoid	Hyp	208.715	2	104.358	2.226	.145
	Err	2516.074	52	48.386[b]				Err	656.327	14	46.881[b]		
Soil PCA1	Hyp	18.123	1	18.123	.375	.543	Soil PCA1	Hyp	.392	1	.392	.008	.928
	Err	2516.074	52	48.386[b]				Err	656.327	14	46.881[b]		
Soil PCA2	Hyp	1.613	1	1.613	.033	.856	Soil PCA2	Hyp	65.542	1	65.542	1.398	.257
	Err	2516.074	52	48.386[b]				Err	656.327	14	46.881[b]		
2019		SS	Df	MS	F	P	2019		SS	Df	MS	F	P
Litter	Hyp	168.326	2	84.163	1.981	.150	Litter	Hyp	.600	1	.600	.040	.846
	Err	1911.574	45	42.479[b]				Err	151.044	10	15.104[b]		
Shrub	Hyp	46.689	2	23.344	.550	.581	Shrub	Hyp	32.850	2	16.425	1.087	.374
	Err	1911.574	45	42.479[b]				Err	151.044	10	15.104[b]		
Graminoid	Hyp	3.419	2	1.710	.040	.961	Graminoid	Hyp	11.275	2	5.638	.373	.698
	Err	1911.574	45	42.479[b]				Err	151.044	10	15.104[b]		
Soil PCA1	Hyp	1.002	1	1.002	.024	.879	Soil PCA1	Hyp	.230	1	.230	.015	.904
	Err	1911.574	45	42.479[b]				Err	151.044	10	15.104[b]		
Soil PCA2	Hyp	24.878	1	24.878	.586	.448	Soil PCA2	Hyp	.548	1	.548	.036	.853
	Err	1911.574	45	42.479[b]				Err	151.044	10	15.104[b]		

Appendix 1b. General Linear Model results for total number of reproductive plants per quad (TOTAL REPRODUCTIVE) and total number of seedlings (TOTAL SEEDLINGS) across two years predicted by microhabitat cover of litter, shrub, graminoid, and two soil variables. Only quads with five or more plants were included for each analysis. Litter, shrub, and graminoid initial covers were each converted into three equal cover categories. Soil PCA1 (PCA axis 1) corresponded to greater loadings in pH, P, Ca, Cu, and Zn while PCA2 (PCA axis 2) corresponded to greater loadings in K, Mg, and Mn. Bolded P-values represent significant values or those approaching significance.

APPENDIX 17
Florida Forest Service Timber Assessment

TIMBER ASSESSMENT

WEEDON ISLAND PRESERVE

PREPARED BY:
MICHAEL EDWARDS, SENIOR FORESTER
FLORIDA FOREST SERVICE
OTHER PUBLIC LANDS REGION 3 & 4

November 3, 2017

PURPOSE

This document is intended to fulfill the timber assessment requirement for Weedon Island Preserve, Pinellas County Parks and Conservation Resources as required by Section 1. Section 253.036, Florida Statutes. The goal of this *Timber Assessment* is to evaluate the potential and feasibility of managing timber resources for conservation and revenue generation purposes.

BACKGROUND

LOCATION

Weedon Island Preserve (WIP) is located at 1800 Weedon Dr. NE, St. Petersburg, FL 33702 in Pinellas County. WIP is boarded by Pinellas County Aquatic Preserve on the East. Commercial, industrial, and residential parcels make up the western boarder of WIP. Tamp Bay makes up the north, east and southern border. Ulmerton Road, I-275, 9th Street, 4th Street N, and Gandy Boulevard split up WIP into 6 main parcels.

HISTORY

WIP's cultural history dates to the Middle Archaic Period, 5,000-3,000 BCE. WIP was established as a State Preserve in 1974. Management of the State-owned parcels was designated to Pinellas County BOCC in October 1993. There are agreements with Progress Energy Florida in 2002 and DEP Office of Green Way and Trails in 2010 for management of additional acres. WIP is currently 3,190 acres.

PRESCRIBED BURN UNITS

Local resource managers have designated Burn Units on WIP. There are 19 Burn Units (BU) totaling 169 acres. The BU are also used by the resource managers for other land management purposes and will be referred to later in the *Timber Assessment* as Management Units (MU) when identifying timber management recommendations.

GOALS and OBJECTIVES

A field visit and discussion with the WIP manager was conducted in March of 2016. Also a document review of the of the 2012 WIP Management Plan was completed. This background information has resulted in the identification of three goals and five objectives that relate to WIP timber resources.

GOALS

Habitat Restoration and Improvement Goal:

- Restore and improve habitats using natural resource management practices.

Prescribe Burn Management Goal:

- Maintain a prescribe burn program that focuses on frequency, acres, and quality of burns to restore natural communities.

Exotic and Invasive Species Plant and Animal Maintenance and Control Goal:

- Reduce the extent and abundance of exotic invasive in WIP.

OBJECTIVES

Habitat Restoration and Improvement Objectives:

- Mechanically reduce vegetation in recently burned units as needed to improve the natural communities in fire-suppressed areas.

Prescribe Burn Management Objectives:

- Complete prescribed burns in at least two units per year as part of regular fire regime.

Exotic and Invasive Species Plant and Animal Maintenance and Control Objective:

- Conduct 57 acres of annual exotic vegetation maintenance treatment of BU 1E, 1F, 2B, 2C, 2D, 2E, 3, and 7.
- Introduce annual exotic vegetation treatment following prescribed fire in recently burned units not already under maintenance.
- Continue removing exotic and nuisance animals from WIP as detected.

ECOLOGICIAL COMMUNITIES

WIP's natural communities were classified using the 2010 Florida Natural Areas Inventory (FNAI). There were 17 communities identified. Estuarine, mangrove forest, and seagrass are the predominate natural communities. Scrubby Flatwoods is the only natural community addressed in this *Timber Assessment*.

SCRUBBY FLATWOODS (94.60 acres) MU (1A, 1C, 2C, 3, 5A, & 7)

This natural community dominates the uplands and comprises just 3% of WIP total acres. Currently there isn't enough of a timber resource on WIP to justify a timber sale in this community. The canopy has widely-spaced, mature pine trees (30 plus years) with an estimated BA of 30-50 square feet per acre. The understory is comprised of low growing scrub oaks and saw palmetto. Dominant flora found are; laurel oak, live oak, sand live oak, cabbage palm, red bay, longleaf pine, slash pine, saltbush, rusty staggerbush, pinewoods finger grass, and switch grass. The natural fire regime is 5-15 years.

SOILS AND PRODUCTIVITY

The U. S. Department of Agriculture Natural Resource Conservation Service (NRCS) publishes soil series profiles and site index (SI) for pines. The following is a generalized summary of the most prevalent soils and the site index for each pine species.

SCRUBBY FLATWOODS SOIL TYPES

#4 ASTATULA	0-5% SLOPE	SI-N/A
#21 PAOLA & ST. LUCIE	5-12% SLOPE	SI-N/A
#26 POMELLO	0-5% SLOPE	SI-SL70, SI-LLP 60

GENERAL TIMBER MANAGEMENT GUIDELINES

Note: Any timber harvest, site preparation, seedling planting, or other timber management activity will adhere to Florida's Silviculture Best Management Practices Standards, available online. In addition, all known historical and archeological sites will also be protected.

A useful measurement of tree stocking and density is basal area (BA). BA is the cross sectional area (square feet per acre) of a tree measured four and one-half feet above the ground. The diameter of

individual trees measured at this height is referred to as its diameter breast height (DBH). Fully stocked pine stands have enough trees per acre of a size large enough to utilize the growing space without causing over-crowding. Longleaf pine (LLP) or south Florida slash pine (SFSP) stands with a BA of 70 to 100 square feet per acre are considered fully stocked. It requires more, smaller diameter trees than it does larger diameter trees to equal one square foot of BA. For example: It takes 357 evenly spaced, six-inch DBH trees to equal a BA of 70 square feet per acre. Whereas, only 89 twelve-inch DBH trees per acre equal the same 70 square feet per acre of BA. BA can be roughly correlated to crown coverage and therefore needle-cast. About 40 to 60 square feet per acre of BA should provide sufficient needle-cast to carry prescribed fire and adequate sunlight for native grasses to be maintained.

Natural communities are dynamic things. A stand of scattered mature trees has not looked exactly as it does today throughout its existence. In natural, pine dominated forest systems trees die because they become old and less able to withstand insect and disease attack. SFSP has a life expectancy of about 100 years. LLP can live up to 300 years or more. Bark beetles might invade a weakened tree then multiply and kill some of its neighbors. Lightning strikes and windstorms do the same thing. Thus, holes of various sizes are continuously being created in the canopy. These openings allow full sunlight to reach the forest floor. In addition, lightning caused fires burn away leaf litter and expose bare mineral soil. The bare soil and canopy openings permit large numbers of sun loving pine seedlings to become established and grow straight and tall.

Where naturally occurring fire has kept the understory open, pine seedlings become established in these canopy holes at very high densities. It is common to have ten to twenty thousand seedlings per acre in scattered openings. Recurrent wildfires and competition for sunlight, moisture, and nutrients favor the strongest, fastest growing pine saplings. The rest die off continually over the life of a stand of trees until the trees mature and another opening is created that replaces the survivors with young seedlings again. The result is an uneven aged stand where each group of trees created by a canopy opening is about the same age. However, the stand is a mosaic of clusters that have different ages and densities. The long-term BA will fluctuate around a constant figure depending on soil productivity (as low as 20 square feet per acre on extremely poor sites, up to 80 square feet per acre on highly productive sites). The goal of ecologically based timber management is to mimic these natural processes and still be able to harvest trees that are destined to die anyway. The challenge is to capture the value of the timber while minimizing any negative impact on the system as a whole.

Thinning type harvests in pine stands help maintain the health and vigor of the stand by removing weak, diseased, and deformed trees. Enough co-dominant trees are removed during thinning to insure crown retention and continued growth in the remaining trees. To create uneven aged pine stands, group selection openings are cut during thinning activities. These openings allow young trees to become established by seed falling from nearby trees or by planting seedlings. Since pine seedlings require direct sunlight to grow, all trees within the opening must be removed. However, to minimize the visual impact, openings can be as small as one-half acre. For natural regeneration, the minimum width of the openings is about two to three chains (1 chain=66 feet). Lack of cover followed by dense stands of young pine trees created by large openings can become impediments to animal foraging and migration patterns. For example: To prevent saplings growing in these openings from becoming barriers to the red-cockaded woodpecker (RCW) flight patterns, group selections should not exceed five acres in size.

Combined acreage of all openings cut within a stand during each thinning is kept to no more than five to ten percent of the total stand acreage. Since each stand only gets thinned every ten-plus years, over-harvesting of old-growth trees is avoided and a steady supply of young trees is ensured. For example: suppose that today there is a stand of 20-year-old pine trees. Every 10 years 95% of a stand gets thinned to keep the canopy open and 5% clearcut to allow regeneration of young pines. At the end of the tenth cutting cycle (100 years from now) 50 % of a stand would have 120+ year-old trees and 50% would range

from seedlings to 100-year-old trees. If the cutting cycle is extended to 20 years (which is more likely on poorer soils) and 10% is cut for openings, the age distribution at the end of 100 years is the same as for the 10-year cycle.

Planting activities, group selection openings, hardwood control measures, and natural regeneration in pine stands will produce young tree stands of various sizes. A well stocked stand of young pine trees will usually require the removal of weak, diseased, and some overcrowded trees beginning by the age of 15 to 20 years. By this time, the crowns have grown together and ground cover begins to get shaded out and hardwoods can begin to compete with shade intolerant pine seedlings. Harvesting a portion of the timber maintains healthy pine growth and provides sunlight to the forest floor. Trees removed in the thinning process can be sold to generate revenue to be used in other land management projects. Likely markets for early thinnings from pine stands currently include pulpwood, fence posts and landscape mulch.

Due to shading effects, trees grown in tight spacing produce fewer and smaller lower limbs. The shedding of the lower limbs makes them more desirable for fence posts and later, more valuable products. Planting at least 500 seedlings per acre also helps insure the marketability of the pine trees and increases future management options.

The need for second and later thinnings depend on how low the BA was taken in the first thin and successive growth rate. If the BA is reduced to 50 to 70 square feet per acre in the first cut, another harvest will probably be needed in ten to fifteen years. Trees removed from the second and succeeding operations produce ever more valuable products and therefore more money. Current market conditions have some second thinning products worth at least five times as much as the original wood that was cut. Third thinning trees can be worth twice as much as the second thin. All this revenue can be generated and still have a stand of pine trees and a healthy ecosystem.

TIMBER MANAGEMENT RECOMENDATIONS

The following are general descriptions and management recommendations. These recommendations should be used to manage the current and future timber resources of WIP.

LONG TERM RECOMENDATIONS

Many factors affect the need for and timing of future thinnings. These include initial planting density, number of trees surviving to merchantable size, crown closure (ground cover shading), and a live crown ratio below 40%. The following recommendations are guidelines to be used in areas where the described conditions exist on newly acquired lands, currently unknown stands, and in the distant future as planted seedlings and natural regeneration matures.

BA < 10-These areas have insufficient pine trees to regenerate themselves. Control the saw palmetto and sabal palms using roller drum choppers and fire. Plant LLP or SFSP as described under the *Artificial Regeneration* section below.

10 to 30 BA–These stands may or may not have enough seed trees to regenerate themselves. Though for certain, any further loss of mature trees could preclude a healthy future. Stands with these marginally low BA should be included in the regeneration plan. See *Natural* and *Artificial Regeneration* sections below.

40 to 70 BA–These stands have an adequate number of pine trees to utilize the growing space without overcrowding. No harvests are necessary in these stands unless thinning is required to allow access for roller drum chopping of palmettos, palms, or other overgrown woody vegetation. If chopping is needed, follow spacing recommendations as described in the Natural Regeneration section. In large stands with little regeneration, some group selection openings may be cut to promote seedling establishment.

80 BA & UP–Pine stands with this level of stocking are probably beginning to shade out the ground cover. These stands should be thinned to a BA of 40 to 60 square feet per acre. If chopping for palmetto control is needed, follow spacing recommendations as described in the natural regeneration section. Group selection openings should be scattered throughout these stands to promote seedling establishment.

SALVAGE SALES

On occasion, small volumes of wood may need to be removed due to fire, windstorm, insect, or other damage. The decision whether to harvest the affected timber depends on the threat to the surrounding stands and the volume/value of the trees involved. For example, small, isolated lightning-strike beetle kills are a natural part of a healthy ecosystem and normally would not be cut. However, if a drought caused the insect infestation to spread, the infected trees and a buffer zone might have to be removed. *Note: due to forest health and timber market factors, it is recommended contacting the FFS Forester as soon as possible.* Many times a salvage sale may be added to an existing sale to expedite the removal of dead and dying trees.

REFORESTATION

NATURAL REGENERATION (ONLY USED WITH MATURE, CONE BEARING TREES)

The following methods of natural regeneration should be applied to current and future stands that have adequate number of seed trees. SFSP and LLP require a BA of 30 square feet per acre of mature trees (30 plus years). That would be a minimum of 12 trees per acre at 10" DBH. SFSP generally produce seeds on a 3-year cycle. LLP is a sporadic seed producer, from annually to every 20 years. When a good seed crop is anticipated by either flower or cone crop counts the previous year, the MU should be treated with one of the following site preparation methods described below**.**

10 to 30 BA- Control saw palmetto height and density. This can be accomplished by burning the stand in late winter or early spring to remove most of the fronds. Then roller drum chop the palmettos prior to the summer rainy season with a chopper heavy enough to sever their stems (probably a medium or heavy, single, or tandem, but not offset). A second burn in the summer after the chopping is complete would be beneficial if a fire will carry.

If for any reason an adequate number of young seedlings are not established by the second summer following the initial chopping, burn the stand again prior to end of the rainy season. This will allow some grasses to re-grow enough to protect the seeds and fragile seedlings from the hot sun.

30 to 50 BA-Again control saw palmetto as above. These stands may require thinning alone or in combination with group selection cuts to allow the roller choppers to treat the palmettos without killing remnant pine trees. Spacing between leave trees or clusters of leave trees should be at least 20 to 30 feet to give room for the tractor and chopper to operate. Group selection openings should be at least two chains (132 feet) wide to allow adequate sunlight for sapling growth. Follow the fire regime as described above.

> 50 BA-These stands need reforestation treatment only where saw palmetto must be controlled or additional age classes are desired (i.e. insufficient number of trees younger than ten years old). Where palmetto control is a priority, thin pines to 30 to 40 sq. ft. per acre (at least 20 to 30 feet between leave trees or clusters if chopping is required). Scatter group selection openings throughout the stand. Roller chop the stand, evaluate success, and implement fire regime as above. If palmetto is not a problem, skip the chopping, then evaluate success and burn as above

Successful establishment of a LLP or SFSP stand requires 1,000 or more seeds per acre to have seeded in,

and begin growing. Timing of reintroduction of prescribed fire into regenerated stands depends on tree species, seedling height growth, and fuel loads. SFSP planted at 400 or more trees per acre should be at least head-high in light fuels before the stand is burned. LLP planted at 400 or more trees per acre can be burned as early as a year after planting if there is one-inch diameter growth on the root collar and the seedlings are in light fuels. With short trees and heavier fuels, the first burn might have to be accomplished at night to prevent excessive scorch and mortality. These stands can probably be returned to the normal burn rotation following the first post-establishment burn, if fuels are light and fire frequent enough. See artificial regeneration methods, if more consistent and quicker results are required

ARTIFICIAL

Forest source LLP or SFSP seedling should be selected for reforestation. To minimize damage from reproduction weevils, do not plant pine seedlings where pine stumps are present until at least one growing season has passed since the harvest. The following recommendations are designed to generate the highest possible revenue stream while maintaining healthy ground cover. In areas where native ground cover is to be restored, consider planting pine seedlings immediately after sowing the seed and packing of the soil. This should help reduce losses due to moisture competition from established grasses during dry weather. Follow the fire regime described above in the *Natural Regeneration* section.

SITE PREPARATION

Prescribed fire may be used to prepare the planting site for hand planting or machine planting. Burn in the fall to provide access for planters, reduce groundcover competition (short term), hardwood and palmetto control, and allow adequate sunlight to the ground. Negative aspects of fall burning include lack of suitable habitat for wildlife until the spring growing season, and if not performed under the correct weather conditions, scorching of mature pine over-story can occur.

Mowing and roller chopping have also been used for site preparation; these techniques allow sunlight to reach the germinating seed or planted seedlings. Negative impacts include mowed/chopped debris on the ground, which can inhibit good soil to seed contact, and potentially the buildup of too much fuel for burning that can be damaging to new seedlings. Mowing "selects" for grasses, but like disking, roller chopping selects for forbs resulting in reduced fine fuels and soil disturbance of native groundcover.

A word of caution about planting in established pastures. To ensure adequate survival and avoid the expense of replanting, some form of herbicidal control, scalping, or deep discing of heavy grasses may be necessary. Competition from grass for soil moisture during hot, dry weather can cause severe losses of young seedlings. Applying a contact herbicide such as Roundup either in two-foot-wide strips or in spots can control these grasses. The herbicide should be applied far enough in advance of planting time so the grasses have time to “brown up” and indicate where to plant the seedlings.

If deep discing is used on heavy grass pasture, it should be accomplished during dry weather. The upturned earth should remain dry for about one month. Then the soil should be roller packed or have sufficient rainfall to settle and remove air pockets prior to planting. This method of grass control may be less expensive than herbicide treatments. However, the potential exists for poor survival due to inadequate grass control and improperly compacted soil. In addition, noxious weed seeds are often brought to the surface where they germinate and out-compete with the young pines or cause other problems. Therefore, this method is not recommended.

A release treatment of herbicide can be applied after planting to aid in the new seedlings survival. Once seedlings have started root growth apply a 6 ft. band over planted rows in mid-April to mid-May. For either SFSP or LLP seedlings, use 2 oz./acre of sulfometuron + 24 oz./acre hexazinone for herbaceous weed control (wiregrass is tolerant). This could be used for example if the site prep could not be completed before planting. If the site has extra dense hardwoods that should be controlled apply a

broadcast foliar spray in June to October, 40-48 oz. imazapyr + 2-3 quarts of glyphosate. Alternatively, a spring treatment with hexazinone 2-6 quarts could be applied to treat the hardwoods to allow the seedlings adequate growth before regular prescribed burning can resume. Some units may require a combination of chemical then prescribed burn or mowing/chopping then prescribed burn to prepare the site for planting and ensure good survival in the subsequent years.

HAND PLANTING

Hand planting of containerized (tubeling) forest source LLP or SFSP seedlings is one option for reestablishment in areas where an inadequate number of seed trees exist. Bare-root trees are planted in the winter. Tubelings can be planted in winter or summer, thereby extending the planting season. Plant approximately 600 bare root seedlings per acre at varying spacing, but averaging 6' X 12' overall. Due to the increased likelihood of survival and higher cost of containerized seedlings, as few as 500 seedlings per acre can be planted (8' X 11'). Still, for fear of not being able to reestablish essential grasses, land managers may insist on planting less than the recommended number of pine seedlings overall. To ameliorate these concerns, 400 seedlings per acre can be hand planted in small, irregularly shaped clusters (2 to 5 acres) with 2 to 5 chains between clusters. If machine planting is employed, plant 3 to 5 curved rows (9' X 12'). Leave 2 to 5 chains unplanted between sets of rows. The entire area can be inoculated with native grass seed prior to planting the LLP or SFSP seedlings. However, tremendous cost savings can be made by only sowing the area between tree plantings and relying on these areas to seed the rest over time.

MACHINE PLANTING

Meander planting containerized LLP or SFSP seedlings at an average spacing of 6' X 12' yields about 600 trees per acre. It is more difficult to vary the spacing and make the planting look random with machine planting. This is due primarily to the inability of tree planters to make sharp turns and still pack the soil around the seedlings roots. Tight turns are also hard on the planter's bearings. The desired effect can be obtained by gradually curving the planting rows and varying the distance between and within the rows. Another way to create the random look is to locate the planting rows twice as far apart as normal (averaging approximately 24'). Then, plant a second set of rows at some angle approaching 90 degrees to the first set of rows spaced about the same distance apart.

Again competition for soil moisture during dry weather can cause heavy losses of seedlings and waste of planting costs. Where grass is thick, it is best to either herbicide strips as described above or use a combination planter/scalper to plant the seedlings. The scalper should be set to no more than 2 to 3 inches deep and 18 to 24 inches wide. These settings will minimize soil disturbance and maintain continuity of fuels for future prescribed burns, but the seedlings will have a decent chance of survival.

PRESCRIBED FIRE

Frequent lightning induced fires are natural to most Florida's natural communities. Prior to European settlement, they occurred at regular intervals of one to five years. Without fire, native habitats would probably have turned into densely shaded hardwood hammocks. Introduction of effective fire suppression in the mid-1900's resulted in thick stands of saw-palmetto and subsequent loss of other grassy and herbaceous ground covers. Use of prescribed fire is essential to the maintenance of open healthy, pine-dominated ecosystems. The needles shed by pine trees planted in old pastures help carry fire across the landscape which in turn helps maintain fire dependent communities.

According to WIP records, it appears that the BUs have a relatively new burn history. Most BUs have been burned at least once in the past 10 years. It is recommended that this frequency be increased to the appropriate fire return interval (FRI). Also managers should introduce fire into unburned units to begin to maintain the appropriate FRI. One suggestion would be to consider adjusting the season of burning

(growing or dormant). The season to burn in depends on the objectives for the prescribed burn. Dormant season; fuels reduction, wildlife management (some species), and duff removal in fire suppressed BUs. Growing Season; stimulate herbaceous seeding, site prep for planting and kill woody vegetation. Grassy fueled fires produce less lingering smoke than woody fuels. Mechanical or chemical treatments followed by frequent prescribed burns should stimulate grasses and decrease the amount of woody understory.

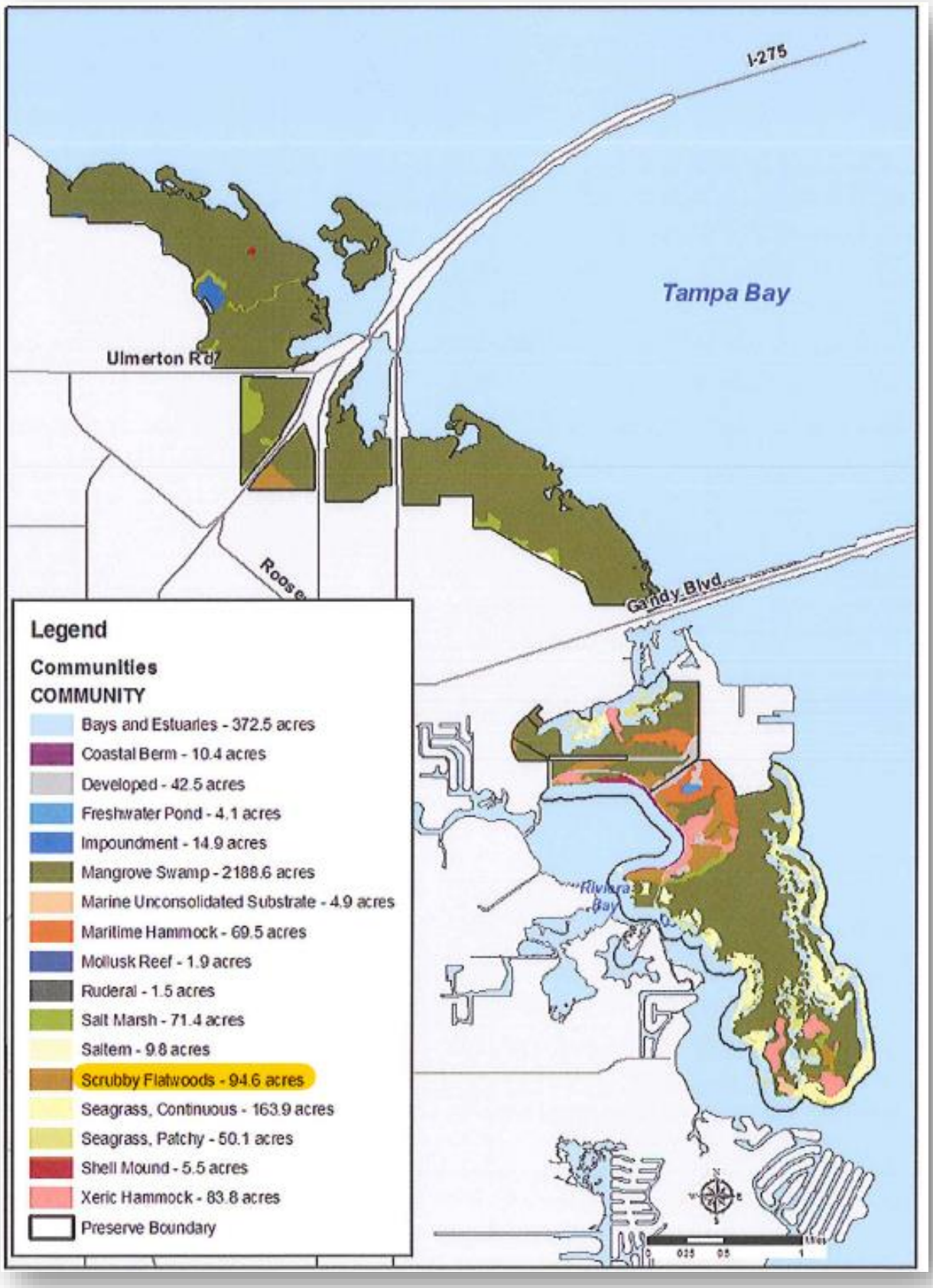
Caution must be exercised when reintroducing fire into these systems, as desirable as burning is. Survival of (expensive, newly planted seedlings or time intensive, natural seedlings) as well as valuable mature timber depends on timing and careful execution of burns. To prevent damage to delicate root systems and avoid smoky duff fires, be sure that there is adequate moisture in any organic matter thicker than approximately one inch. In stands with heavy duff layers, try to burn no more than one inch of duff at a time on approximately two to three-year intervals. At least the first burn should be at nighttime, during the dormant season after the seedlings have reached six feet or more in height and there is enough needle litter to carry the fire. If ground fuels are not too heavy, succeeding burns can be switched to the growing season.

ACCESS

There is one main designated entrance to the WIP, via Weedon Drive NE, south of Gandy Boulevard, on the southern parcel. WIP has an adequate network of roads that can be used for forest management purposes. However, many of them may require reinforcement with rock or shell to support the heavy trucks used in a timber operation. It would be beneficial to establish a few primary roads for access to quadrants of the tract. This work will also benefit other activities including hunting access and prescribe burning. It also will reduce wear and tear on WIP trucks and reduce travel time across the Property.

SUMMARY

Based on the current assessment of WIP, it is not feasible to manage the timber resources through commercial timber harvesting. The scrubby flatwoods is the only natural community that has some timber growing on it, but not enough to be of any commercial value. This stand has a low stocking of mature pine trees (BA of 30 to 50 square feet per acre) and is spread out over the WIP property. The timber market is another factor; WIP is in a highly urbanized area of the state, far from most timber mills and loggers. This would make the property unattractive to timber buyers.


I-275
Tampa Bay
Ulmerton Rd
Gandy Blvd
Legend
Communities
COMMUNITY
Bays and Estuaries - 372.5 acres
Coastal Berm - 10.4 acres
Developed - 42.5 acres
Freshwater Pond - 4.1 acres
Impoundment - 14.9 acres
Mangrove Swamp - 2188.6 acres
Marine Unconsolidated Substrate - 4.9 acres
Maritime Hammock - 69.5 acres
Mollusk Reef - 1.9 acres
Ruderal - 1.5 acres
Salt Marsh - 71.4 acres
Saltern - 9.8 acres
Scrubby Flatwoods - 94.6 acres
Seagrass, Continuous - 163.9 acres
Seagrass, Patchy - 50.1 acres
Shell Mound - 5.5 acres
Xeric Hammock - 83.8 acres
Preserve Boundary

APPENDIX 18
Site Use Documents

Information and Guidelines
for
Research
on
Pinellas County Environmental Lands



rev. 04/2011

Introduction

The Pinellas County Department of Parks and Conservation Resources (PCR) is responsible for land management, ecological research, and environmental education on county parks, preserves, and management areas. Visiting researchers are subject to all rules and regulations of Pinellas County as well as all federal and state laws. The purpose of this document is to supplement these rules and regulations by describing policies that pertain to research conducted on Pinellas County's environmental lands

Site Use Applications and Agreements

Pinellas County's environmental lands offer a rich variety of research opportunities. Research scientists and students interested in conducting projects that utilize Pinellas County's environmental lands are required to obtain a Site Use Permit. Site Use Permits are required for all scientific research (biological surveys, species collection or trapping, use of restricted-trails for observations, and all ecological, hydrological, anthropological, geological, or chemical studies), access to restricted-trails, commercial photography and television broadcasting, group activities involving 50 or more persons, and exhibits, displays, signs, and/or distribution of printed materials.

The first step towards obtaining the required Site Use Permit is to submit a Site Use Application. The application describes the proposed research, budget, materials and methods, and schedule of activities. The application also outlines any assistance or support requested of the County. Applications are reviewed by the Site Use Committee, which meets as needed, and the decision to approve, reject, or request additional information for each proposed project rests solely with this committee. Factors considered by the committee include, but are not limited to; the length and scope of the project, potential effects on cultural and natural resources, and alignment of the proposed research with the mission of PCR. Researchers will be contacted concerning the committee's decision, typically within two weeks.

If the project is approved, a signed Release and Indemnification Agreement for each research participant must be on file with PCR prior to initiation of the project. All required federal and/or state permits must also be on file with PCR. A letter granting permission to access the relevant properties will be issued by Pinellas County and must be in possession of researchers while working on environmental lands. This permission letter serves as the Site Use Permit to conduct authorized research.

Forms:

Site Use Application: This document is completed by the applicant and describes the proposed research to be conducted on any of Pinellas County's environmental lands. It should be submitted well in advance of the desired project initiation date for review by the Site Use Committee.

Release and Indemnification Agreement: This form must be signed by each member of the research team and on file with PCR prior to initiating authorized research.

Site Use Permit: This permission letter from Pinellas County grants access to designated environmental lands to conduct authorized research. It should be carried by researchers at all times while on Pinellas County environmental lands.

Pinellas County Biological Field Station (PCBFS) Reservation Request: This form should be completed by visiting researchers requesting on-site lodging at the Brooker Creek Preserve, and should be submitted well in advance of the desired project initiation date.

General Rules for Visiting Researchers

Pinellas County's environmental lands include Brooker Creek Preserve, Weedon Island Preserve, Shell Key Preserve, and Mobbly Bayou Wilderness Preserve, as well as an additional 11 Management Areas. Comprising over 16,000 acres, or approximately 7.5% of Pinellas County, these lands are designated natural areas that are managed for the conservation, protection, and enhancement of natural and cultural resources while allowing for sustainable passive public recreational uses that are compatible with approved management plans and applicable ordinances and laws. The following rules and guidelines are applicable to all visiting researchers utilizing Pinellas County's environmental lands.

Accidents:
Pinellas County is not liable for injuries or losses incurred by visiting researchers on environmental lands. All accidents that occur on environmental lands, regardless of injury or severity, must be reported to PCR immediately so that an Accident Report can be completed. Vehicular accidents must be reported to the police, and then to PCR. When the police choose not to investigate, this will be noted on the Accident Report. At no time shall the driver leave the scene of an accident, regardless of whether the other party has left, until the police have arrived. Leaving the scene of an accident is against the law and can adversely affect claims and privileges. It is the responsibility of visiting researchers to know and understand their home institution's policies and procedures concerning accidents. Pinellas County is not responsible for conducting any investigation required under another agency's accident policy.

Acknowledgement:
Proper credit should be given to the Pinellas County Department of Parks and Conservation Resources in all publications resulting from research completed wholly or in part on environmental lands. The investigator is requested to provide two original reprints of such publications to PCR.

Camping:
Primitive camping is allowed only in designated areas of Shell Key Preserve and by prior approval at Brooker Creek Preserve and Weedon Island Preserve. No camping facilities are available on other environmental lands.

Checklists:
Checklists of plants, birds, mammals, reptiles, and amphibians are available upon request for each preserve.

Chemicals:
No chemicals, including gasoline storage containers, are allowed on any environmental land without prior authorization.

Damage:
Pinellas County assumes no responsibility for any damage, loss, or theft of personal property or equipment brought onto environmental lands. We recommend valuable property be insured.

Equipment:
Deployment of field equipment must be coordinated in advance. Use of county-owned equipment is by permission only. Use of certain instruments may require training and demonstration by county staff. Repair of damage resulting from improper use is the financial responsibility of the investigator.

Field Markers:
Permission must be obtained to deploy flagging and field markers. All non-permanent field markers must be removed once a project is completed. Use of permanent or semi-permanent field markers must be authorized in advance.

Fire:
During wildfires or prescribed burns, no one except fire-trained Pinellas County staff has access to the vicinity of the burn without permission. Wildfires should be reported immediately to the PCR office at (727) 582-2100. If no answer, call the State of Florida Division of Forestry at (863) 648-3163.

Fishing:
Fishing is allowed in designated areas of Shell Key Preserve and Weedon Island Preserve. State and local fishing licensing and laws apply.

Gasoline:
Gasoline, or any other chemical, is not allowed on any environmental land without proper authorization.

Gates:
Gates used to access any environmental land must be left as found, either open or closed. Motor vehicles should be driven only over existing roads and trails, never over fences or off-trail. Locks typically are configured as a "daisy chain" to allow each lock to provide access; when locking a gate, be sure you do not bypass one of the locks.

Habitat Alterations:
Any activity that results in a modification of habitats on environmental lands is not permitted without prior approval. Such activities include clearing vegetation, burning, establishing trails, cutting trees and shrubs, mowing, and planting.

Hazards:
Venomous snakes and arthropods, poisonous plants, biting and stinging insects and other potentially hazardous organisms occur on environmental lands. Visitors are expected to be knowledgeable of such hazards and to take proper precautions.

Historical Artifacts:
Historical artifacts found on any environmental land are protected and must be left alone, unless advance permission has been granted. Use of metal detectors is prohibited on environmental lands except by special permission.

Horses and Riders:
When approaching a horseback rider head-on, pull over your vehicle and stop (or step to the side if on foot) approximately 50 ft before you reach the horse; allow the rider to pass and go at least 25 ft before you resume travel. When approaching a horseback rider from behind, stay back at least 50 ft or pull off to the side and wait until the rider is far enough ahead so you can resume travel. If the rider waves you on, drive slowly and as far as possible over on the opposite side of the trail from the rider. Resume normal speed when you are at least 50 ft past the rider.

Hunting:
Hunting is not allowed on any environmental land in Pinellas County.

Land Ownership:
Researchers working on environmental lands within Pinellas County should be aware of the ownership of adjacent properties. Private landowners are more likely to grant permission for a researcher to access their property if they are approached in advance.

Liability:
Visitors and researchers enter environmental lands at their own risk. Pinellas County is not responsible for any injury or loss incurred by visitors while on a preserve or management area. Hazardous conditions are common in natural areas. Please use caution and carry a mobile phone or other means of communication at all times.

Ordinance:
Under Pinellas County Ordinance 10-44, the following apply to lands managed by PCR.

No pets are allowed.
Alcohol is prohibited.
Fireworks are not allowed.
All plants and animals are protected.

Permits:
Collecting, banding, or holding live animals requires appropriate permits from state and federal agencies. It is the responsibility of the visiting researcher to obtain these permits and provide a copy to PCR prior to initiating research. Permission by the home institution's Institutional Animal Care and Use Committee (IACUC), where relevant, must be provided to PCR. Any researcher proposing a project that involves cultural resources must obtain required permits from the State of Florida Bureau of Archeological Research, Division of Historical Resources.

Protected Resources:

- All plant, terrestrial, aquatic, and epiphytic life within any environmental land is protected. Any disturbance that would impair the natural condition of any area is not allowed, except by special permit.
- A special permit is required to transplant, possess, or remove any plant or plant part.
- A special permit is required to introduce, possess, or remove any animal from an environmental land. Wildlife cannot be artificially fed or petted.
- All cultural resources are protected on all properties. Any removal of cultural artifacts is not allowed except by special permit

Parking:

Staff, law enforcement officers, and visiting researchers use roads and trails on a regular basis. Please pull vehicles off the road or trail far enough to allow another vehicle to pass.

Research Reports:

A report detailing work conducted on Pinellas County's environmental lands is required of all visiting researchers. Reports should be submitted to PCR in digital or hardcopy format, and must include the title of the project, name of the researcher(s), dates work was performed, and presentation and discussion of major findings.

Safety:

Visiting researchers need to take care to avoid heat stress by drinking plenty of water, wearing protective clothing, and using sunscreen. Drivers should check behind their vehicles for hazards before backing. Further, please abide by safety operational procedures established by Pinellas County including, but not limited to, the use of the following personal protective equipment:

- Head protection for protection from impact or penetrations from falling or flying objects.
- Eye and face protection when there is a probability of injury preventable by protective equipment.
- Hearing protection when sound exceed permissible noise exposure levels outlined in OSHA 1910.95.
- Foot protection to protect feet from dropped articles that might cause injury.
- Life jackets when working near or over water; one life jacket is required for each person on board the vessel.
- Reflective vests when working near traffic.
- Hand and body protection including gloves and leggings (e.g., snake chaps or gaiters) to protect against abrasions.

Security:

While working on environmental lands, visiting researchers are requested to carry a mobile phone and to provide that number to PCR before entering the field. In case of emergency, call 911. The LIMA Unit of the Pinellas County Sheriff's Office regularly

patrols our environmental lands. Researchers should have the Site Use Permit that grants permission to be on the property with them at all times.

Site Use Permit:
For researchers working independently on Pinellas County environmental lands, a letter granting access to specific properties must be obtained. This letter should be carried by researchers at all times while visiting environmental lands.

Snags:
Please be aware of the location of snags (standing dead trees) or recently treated exotic plants while you are working. Strong winds can blow down snags as well as live trees.

Smoking:
Smoking is prohibited while on environmental lands except in designated areas. Smoking poses a fire hazard.

Speed Limits:
The speed limit on all roads within preserves and management areas is 15 MPH. Please observe the posted speed limits on public roads adjacent to environmental lands.

Structures:
Please do not disturb any marker or structure you may encounter on environmental lands. Such structures may be part of long-term monitoring programs.

Swimming:
Swimming is "at your own risk". No safety approved swim areas or lifeguards are available on any environmental land.

Vehicle Use:
Special permission is required to use personal vehicles on staff-only roads and trails. Visiting researchers must drive only on designated roads and trails; any off road activity will result in forfeiture of the Site Use Permit. Most environmental lands are accessible by 4-wheel drive vehicles only. The color, make, model, year and license tag of all non-county vehicles to be used on environmental lands must be on file with PCR. We recommend all vehicles be equipped with an electronic winch system. Pinellas County employees cannot use county equipment to assist when non-county vehicles become stuck unless permission is granted by the PCR Bureau Director and a waiver releasing Pinellas County of responsibility of incurred damage has been signed by the visitor whose vehicle is stuck.

Weather:
Visitors should be aware of dangerous weather and take sensible precautions against threatening conditions such as strong winds, lightning, tornadoes, and hurricanes.

Pinellas County
PARKS & CONSERVATION RESOURCES

Site Use Application

Please identify the property to which you are requesting access.

☐ park(s): _____

☐ preserve(s): _____

☐ management area(s): _____

1. APPLICANT INFORMATION

APPLICANT: _____

APPLICANT'S TITLE OR ACADEMIC STATUS: _____

INSTITUTION (Do not abbreviate): _____

DEPARTMENT (Do not abbreviate): _____

OFFICE ADDRESS: _____

CITY/STATE/ZIP: _____ OFFICE PHONE: _____

FAX: _____ EMAIL: _____

EMERGENCY CONTACT (Name and Phone): _____

2. PROJECT DURATION DATES (Month/Year to Month/Year): _____

3. PROJECT TITLE (Do not omit):

rev. 09/2019

4. PROPOSED RESEARCH PROJECT DESCRIPTION. This description should include all experimental manipulations and allow a reviewer who is familiar with the general area of research to evaluate the significance of the research. The application will be evaluated based upon *Pinellas County Code, Chapter 90,* including but not limited to: scientific merit, potential environmental impacts, impairment of Environmental Lands for other research activities, and availability of alternative sites. Please type or print clearly. (In many case, detailed proposal abstracts will suffice and can be appended.)

If known, list sampling parameters to be estimated during this project and provide a map of requested location(s) within each property.

5. PROJECT PERSONNEL. Please list the names of project collaborators and personnel who may require access to county property as part of this project:

NAME: _____ POSITION/TITLE: _____ INSTITUTION: _____

NAME: _____ POSITION/TITLE: _____ INSTITUTION: _____

NAME: _____ POSITION/TITLE: _____ INSTITUTION: _____

6. SPECIAL NEEDS. Please describe any special needs not detailed above.

7. ASSOCIATED PERMITS. Please read and answer the following items carefully. Researchers are responsible for obtaining the appropriate permit(s) and must provide copies of all permits for the proposed work with expiration date(s) to PCR before gaining access to any property. PLEASE NOTE THAT STATE AND FEDERAL PERMITS MAY TAKE AT LEAST 30 DAYS TO BE APPROVED.

A) Does your project involve vertebrate animals? ☐ Yes ☐ No

If "YES," provide the following information from your home institution's **Animal Care Committee** agreement (This is often the same committee that oversees the care of laboratory animals):

Indicate all that apply: ☐ Reptile ☐ Amphibian ☐ Fish ☐ Bird ☐ Mammal
Protocol (APF)#: _____ Expiration Date: _____

B) Does your project involve collecting (including banding and/or marking) vertebrate wild animals? ☐ Yes ☐ No

If "YES," provide the following information from **your Florida Fish and Wildlife Conservation Commission** scientific collecting permit:
Permit #: _____ Expiration Date: _____

C) Does your project involve collecting, banding, and/or marking birds? ☐ Yes ☐ No

If "YES," provide the following information from your **U.S. Fish and Wildlife Service** permit:
Permit #: _____ Expiration Date: _____

D) Does your project involve working with plants or animals that are federally listed as threatened or endangered?

☐ Yes ☐ No
If "YES," provide the following information from your **U.S. Fish and Wildlife Service** permit:
Permit #: _____ Expiration Date: _____

E) Does your project involve surveying or collecting for cultural resources?

☐ Yes ☐ No
If "YES," provide the following information from your **State of Florida** permit:
Permit #: _____ Expiration Date: _____

8. POTENTIAL EFFECTS ON ENVIRONMENTAL LANDS. Does your project involve:

A) The removal of organisms or objects from environmental lands?

☐ Yes ☐ No

B) The transfer of animals, plants, and/or microorganisms from outside the environmental lands to within the environmental lands, or between different parts of the environmental lands?

☐ Yes ☐ No

C) The use of radioactive isotopes or chemicals (e.g., pesticides, herbicides, insecticides, fertilizers)?

☐ Yes ☐ No

D) Soil or habitat disturbance?

☐ Yes ☐ No

E) Prescribed fire or other mechanical treatments?

☐ Yes ☐ No

9. REGULATIONS.

All users must sign a Pinellas County PCR RELEASE AND INDEMNIFICATION AGREEMENT before they will be allowed to enter a non-public area of any environmental land. It is the responsibility of the applicant to see that each member of the group has signed this agreement before visiting the environmental land. For visitors under 18 years of age, the minor's parent or legal guardian must sign this agreement. This agreement cannot be altered.

Project applicants are solely responsible for following all rules and regulations applicable to environmental lands, including PCR Site Use policies. Exceptions to rules and regulations require prior written permission from PCR. Please help ensure that environmental lands remain accessible for research by reporting any violations. A complete list of regulations can be found in the *Information and Guidelines for Research on Pinellas County Environmental Lands* and *Pinellas County Code, Chapter 90*.

All publications resulting from the use of environmental lands, facilities, or databases must acknowledge Pinellas County's Department of Parks and Conservation Resources. Please submit photocopies or reprints of all resultant publications to: Parks and Conservation Resources, 12520 Ulmerton Road, Largo, FL 33774.

PCR may request a copy of field data and metadata derived from work on Pinellas County's environmental lands. Minimum required metadata in support of each dataset shall include the title of the project, the investigator's name and contact information, and an abstract describing the results of the study.

I acknowledge that I have read and agree to abide by the regulations in the *Information and Guidelines for Research on Pinellas County Environmental Lands* and *Pinellas County Code, Chapter 90*. I also agree that it is my responsibility to disseminate this information to all members of my party.

_____ _____

Applicant Signature Date

[a] Receipt of application via email is comparable to applicant's signature.

Site Use
Release and Indemnification Agreement

Waiver: In consideration of being permitted to visit or participate in any way in any activity at the *following environmental lands* under the management of Pinellas County, Department of Parks & Conservation Resources (list properties): _____

_____

I, for myself, my heirs, personal representatives or assigns, do hereby release, waive, discharge, and covenant not to sue Pinellas County, its officers, employees, and agents from liability from any and all claims including the negligence of Pinellas County, its officers, employees, and agents, resulting in personal injury, accidents or illness (including death), and property loss arising from, but not limited to visitation or participation in any way in any activity at the above location.

_____ _____

Signature of Minor's Parent/Guardian Date Signature of Participant Date

Assumptions of Risks: Visitation or participation carries with it certain inherent risks that cannot be eliminated regardless of the care taken to avoid injuries. The specific risks vary from one activity to another, but the risks range from 1) minor injuries such as scratches, bruises, and sprains to 2) major injuries such as eye injury or loss of sight, joint or back injuries, heart attacks, and concussions 3) catastrophic injuries including paralysis and death 4) injuries from encountering wildlife including poisonous snakes, carnivores, and stinging insects.

I have read the previous paragraph and I know, understand, and appreciate these and other risks that are inherent in visitation or participation. I hereby assert that my visitation or participation is voluntary and I knowingly assume all such risks.

Indemnification and Hold Harmless: I also agree to INDEMNIFY AND HOLD Pinellas County harmless from any and all claims, actions, suits, procedures, costs, expenses, damages, and liabilities, including attorney's fees brought as a result of my involvement in visitation or participation and to reimburse them for any such expenses incurred.

Severability: The undersigned further expressly agrees that the foregoing waiver and assumption of risks agreement is intended to be as broad and inclusive as is permitted by the law of the State of Florida and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect.

Acknowledgement of Understanding: I have read this waiver of liability, assumption of risk, and indemnity agreement, fully understand its terms, and understand that I am giving up substantial rights, including my right to sue. I acknowledge that I am signing the agreement freely and voluntarily, and intend by my signature to be a complete and unconditional release of all liability to the greatest extent allowed by law. I acknowledge that I have received, read, and agree to abide by all applicable regulations and also agree that it is my responsibility to disseminate this information to all members of my party.

Participant's Name (Print) _____

_____ _____

Signature of Minor's Parent/Guardian Date Signature of Participant Date

Participant's Age (If Minor) _____

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Property	Investigator	Project	Begin Date	End Date
Weedon Island Preserve	Austin, Robert	Excavation of a prehistoric lithic deposit on the Weedon Island Site, 8PI1	2/1/2012	12/31/2013
Weedon Island Preserve	Jabanoski, Kristen	Water sampling for a study of plankton	2/20/2012	3/9/2012
Weedon Island Preserve	O'Hara, Nanette	Maintaining your Florida yard: workshop for homeowners	3/17/2012	3/31/2012
Weedon Island Preserve	Judkins, Heather	Plant diversity of local ecosystems	3/22/2012	3/31/2012
Weedon Island Preserve	Vogel, Julie	Sampling Brooker Creek with ISE and other field probes	6/1/2012	6/30/2012
Weedon Island Preserve	Figueredo, Jessica	Melampus coffeus influence on the distribution and establishment of mangroves in Weedon Island Preserve	11/29/2012	4/30/2013
Weedon Island Preserve	Johnson, Brandon	Progress Energy Bartow Plant thermal plume assessment phase II: biological monitoring	12/12/2012	4/30/2014
Weedon Island Preserve	Kish, George	Environmental sampling training at Brooker Creek and Weedon Island Preserves	1/24/2013	5/31/2013
Weedon Island Preserve	Lastorka, Sean	Effects of boardwalks on mangrove detritivores	2/12/2013	4/30/2013
Weedon Island Preserve	Stallings, Chris	Comparative study between sea grass and sandy bottom habitats	3/7/2013	3/31/2013
Weedon Island Preserve	Grubbs, Joshua	A comparison of the population densities of Schinus, Schefflera, and Casuarina in xeric, mesic, and hydric soil zones of Weedon Island Preserve	8/2/2013	10/31/2013
Weedon Island Preserve	O'Donnell, Sharlene	Human-animal gulf coast interactions throughout space and time at Weedon Island, FL	8/2/2013	12/31/2013
Weedon Island Preserve	Murphy, Jeanne	UF/IFAS Florida Master Naturalist Program: habitat evaluation, special topics	9/7/2013	9/30/2013
Weedon Island Preserve	Snell-Rood, Emilie	Nutritional constraints on brain and life history evolution: a comparative study across butterflies	9/9/2013	10/31/2013
Weedon Island Preserve	Kish, George	Observing characteristics of wetlands at Brooker Creek and Weedon Island preserves	9/9/2013	12/15/2013
Weedon Island Preserve	Austin, Robert	Midden profile and restoration of looter's trench Weedon Island (8PI1), Florida	11/1/2013	5/26/2015
Weedon Island Preserve	Sola, Romina	DEP's Learning in Florida's Environment (LIFE) program	12/9/2013	12/31/2013
Weedon Island Preserve	Arthur, John W.	Seminar in Archaeological Method and Theory	12/23/2013	5/31/2016
Weedon Island Preserve	Kish, George	Environmental sampling training at Brooker Creek and Weedon Island preserves	1/3/2014	5/31/2014
Weedon Island Preserve	Burford, Megan	Biome Laboratory and Plant Community Sampling	3/7/2014	4/29/2014
Weedon Island Preserve	Sampson, Christina	Hunter-Gatherer Ritual and Political Economies at Weedon Island, Florida	3/28/2014	12/31/2015
Weedon Island Preserve	Merton, Elizabeth	Improving wetland identification with satellite imagery	5/12/2014	8/31/2014
Weedon Island Preserve	Freytes-Ortiz, Ileana	How does ocean warming influence prey responses to predators?	5/27/2014	10/31/2014
Weedon Island Preserve	Austin, Robert	Excavation of a prehistoric lithic deposit on the Weedon Island Site, 8PI1, Season III	5/27/2014	9/1/2017
Weedon Island Preserve	Kish, George	Observing Wetlands in Pinellas County	8/1/2014	12/31/2014
Weedon Island Preserve	Masi, Michelle	Biomes Lab	9/1/2014	9/30/2014
Weedon Island Preserve	Cassill, Deby	What ants can tell us about: survival, neighborliness, and collective behavior	10/9/2014	12/31/2016
Weedon Island Preserve	Britt, Katie	DEP's: Learning in Florida's Environment Program (LIFE)	1/9/2015	1/31/2015
Weedon Island Preserve	Kish, George	Observing Wetlands in Pinellas County	2/17/2015	8/31/2015
Weedon Island Preserve	Masi, Michelle	Biomes Lab	4/1/2015	4/30/2015
Weedon Island Preserve	Freytes-Ortiz, Ileana	Will mussel feeding behavior be affected by cold shock temperatures from winter storms?	6/19/2015	8/31/2015
Weedon Island Preserve	Judkins, Heather	Aquatic Ecosystem Survey	9/4/2015	12/31/2015
Weedon Island Preserve	Masi, Michelle	Biomes Lab	9/15/2015	10/31/2015
Weedon Island Preserve	Kish, George	Observing Wetlands in Pinellas County	9/22/2015	12/31/2015
Weedon Island Preserve	Kish, George	Observing Wetlands in Pinellas County	2/23/2016	5/31/2016
Weedon Island Preserve	Hesterberg, Stephen	Evaluation of two habitat complexity metrics for predicting flatback mud crab abundance (Eurypanopeus depressus) on oyster reefs in Tampa Bay, Florida	5/6/2016	10/31/2016
Weedon Island Preserve	Reiss, Kelly	Florida’s Participation in the National Wetland Condition Assessment (NWCA) 2016	5/19/2016	10/31/2016
Weedon Island Preserve	Arvidson, Lance	Bat Diversity and Abundance in the Tampa Bay Watershed	3/28/2017	12/31/2017
Weedon Island Preserve	Erickson, Amy	Marine Biology BIOL 465L Field Trip Studies	4/3/2017	5/31/2017
Weedon Island Preserve	Chacin, Dinorah	Demographic rates of Eastern oysters living in red mangroves vs. oyster reefs	8/15/2017	3/1/2018

Property	Investigator	Project	Begin Date	End Date
Weedon Island Preserve	Earley, Ryan	Behavior, life history, ecology, and population genetics of the mangrove rivulus (Kryptolebias marmoratus) in Western Florida	10/1/2017	10/31/2021
Weedon Island Preserve	Peterson, Cheryl	Demographic Data Collection to Assess the Endangerment of Chrysopsis floridana	10/11/2017	12/31/2019
Weedon Island Preserve	Arthur, John W.	Seminar in Archaeological Method and Theory	11/2/2017	5/31/2018
Weedon Island Preserve	Carney, Jessica	Black Mangrove Ecology	3/9/2018	5/31/2018
Weedon Island Preserve	Austin, Robert	Screening of Looter Spoil, Junior Archaeology Camp	7/18/2018	7/30/2018
Weedon Island Preserve	Quinton, BJ	Supplemental research associated with Blue Carbor in the Tampa Bay Estuary Project	8/20/2018	9/30/2019
Weedon Island Preserve	Federovitch, Casey	Course – Insect Classification ENY6166	9/25/2018	12/1/2018
Weedon Island Preserve	Draskovich, Heather	Rethinking Settlement Patterns at the Weeden Island Site (8PI1)	10/17/2018	12/31/2019
Weedon Island Preserve	Austin, Robert	Screening of Looter Spoil, Junior Archaeology Camp	7/15/2019	7/31/2019
Weedon Island Preserve	Arthur, John W.	Archaeological Testing at Weedon Island	11/15/2019	5/31/2020
Weedon Island Preserve	Jackson, Kendal	Geoarchaeological Testing of Shellworks at Ross Island, Weedon Island Preserve	12/17/2019	5/31/2020
Weedon Island Preserve	Smith, Ron	Butterflies of Pinellas County	2/21/2020	12/31/2021
Weedon Island Preserve	Arthur, John W.	Seminar in Archaeological Method and Theory	5/31/2020	12/31/2020
Weedon Island Preserve	Costner, Whitney	Demographic Data Collection to Assess the Endangerment of Chrysopsis floridana	11/2/2020	12/31/2023
Weedon Island Preserve	Arthur, John W.	Seminar in Archaeological Method and Theory	12/31/2020	12/31/2021
Weedon Island Preserve	Kolianos, Phylls	Discovering Weedon Island's Ancient Past	2/1/2021	4/30/2021
Weedon Island Preserve	Fly, Jessie	Tampa Bay Urban Fishing Listening Project	2/19/2021	8/31/2021
Weedon Island Preserve	Reiss, Kelly	Florida's Participation in the National Wetland Condition Assessment (NWCA) 2016	4/19/2021	10/31/2021
Weedon Island Preserve	Hauck, Elizabeth	Reproduction in relation to heavy metal contamination along an urbanization gradient in a native and invasive Florida lizard species (Anolis carolinensis and A. sagrei)	5/7/2021	3/1/2022
Weedon Island Preserve	Earley, Ryan	Behavior, life history, ecology, and population genetics of the mangrove rivulus (Kryptolebias marmoratus) in Western Florida	5/21/2021	10/1/2025
Weedon Island Preserve	Grassick, Abigail	Responsible Piers Initiative Angler Surveys	6/4/2021	8/31/2021
Weedon Island Preserve	Jayne, Bruce C.	The functional biology of locomotion and feeding of the mangrove water snake (Nerodia clarkii compressicauda)	6/7/2021	12/31/2021
Weedon Island Preserve	Blondheim, Olivia	Mangrove crab (Aratus pisonii) population dynamics at a salt marsh-mangrove ecotone	12/22/2021	12/31/2024
Weedon Island Preserve	Arthur, John W.	Archaeological Method and Theory	1/20/2022	12/31/2022
Weedon Island Preserve	Kolianos, Phylls	Discovering Weedon Island's Ancient Past	2/1/2022	4/30/2022

APPENDIX 19
Florida Master Site File

Figure 15 - List of Archaeological Surveys – Weedon Island Preserve

77 1977 – Archaeological Survey of Selected Portions of Weedon Island State Preserve, L. Ross Morrell and Louis D. Tesar, Sponsor – Division of Recreation and Parks

1522 1987 – An Archaeological Survey of the City of St. Petersburg, Florida, Piper Archaeological Research, Sponsor – City of St Petersburg

2745 1981 – St. Petersburg Architectural and Historic Resources, Community Development Department, Sponsor – City of St. Petersburg

2827 1991 – An Archaeological and Historical Survey of the Unincorporated Areas of Pinellas County, Florida, Robert J. Austin, C. Fuhrmeister, and H.F. Hansen, Sponsor – Pinellas County Commissioners

3979 1994 – Phase I Archaeological Investigations Weedon Island Preserve, Pinellas County, Florida, John C. Bedell and Petar D. Glumac, Sponsor – Parsons Engineering-Science

6544 2001 – Final Letter Report for the Phase I Archaeological Surve of the Proposed Interpretive Center at the Weedon Island Preserve, Pinellas County, Florida, Janus Research, Sponsor – Pinellas County Department of Environmental Management

7729 2001 – St. Petersburg, Wendy A Miller, Sponsor - Unspecified

10611 2004 – An Archaeological and Historical Survey of the 4th Street North Tower Location in Pinellas County, Florida, Meghan L. Ambrosino, Sponsor – ATC Associates, Inc.

N/A 2004 – Coastal Processes and Anthropogenic Factors Influencing the Geomorphic Evolution of Weedon Island, Florida. Jeanne Lambert, USF. 2006

12022 2005 – Comprehensive Cultural Resource Survey of Weedon Island Preserve, Pinellas County, Florida, Lori Collins, J. Dean, and M. O'Brien, Funded in part by a Division of Historical Resources Grant. 1A-32 Archaeological Survey Permit Number

13268 2006 – Phase I and II Testing of the Florida Power Corporation D/B/A Progress Energy Florida, Inc., Bartow Power Plant Repowering Project Area, Janus Research, Sponsor – Golder Associates, Inc.

14474 2007 – Archaeological Survey of Proposed Gulfstream Phase IV Extra Work Area (EWA) at the Progress Energy Bartow Plant Janus Research, Inc., 1A-32 Archaeological Survey Permit Number 0607.65, Sponsor – Progress Energy Florida

15541 2008 – Weedon Island Preserve Gateway Tract Archaeological Survey Project. Southeastern Archaeological Research, Inc., 1A-32 Archaeological Survey Permit Number 0708.26. Funded in part by Division of Historical Resources Grant, Sponsor – Pinellas County

15630 2008 – Archaeological Survey of the Florida Power Corporation D/B/A Progress Energy Florida, Inc., Northeast Substation – Wetland Mitigation Area. Janus Research, Inc., 1A-32 Archaeological Survey Permit Number 2006-07321, Sponsor – Progress Energy Florida

16115 2008 – Countywide Cultural Resources Survey, Pinellas County, Florida, Pinellas County Planning Department, Mary Beth Reed, G.C. Smith, Sponsor – Pinellas County Planning Deparmtment

Appendix 15: Weedon Island Cultural Sites listed in the Florida Master Site File

Site Name and FMSF#	Culture/Period	Description	Significance	Condition
Weeden Island PI00001	Late Archaic Prehistoric/Historic/ 19th Century American/20th Century	Multiple Sites	Listed to NRHP	Substantial Disturbance
Wright PI00052	Prehistoric	Shell Midden Ceramic scatter	Insufficient Information	Unknown
Dan's Island PI00053	Prehistoric	Shell midden Ceramic scatter	Insufficient Information	Unknown
Ross Island PI00056	Prehistoric	Shell midden Artifact Scatter	Insufficient Information Further work recommended	Substantial Disturbance
Riviera Bay 3 PI01243	Prehistoric/Historic 20th Century	Shell midden Artifact Scatter Building remains	Insufficient Information	Major Disturbance
Riviera Bay 4 PI01245	Prehistoric	Shell midden Artifact Scatter	Insufficient Information	Major Disturbance
Googe Island PI01247	Prehistoric	Shell Midden	Insufficient Information	Major Disturbance
ES 1 PI03353	Prehistoric	Lithic Scatter Prepottery	Insufficient Information	Unknown
Feather Sound/Big Island Mound PI01700	Prehistoric	Shell Midden Mounds	Eligible for local register; potential contributor to NR District	Major Disturbance
Midden at Feather Sound PI01759	Prehistoric	Shell Midden	Insufficient Information	Unknown
ES 2 PI03354	Archaic/Prehistoric	Artifact Scatter	Insufficient Information	Unknown
ES 3 PI03355	Middle Archaic	Artifact Scatter	Insufficient Information	Unknown
NN PI11471	20th Century American/1900s	Linear Resource Old road bed	Insufficient Information	Unknown

Site Name and FMSF#	Culture/Period	Description	Significance	Condition
NN PI11472	Prehistoric	Midden	Ineligible for NRHP/ Small	Minor Disturbance
NN PI11473	20th Century	Building remains	Insufficient Information	Substantial Disturbance
NN PI11474	Prehistoric/ 20th Century	Building remains/shell midden/ lithics	Eligible for NRHP	Substantial Disturbance
NN PI11475	Prehistoric	Surface Scatter	Insufficient Information	Unknown
NN PI11476	Prehistoric	Surface Scatter	Would not increase knowledge base of Preserve	Substantial Disturbance
NN PI11477	Prehistoric	Surface Scatter	Significantly tested without increase of knowledge base	Substantial Disturbance
NN PI11478	Prehistoric	Shell Midden Subsurface features	Insufficient Information	Minor Disturbance
NN PI11479	20th Century	Homestead	Insufficient Information	Major Disturbance
NN PI11481	20th Century	Surface Scatter	Insufficient Information	Unknown
NN PI11482	Prehistoric Manasota/Safety Harbor	Shell Midden/Campsite	Eligible for NR and potential contributor to NR District	Substantial Disturbance
NN PI11483	Prehistoric	Shell Midden	Not suspected to provide significant research value	Substantial Disturbance
NN PI11484	Prehistoric	Shell Midden Surface Scatter	Insufficient Information	Substantial Disturbance
NN PI11485	Prehistoric	Surface Scatter	Site damaged does not contain material to have research value	Substantial Disturbance

Site Name and FMSF#	Culture/Period	Description	Significance	Condition
NN PI11486	Prehistoric 20th Century	Shell Midden Surface Scatter Building remains	Lacks substantial deposits and limited	Substantial Disturbance
NN PI11487	Prehistoric 20th Century	Shell Midden Surface Scatter Building remains/farmstead	Surfacial material lacks context	Major Disturbance
NN PI11488	Prehistoric	Shell Midden	Insufficient Information	Major Disturbance
NN PI11489	Prehistoric	Shell Midden	Lacks artifacts and stratigraphic integrity; ineligible for NR	Redeposited
NN PI11490	Prehistoric/20th Century	Surface Scatter	Insufficient Information	Unknown
NN PI11491	Prehistoric	Shell Midden	Insufficient Information	Unknown
NN PI11492	20th Century	Wooden Catwalk	Further work recommended for local register	Redeposited
NN PI11493	Prehistoric Manasota	Shell Midden	Further work recommended for local register	Major Disturbance
Shoreline Midden Site PI11569	Prehistoric	Shell Midden	Eligible for local register	Major Disturbance
Shoreline Canoe PI11624	Prehistoric	12.17 m dugout canoe	Excavated on 3/1/11	In Conservation
Cedar Point PI11636	Historic	Historic refuse; Remains of 1930s fishing camp	Insufficient Information	Substantial Disturbance

Recorded Cultural Resources in the Weedon Island Preserve

Site ID	Location	UTM: Zone	Easting	Northing	
8Pi1	WIP	17	341700	3082470	
8Pi56	WIP	17	343270	3078900	
8Pi1243	WIP	17	341300	3081100	
8Pi1245	WIP	17	341340	3082000	
8Pi11471	WIP	17	341000	3082090	
8Pi11472	WIP	17	341660	3081460	
8Pi11473	WIP	17	341350	3081850	
8Pi11474	WIP	17	340450	3082120	
8Pi11475	WIP	17	340550	3082100	
8Pi11476	WIP	17	340500	3082200	
8Pi11477	WIP	17	340500	3082230	
8Pi11478	WIP	17	340700	3082280	
8Pi11479	WIP	17	340930	3082500	
8Pi11481	WIP	17	342120	3081720	
8Pi11482	WIP	17	341970	3081670	
8Pi11483	WIP	17	341900	3081600	
8Pi11484	WIP	17	342170	3081480	
8Pi11485	WIP	17	342090	3081600	
8Pi11486	WIP	17	342180	3081390	
8Pi11487	WIP	17	342140	3081350	
8Pi11488	WIP	17	342000	3081220	
8Pi11489	WIP	17	342700	3078850	
8Pi11490	WIP	17	342550	3079270	
8Pi11491	WIP	17	342920	3079500	
8Pi11492	WIP	17	342600	3081270	
8Pi11493	WIP	17	340910	3082580	
8Pi3353	WIP	17	341520	3081020	
8Pi3354	WIP	17	341570	3081140	
8Pi3355	WIP	17	341800	3081440	
8Pi1247	WIP	17	342580	3079200	
8Pi11569	WI Gateway	17	337330	3087940	
8Pi11624	WI Gateway	17	337580	3087870	
8Pi1759	WI Gateway	17	335700	3087940	
8Pi11636	WI Gateway	17	338095	3088150	
8Pi1700	WI Gateway	17	337200	3087590	
8Pi52	WI Gateway	17	Exact Location ukn		
8Pi53	WI Gateway	17	Exact Location ukn		

APPENDIX 20
Rental Agreements

SERVICES AGREEMENT

THIS SERVICES AGREEMENT ("Agreement") is made as of this 7th day of January, 20 22 ("Effective Date"), by and between Pinellas County, a political subdivision of the State of Florida ("County"), and Zaha Nosha LLC d/b/a ECOmersion ("Contractor") (individually, "Party," collectively, "Parties").

W I T N E S S E T H:

WHEREAS, the County has previously determined that it has a need for Concession Services, as defined herein, at Weedon Island Preserve, a County-operated facility at 1800 Weedon Dr. NE, St. Petersburg, FL 33702 ("The Preserve").

WHEREAS, the County requested proposals pursuant to 21-0501-R(PLU) ("RFP") for Rental & Concession Contractor for Weedon Island services; and based upon the County's assessment of Contractor's proposal, the County selected the Contractor to provide the Services as defined herein; and

WHEREAS, Contractor represents that it has the experience and expertise to perform the Services as set forth in this Agreement.

NOW, THEREFORE, in consideration of the above recitals, the mutual covenants, agreements, terms and conditions herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby mutually acknowledged, the Parties agree as follows:

1. Definitions.

A. "**Agreement**" means this Agreement, including all Exhibits, which are expressly incorporated herein by reference, and any amendments thereto.

B. "**County Confidential Information**" means any County information deemed confidential and/or exempt from Section 119.07, Florida Statutes, and Section 24(a), Article 1 of the Florida Constitution, or other applicable law, including any other information designated in writing by the County as County Confidential Information.

C. "**Contractor Confidential Information**" means any Contractor information that is designated as confidential and/or exempt by Florida's public records law, including information that constitutes a trade secret pursuant to Chapter 688, Florida Statutes, and is designated in this Agreement or in writing as a trade secret by Contractor (unless otherwise determined to be a public record by applicable Florida law). Notwithstanding the foregoing, Contractor Confidential Information does not include information that: (i) becomes public other than as a result of a disclosure by the County in breach of the Agreement; (ii) becomes available to the County on a non-confidential basis from a source other than Contractor, which is not prohibited from disclosing such information by obligation to Contractor; (iii) is known by the County prior to its receipt from Contractor without any obligation or confidentiality with respect thereto; or (iv) is developed by the County independently of any disclosures made by Contractor.

D. "**Contractor Personnel**" means all employees of Contractor, and all employees of subcontractors of Contractor, including, but not limited to temporary and/or leased employees, who are providing the Services at any time during the project term.

E. "Exclusive" shall mean that the County shall not grant a concession license agreement to any other party for the same or similar goods or services in The Preserve provided by Contractor during the term hereof; provided, however, the exclusive rights granted herein shall not apply to special events authorized by the County. In light of the exclusive nature of this Agreement, the County agrees to provide Contractor with reasonable advance notice of, and the right of first refusal to participate in, such special events authorized by the County to the extent that such special events entail the same or similar goods or services in The Preserve provided by Contractor during the term hereof.

F. **"Minimum Operating Standards"** shall mean the operation requirements described in **Section 6** incorporated herein by reference.

G. **"Monthly Gross Sales"** shall mean the gross revenues received by Contractor from all rentals, merchandise sales, and concession services in, on, or from The Preserve on a monthly basis during the term hereof. It includes the entire amount of the sales and revenues received for all services performed and merchandise sold in or from the Contractor, its employees, agents, subtenants, licensees and assignees, including all revenue derived by Contractor from its activities and business, whether for cash or for credit and the entire amount of all sales filled at or secured or received in The Preserve. Cancellations, refunds, and uncollectable amounts from which Contractor derives no revenue are excluded from Monthly Gross Sales. To the extent that Contractor applies a discount to its rentals, sales, or services, Monthly Gross Sales shall include only the discounted amount received by Contractor. The Compensation provision applies with full force and effect to any mail-order revenues, website revenues, electronic commerce, Internet or e-mail orders, which advertises, references, depicts or emanates from the Contractor's business at The Preserve.

H. "Concession Services" shall mean the services provided by the Contractor to the general public at The Preserve as described in the contract documents and attached Scope of Services (**Exhibit A)**.

2. **Conditions Precedent.** This Agreement, and the Parties' rights and obligations herein, are contingent upon and subject to the Contractor securing and/or providing the performance security, if required in Section 3, and the insurance coverage(s) required in Section 13, within ten (10) days of the Effective Date. No Services shall be performed by the Contractor and the County shall not incur any obligations of any type until Contractor satisfies these conditions. Unless waived in writing by the County, in the event the Contractor fails to satisfy the conditions precedent within the time required herein, the Agreement shall be deemed not to have been entered into and shall be null and void.

3. E-Verify. The Contractor and Subcontractor must register with and use the E-verify system in accordance with Florida Statute 448.095. A Contractor and Subcontractor may not enter into a contract with the County unless each party registers with and uses the E-verify system.

If a Contractor enters a contract with a Subcontractor, the Subcontractor must provide the Contractor with an affidavit stating that the Subcontractor does not employ, contract with, or subcontract with unauthorized aliens. The Contractor must maintain a copy of the affidavit for the duration of the contract.

If the County, Contractor, or Subcontract has a good faith belief that a person or entity with which it is contracting has knowingly violated Florida Statute 448.09(1) shall immediately terminate the contract with the person or entity.

If the County has a good faith belief that a Subcontractor knowingly violated this provision, but the Contractor otherwise complied with this provision, the County will notify the Contractor and order that the Contractor immediately terminate the contract with the Subcontractor.

A contract terminated under the provisions of this section is not a breach of contract and may not considered such. Any contract termination under the provisions of this section may be challenged to Section 448.095(2)(d), Florida Statute. Contractor acknowledges upon termination of this agreement by the County for violation of this section by Contractor, Contractor may not be awarded a public contract for at least one (1) year. Contractor acknowledges that Contractor is liable for any additional costs incurred by the County as a result of termination of any contract for a violation of this section. Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in this section, requiring the subcontracts to include these clauses in any lower tier subcontracts. Contractor shall be responsible for compliance by any Subcontractor or Lower Tier Subcontractor with the clause set for in this section.

4. Compensation. As compensation for the privilege of providing Concession Services to the County as described herein, the Contractor shall pay the County 27 percent (%) of the Monthly Gross Sales on rentals, instruction and tours, and 15 percent (%) of the Monthly Gross Sales on merchandise, plus any applicable sales tax. Payment shall be made monthly, on or before the 15th day of each month based on preceding month's sales, with the first payment due on the 15th day of the month following execution of the final agreement. Payments not received by the Due Date

shall be subject to a late penalty in the amount of 1% of the fee due for each day the payment is late. If payments and applicable penalties are not received within thirty (30) days of the Due Date, then the County shall provide Contractor with written notice of the outstanding payments and applicable penalties and at least thirty (30) days' opportunity to cure. Should Contractor fail to cure, then the County may cancel this Agreement and begin procedures to collect any outstanding payments.

i) Payments shall be accompanied by a compensation report, which at a minimum shall include the information depicted on **Exhibit B**, Sample Compensation Report. The monthly compensation reports shall be based on source documents, numbered receipts and books of original entry, and shall include year-to-date cumulative sales. Books of original entry and source documents will remain with the Contractor.
ii) The monthly payments shall be made payable to "Pinellas County" and sent to the Department of Parks and Conservation Resources, 12520 Ulmerton Road, Largo, Florida, 33774.
iii) In addition to applicable sales tax, the Contractor shall be solely responsible for an ad valorem, rental or similar taxes levied upon real property arising from the agreement.
iv) On a quarterly basis, the Contractor shall provide the County with a cumulative registry of guests that include the following information:
    (1) Number of canoes, kayaks and/or paddle boards rented
    (2) Rental costs
    (3) Total number of guests served
    (4) Days and times of rentals
    (5) Any demographic information that may be collected
    (6) Any consumer surveys.

5. Audit. The Contractor shall retain all records relating to this contract for a period of at least five (5) years after final payment is made. All records and numbered receipts will be maintained in accordance with Pinellas County policy, and inspection of records is pursuant to Chapter 119, Florida Statures. In addition, Pinellas County reserves the right to audit such records pursuant to Pinellas County Code, Chapter 2, with reasonable advance written notice to Contractor of Pinellas County's intent to conduct an audit.

6. Parking.

The Contractor shall agree to direct patrons to park in the Weedon Island Preserve Cultural and Natural History Center's main parking lot.

7. Permits/Licenses. The Contractor shall secure and maintain any (and all) permits and licenses to provide services pursuant to this contract. The Contractor shall comply with all laws, regulations and ordinances. It is the County's responsibility to secure permission for a Kayak/Canoe/Standup Paddle Concession to operate at the designated site from the State of Florida within ninety (90) days of an agreement. In the event such permission is not granted by the State, the County may cancel this agreement immediately.

8. Minimum Operating Standards. Contractor shall conform to the following Operating Standards:

a. The Contractor shall operate the concession services seven (7) days per week, from 7:00 am until posted time (sunset), excluding the day after Thanksgiving and Christmas Day.

b. Employees shall wear uniforms (i.e., t-shirts, badges) at all times and staffing shall be sufficient to meet service demand.

c. Contractor shall provide sufficient equipment to meet service demand. All equipment in use shall be kept in operable condition at all times. Should equipment require repair or replacement, Contractor shall remove such equipment from use and ensure that there is sufficient additional equipment to meet demand. All equipment, including maintenance, repair and replacements shall be at the sole expense of the Contractor.

d. All kayaks and canoes shall be accounted for by the end of each day.

e. The Contractor must require each patron to sign a County-approved waiver and release prior to the rental of a kayak or canoe. County shall advise Contractor on or before the Effective Date of this Agreement as to whether Contractor's proposed waiver and release is County-approved. Should revisions to Contractor's proposed waiver and release be necessary, Contractor and County shall reasonably cooperate in reaching an agreement on the content of the waiver and release. County shall not unreasonably withhold approval of Contractor's proposed waiver and release.

f. Display of merchandise shall be temporary and shall be removed from the Preserve by the end of each day.

g. In the event of inclement weather, the Contractor may cease operations until the weather improves with notice to Parks. County designates the following person(s) as the Parks representatives for purposes of notification under this section:

Senior Grants & Contracts Specialist
Pinellas County Parks and Conservation Resources
12520 Ulmerton Rd., Largo, FL 33774
Office: 727-582-2866

("Parks Designated Representative").

h. The Contractor shall also keep the area free of all hazards that are reasonably within the Contractor's ability to prevent or remove at the Contractor's sole expense. Storage of hazardous materials or activities that produce any hazardous substances is strictly prohibited on the Preserve.

i. At the end of each day of operation, the contractor shall remove all equipment, including any marker(s) from the water.

j. Signs or Advertising

I. Signs or advertising utilized in marketing for the concession services shall have prior written approval from Parks. Notification of approval shall be provided by Parks Designated Representative. County shall not unreasonably withhold approval of signs or advertising.

II. One (1) unlit sign advertising the Contractors contact information and hours of operation shall be installed along Weedon Drive NE, on the west side of the road. Such sign shall not exceed 48" X 36".

k. The Contractor shall not allow activities which are prohibited in all other County-owned or County occupied buildings or land under the provisions of federal, state or local laws, rules, regulations or ordinances. By way of illustration and not limitation, state law prohibits the use of County-occupied buildings or land for political fundraisers (see §106.15(40), Florida Statutes) and federal and state law prohibits the use of County occupied buildings or land for any implied promotion of a religion.

l. The County shall only be responsible for supplying freshwater utilities to the designated service area. The County shall not be liable in any manner for damages to the contractor's business and/or inventory, or for any other claim, resulting from any interruption in utility services.

m. All property of any kind that may be within the Preserve during the continuance of this agreement shall be at the sole risk of the Contractor, and the County shall not be liable to the Contractor or any other person for any injury, loss or damage to property or to any person on the Preserve.

n. The Contractor shall maintain the designated service area, including trash pickup, and keep the area in good repair and in a clean, neat, orderly, and sanitary condition.

o. Any alterations, improvements, or additions in or to the Preserve, or any installation of other equipment of any kind relating to the use of fresh water, heating, air conditioning, or electrical shall require written consent by Parks, provided by Parks Designated Representative. Likewise, for additions of building systems or equipment. On or before the Effective Date of this Agreement, the Parks Designated Representative shall notify Contractor in writing as to whether Contractor's proposed trailer, storage, and installation of solar-powered electric equipment is approved. Should revisions to Contractor's proposed trailer, storage, and electric equipment be necessary, Contractor and County shall reasonably cooperate in reaching an agreement on the revisions to be made. County shall not unreasonably withhold approval of Contractor's proposed trailer, storage, and solar-powered electric equipment. All County-approved alterations, improvements, or additions made by the Contractor shall be at the sole expense and responsibility of the Contractor.

p. The Contractor, at its own expense, shall pay for all charges for labor, services and materials used in connection with any improvements or repairs to the Preserve undertaken by its business. All additions, improvements and fixtures, except moveable equipment and inventory, will become the property of the County and remain on the Preserve upon the termination of this Agreement.

q. The Kayak/Canoe/Standup Paddle Concession Services shall be provided at a location approved by the County as illustrated in **Exhibit D**. To Facilitate the Kayak/Canoe/Standup Paddle Concession Services, the County agrees to set aside the existing parking spaces at the rental location for the Contractor as illustrated in **Exhibit D.**

r. The Contractor agrees to direct patrons to park in the Weedon Island Preserve Cultural and Natural History Center's main parking lot.

s. No alcoholic beverages will be allowed at the Preserve in accordance with applicable County ordinances. Contractor shall not bring, and shall not allow its employees, agents, representatives, and independent contractors to bring, any alcoholic beverages to the Preserve. Contractor is not responsible for the actions or omissions of any third parties, including visitors to the Preserve, for violations of the applicable County ordinances.

t. Contractor agrees to establish and, when necessary, implement a County approved Emergency Response Plan to assist patrons who may need search and rescue services (**Exhibit C**). Such Plan will ensure that each canoe/kayak is equipped with a means of communication and, if necessary, provide a two-way radio or other suitable communications devices for this purpose. This Plan shall account for all canoes/kayaks at the end of each day. The Contractor's Plan shall include the criteria and subsequent actions when inclement weather occurs. County shall provide written notice to Contractor on or before the Effective Date of this Agreement as to whether the Contractor's Plan is approved by County. Should revisions to the Contractor's Plan be necessary, Contractor and County shall reasonably cooperate in reaching an agreement on the revisions to be made. County shall not unreasonably withhold approval of the Contractor's Plan. The Contractor shall require a County-approved waiver and release to be executed by all patrons prior to any rental pursuant to the terms of Section 7(e) herein.

4. **Services Requiring Prior Approval.** Contractor shall not commence work on any Services requiring prior written authorization in the Statement of Work without approval from Parks & Conservation Resources Director.

5. **Amendment:** This Agreement may be amended only by mutual written consent of the parties.

6. **Assignment/Subcontracting:** The Contractor shall provide all services required by this Agreement. No assignment or subcontracting shall be allowed without the prior written consent of the County. In the event of a corporate acquisition and/or merger, the Contractor shall provide written notice to the County within thirty (30) business days of Contractor's notice of such action or upon the occurrence of said action, whichever occurs first. The County shall have the right to terminate this Agreement, which right shall not be unreasonably exercised by the County, in those instances in which a corporate acquisition

and/or merger represent a conflict of interest or are contrary to any local, state or federal laws. Action by the County awarding a proposal to a proposer which has disclosed its intent to assign or subcontract in its response to the RFP, without exception shall constitute approval for purposes of this Agreement. In the event that a subcontractor is approved by the County, contractor and subcontractor shall abide by terms in Section 3 provided herein.

7. **Independent Contractor Status and Compliance with the Immigration Reform and Control Act**. Contractor is and shall remain an independent contractor and is neither agent, employee, partner, nor joint venturer of County. Contractor acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986 located at 8 U.S.C. 1324, et seq, and regulations relating thereto, as either may be amended from time to time. Failure to comply with the above provisions shall be considered a material breach of the Agreement.

8. **Term of Agreement.**

A. The term of this Agreement shall commence on:

☒ the Effective Date; or

and shall remain in full force and for sixty (60) months, or until termination of the Agreement, whichever occurs first.

B. Term Extension.

☒ The Parties may extend the term of this Agreement for one (1) additional twenty-four (24) month period(s) pursuant to the same terms, conditions, and pricing set forth in the Agreement by mutually executing an amendment to this Agreement, as provided herein.

9. **Termination and/or Cancellation.**

- Failure of the Contractor to comply with any of the provisions of this Agreement shall be considered a material breach of contract and shall be cause for immediate termination of the Agreement at the sole discretion of the County.

- No waiver of any breach of any of the covenants herein shall be implied from a failure by either party to take action due to such breach. Further, one or more waivers of any covenant by either party shall not be construed as a waiver of a subsequent breach of the same covenant or condition by the other party, nor shall such consent or approval be construed as consent or approval of any subsequent similar acts by the other party.

- In the event that sufficient budgeted funds are not available for the County's obligations under this Agreement for a new fiscal period, the County shall notify the Contractor of such occurrence and the Agreement shall terminate on the last day of the then current fiscal period without penalty or expense to the County.

- In addition to all other legal remedies available to County, in the event the County elects to cancel this Agreement as provided herein, the County may obtain from another source any services which have not been provided within the period of time stated in the proposal, or if no such time is stated, within a reasonable period of time from the date of order or request, as determined by County.

- In the event that County does not comply with any of its obligations under this Agreement, Contractor may provide written notice of County's failure to the Parks Designated Representative with thirty (30) days' opportunity to cure. Should County fail to cure within the specified cure period, this Agreement may be deemed immediately terminated at Contractor's option. Should Contractor opt to terminate this Agreement, Contractor shall provide notice of termination to the Parks Designated Representative.

10. **Time is of the Essence.** Time is of the essence with respect to all provisions of this Agreement that specify a time for performance, including the Services as described in Exhibits attached hereto; provided, however, that the foregoing shall not be construed to limit a Party's cure period allowed in the Agreement.

11. **Public Records.** Contractor acknowledges that information and data it manages as part of the services may be public records in accordance with Chapter 119, Florida Statutes and Pinellas County public records policies. Contractor agrees that prior to providing services it will implement policies and procedures to maintain, produce, secure, and retain public records in accordance with applicable laws, regulations, and County policies, including but not limited to Section 119.0701, Florida Statutes. Notwithstanding any other provision of this Agreement relating to compensation, the Contractor agrees to charge the County, and/or any third parties requesting public records only such fees allowed by Section 119.07, Florida Statutes, and County policy for locating and producing public records during the term of this Agreement. County Confidential Information and Contractor Confidential Information shall not be included in the public records that Contractor is obligated to maintain, produce, secure, and retain except as otherwise required by law.

If the Contractor has questions regarding the application of Chapter 119, Florida Statutes, to the Contractor's duty to provide public records relating to this contract, contact the Pinellas County Board of County Commissioners, Purchasing and Risk Management Department, Operations Manager custodian of public records at 727-464-3311, purchase@pinellascounty.org, Pinellas County Government, Purchasing and Risk Management Department, Operations Manager, 400 S. Ft. Harrison Ave, 6th Floor, Clearwater, FL 33756.

12. **Compliance with Laws.**

Contractor shall comply with all applicable federal, state, county and local laws, ordinances, rules and regulations in the performance of its obligations under this Agreement, including the procurement of permits and certificates where required, and including but not limited to laws related to Workers Compensation, Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973, Minority Business Enterprise (MBE), occupational safety and health and the environment, equal employment opportunity, privacy of medical records and information, as applicable. Failure to comply with any of the above provisions shall be considered a material breach of the Agreement.

13. **Public Entities Crimes**

Contractor is directed to the Florida Public Entities Crime Act, Section 287.133, Florida Statutes, as well as Florida Statute 287.135 regarding Scrutinized Companies, and represents to County that Contractor is qualified to transact business with public entities in Florida, and to enter into and fully perform this Agreement subject to the provisions state therein. Failure to comply with any of the above provisions shall be considered a material breach of the Agreement.

14. **Liability and Insurance.**

A. **Insurance.** Contractor shall comply with the insurance requirements set out in **Exhibit F**, attached hereto and incorporated herein by reference.

B. **Indemnification.** Contractor must indemnify, pay the costs of defense, including attorney's fees and hold harmless the County from all suits, actions or claims of any character brought on account of any injuries or damages received or sustained by any person, persons or property, by or from said Contractor; or by or in consequence of any neglect in safeguarding the work; or by, or on account of, any act of omission, neglect or misconduct of the said Contractor, on account of any act or amounts recovered under the "Workers

Compensation Law" or of any other laws, bylaws, ordinance, order of decrees, except only such injury or damage as was occasioned by the sole negligence of the County. Contractor agrees to indemnify the County and hold it harmless from and against all claims, liability, loss, damage or expense, including counsel fees, arising from or by reason of any actual or claimed trademark, patent or copyright infringement or litigation based thereon, with respect to the goods or any part thereof covered by this Agreement, and such obligation will survive acceptance of the goods and payment thereof by the County. Nothing contained herein shall be construed to waive the County's sovereign immunity under §768.28, Florida Statutes.

C. **Liability.** Neither the County nor Contractor shall make any express or implied agreements, guarantees or representations, or incur any debt, in the name of or on behalf of the other Party. Neither the County nor Contractor shall be obligated by or have any liability under any agreements or representations made by the other that are not expressly authorized hereunder. The County shall have no liability or obligation for any damages to any person or property directly or indirectly arising out of the operation by Contractor of its business, whether caused by Contractor's negligence or willful action or failure to act,

D. **Contractor's Taxes.** The County will have no liability for any sales, service, value added, use, excise, gross receipts, property, workers' compensation, unemployment compensation, withholding or other taxes, whether levied upon Contractor or Contractor's assets, or upon the County in connection with Services performed or business conducted by Contractor. Payment of all such taxes and liabilities shall be the responsibility of Contractor.

15. County's Funding. The Agreement is not a general obligation of the County. It is understood that neither this Agreement nor any representation by any County employee or officer creates any obligation to appropriate or make monies available for the purpose of the Agreement beyond the fiscal year in which this Agreement is executed. No liability shall be incurred by the County, or any department, beyond the monies budgeted and available for this purpose. If funds are not appropriated by the County for any or all of this Agreement, the County shall not be obligated to pay any sums provided pursuant to this Agreement beyond the portion for which funds are appropriated. The County agrees to promptly notify Contractor in writing of such failure of appropriation, and upon receipt of such notice, this Agreement, and all rights and obligations contained herein, shall terminate without liability or penalty to the County.

16. Acceptance of Services. For all Services and deliverables that require County acceptance as provided in the Statement of Work, the County, through the Parks & Conservation Resources Director or designee, will have ten (10) calendar days to review the deliverable(s) after receipt or completion of same by Contractor, and either accept or reject the deliverable(s) by written notice to contact provided by Contractor. If a deliverable is rejected, the written notice from the County will specify any required changes, deficiencies, and/or additions necessary. Contractor shall then have seven (7) calendar days to revise the deliverable(s) to resubmit and/or complete the deliverable(s) for review and approval by the County, who will then have seven (7) calendar days to review and approve, or reject the deliverable(s); provided however, that Contractor shall not be responsible for any delays in the overall project schedule that result from the County's failure to timely approve or reject deliverable(s) as provided herein. Upon final acceptance of the deliverable(s), the County will accept the deliverable(s) in writing.

17. Survival. The following provisions shall survive the expiration or termination of the Term of this Agreement: 7, 9, 10, 13, 20, 23, and any other which by their nature would survive termination.

18. Notices. All notices, authorizations, and requests in connection with this Agreement shall be deemed given on the day they are: (1) deposited in the U.S. mail, postage prepaid, certified or registered, return receipt requested; or (2) sent by air express courier (e.g., Federal Express, Airborne, etc.), charges prepaid, return receipt requested; or (iii) sent via email and addressed as set forth below, which designated person(s) may be amended by either Party by giving written notice to the other Party:

For County:
Senior Grants & Contracts Specialist
Parks & Conservation Resources
12520 Ulmerton Rd., Largo, FL 33774

For Contractor:
ZAHA NOSHA, LLC
c/o Noah Shaffer
401 E. Jackson St., Suite 3300
Tampa, FL 33602

with a copy to:
Purchasing Director
Pinellas County Purchasing Department
400 South Fort Harrison Avenue
Clearwater, FL 33756

19. Conflict of Interest.

A. The Contractor represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of the Services required hereunder, and that no person having any such interest shall be employed by Contractor during the agreement term and any extensions.

B. The Contractor shall promptly notify the County in writing of any business association, interest, or other circumstance which constitutes a conflict of interest as provided herein. If the Contractor is in doubt as to whether a prospective business association, interest, or other circumstance constitutes a conflict of interest, the Contractor may identify the prospective business association, interest or circumstance, the nature of work that the Contractor may undertake and request an opinion as to whether the business association, interest or circumstance constitutes a conflict of interest if entered into by the Contractor. The County agrees to notify the Contractor of its opinion within (10) calendar days of receipt of notification by the Contractor, which shall be binding on the Contractor.

20. Severability. The terms and conditions of this Agreement shall be deemed to be severable. Consequently, if any clause, term, or condition hereof shall be held to be illegal or void, such determination shall not affect the validity or legality of the remaining terms and conditions, and notwithstanding any such determination, this Agreement shall continue in full force and effect unless the particular clause, term, or condition held to be illegal or void renders the balance of the Agreement impossible to perform.

21. Applicable Law and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida (without regard to principles of conflicts of laws). The Parties agree that all actions or proceedings arising in connection with this Agreement shall be tried and litigated exclusively in the state or federal (if permitted by law and a Party elects to file an action in federal court) courts located in or for Pinellas County, Florida. This choice of venue is intended by the Parties to be mandatory and not permissive in nature, and to preclude the possibility of litigation between the Parties with respect to, or arising out of, this Agreement in any jurisdiction other than that specified in this section. Each Party waives any right it may have to assert the doctrine of *forum non conveniens* or similar doctrine or to object to venue with respect to any proceeding brought in accordance with this section.

22. Waiver. No waiver by either Party of any breach or violation of any covenant, term, condition, or provision of this Agreement or of the provisions of any ordinance or law, shall be construed to waive any other term, covenant, condition, provisions, ordinance or law, or of any subsequent breach or violation of the same.

23. **Due Authority.** Each Party to this Agreement represents and warrants that: (i) it has the full right and authority and has obtained all necessary approvals to enter into this Agreement; (ii) each person executing this Agreement on behalf of the Party is authorized to do so; (iii) this Agreement constitutes a valid and legally binding obligation of the Party, enforceable in accordance with its terms.

24. **No Third Party Beneficiary.** The Parties hereto acknowledge and agree that there are no third party beneficiaries to this Agreement. Persons or entities not a party to this Agreement may not claim any benefit from this Agreement or as third party beneficiaries hereto.

25. **Entire Agreement.** This Agreement constitutes the entire Agreement between the Parties and supersedes all prior negotiations, representations or agreements either oral or written.

(Signature Page Follows)

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year first written.

PINELLAS COUNTY, FLORIDA
By and through its
Division Director of Purchasing and
Risk Management, Administrative
Services

Merry Celeste
By Merry Celeste

ZAHA NOSHA, LLC; Dba as ECOmersion
Name of Firm

By:
Signature

Noah Shaffer
Print Name

Manager
Title

APPROVED AS TO FORM
By: *Keiah Townsend*
Office of the County Attorney

Approved as to Form

By:
Office of the County Attorney

2c) Scope of Services

ECOmersion will operate in Weedon Island Preserve to include rental of kayak, canoe, and paddleboard equipment; guided tours and special programming; and sales of concessions, clothing items, sunscreen, equipment, and other items through the period of this agreement, according to the methods and strategy outlined in this section and Section 2b.

Operating Hours and Conditions

- Any and all hours Weedon Island is open to the public (7:00 A.M. to Sunset) beginning on the first day of the agreement and ending on the final date
- All employees to wear company approved uniform and adhere to restrictions and requirements of Pinellas County Parks and Conservation
- A minimum of two employees will be at the launch site during peak operating hours; staffing requirements will be adjusted based on season, time of day, and demand

Inventory

ECOmersion will furnish the services outlined in this proposal with the equipment listed below. Pictures and equipment details are provided in Appendix G. This level of equipment will permit ECOmersion to place 100 guests on the water at any time.

Equipment Type	# < 1 Year Old	# < 3 Years Old	Total
Single Kayaks	22	8	30
Single Fishing Kayaks	5	0	5
Tandem Kayaks	18	2	20
Sea Kayaks	4	1	5
Canoes	3	0	3
Stand-Up Paddleboard	10	0	10
Pedalboards	5	0	5
Clear Bottom Kayaks	5	0	5
Drybag	10	5	15
Kayak anchors	5	0	5
Action cameras	5	0	5
Fishing Gear for Rental	5	0	5

The following items will be provided at no cost to guests:

- Maps and Preserve Guidebook
- Paddles
- Coast Guard Approved Type II or III Personal Flotation Device

Equipment Maintenance

- Equipment will be inspected annually by the Coast Guard to ensure safety and condition
- Equipment will be visually inspected by management on monthly basis (See Sample Inspection Report in Appendix E)
- Repairs and replacements will be made as needed



Equipment Accounting

- Kayaks will be numbered with unique identifiers and assigned to guests at check-in
- Kayaks will be checked-out via unique identifier upon reservation end to ensure all kayaks are returned by end of day

Site Conditions

- No hazardous material will be stored at the site
- All merchandise will be stored and removed from sight at the end of the day
- Trash will be cleaned up daily at the site
- Employees will have an air-conditioned workspace that is enclosed
- ECOmersion will satisfy the insurance requirements outlined in the Request for Proposal and Service Agreement.

Rental Services

Paddle sport equipment rentals are the core business of Weedon Island. The majority of projected revenue will come from equipment rentals, and we strive to provide a wide range of rental equipment to capture a broad customer base. Our price and equipment type schedule are outlined below. ECOmersion Rental and Tour Services are outlined in detail in Appendix H.

Type	**1-Hour**	**2-Hour**	**Half-day**
Single Kayaks	$25.00	$40.00	$50.00
Tandem Kayaks	$35.00	$60.00	$70.00
Sea Kayaks	$45.00	$60.00	$80.00
Canoes	$30.00	$55.00	$75.00
Stand-Up Paddleboard	$25.00	$45.00	$60.00
Pedalboards	$25.00	$45.00	$60.00
Clear Bottom Kayaks	Tour	Tour	Tour
Dry bag	$5.00	$5.00	$5.00
Kayak anchor	$5.00	$5.00	$5.00
Action cameras	$30.00	$30.00	$30.00



Weedon Island Tours

Guided tours are ECOmersion's specialty. Our staff excel in face-to-face interaction due to their dedication to guest experience. The ECOmersion team's knowledge of local ecosystems is unmatched, as our guides are marine and environmental scientists who received their degrees in Weedon Island's backyard. Guests frequently comment on the excitement, knowledge, and passion of our guides. We will continue to deliver the highest level of service at Weedon Island.

Tours are a critical part of a kayak company's guest retention strategy. They are an opportunity to showcase the culture of a company, and to educate guests in paddling techniques and the best features of the preserve. Many guests, especially first-time paddlers, will value the opportunity to explore Weedon Island with an experienced kayak guide who will coach them on their paddling technique and explain the nature preserve's

intricacies in greater detail than they could understand on their own. We expect to receive a significant portion of revenue from our four different types of guided tours – Sunset, Mangrove, Avifauna, and Conservation tours.

Weedon Island Sunset Tours

ECOmersion staff will perform a late afternoon paddle tour with guests who want to experience a one-of-a-kind sunset from the waters of Weedon Island Preserve. The staff will take guests to a sandbar location to watch the sunset and return before dark. Sunset tours will be offered weekly or more frequently based on demand.

Weedon Island Mangrove Tours

ECOmersion staff will perform a mangrove paddle tour with guests who want to utilize the experience of ECOmersion's staff to gain paddling tips and a higher level of insight into the local flora and fauna in the mangroves. Mangrove tours will be offered weekly or more frequently based on demand.



Avifauna and Conservation Tours

Avifauna and Conservation tours will be offered on a less frequent basis and are considered special programs. They will be discussed in detail below.

Equipment Type	**Capacity**	**Cost / Person**
Sunset Tour	10	$55.00
Mangrove Tour	10	$45.00
Courses	Varies	Varies
Special Program	Varies	Varies

Our median scenario (expected) annual revenue projections for guided tours indicate that we will achieve nearly $60,000 in tour revenue at Weedon Island in year 1 of the proposal.

Special Programs

In alignment with Pinellas County's key initiatives, ECOmersion has carefully developed special programs focused on developing a quality workforce, ensuring public's safety and welfare, and practicing environmental stewardship. ECOmersion's special programs are discussed further in Appendix H.

Girl Scouts Badge Workshops and School Field Trips

ECOmersion has worked within the framework provided by the Girl Scouts of America to develop a program allowing young women to obtain different outdoor recreation and conservation related badges according to their scouting level. This program may be replicated for any troop in the nation, and some components will be adapted to the general public for school field trip programs.

Cleanups

ECOmersion performs debris-removal and park clean up events on at least a monthly basis. Each year we set out a goal to remove double the amount of debris from local parks as the year before.



Unique Experience Paddling Tours

ECOmersion plans to complete paddling tours with Tampa Bay Watch marine biologists to discuss the local flora and fauna in greater detail. We plan to invite special guests such as aviary experts from the St. Pete Audubon Society to provide photographers and bird watching enthusiasts an opportunity to get close to some of the rarest birds in the world.



Conservation and Historical Tours

ECOmersion intends to conduct tours through the mangroves at Weedon Island with a focus on the conservation efforts going on within the preserve and county, as well as the rich history and artifacts that have been discovered in the preserve.

Instructional Paddling Courses

Kayak and SUP Courses may be provided according to demand. A list of courses may be found in Appendix H ECOmersion plans to collaborate with Pinellas Paddlers group to offer a "First Time Paddler Course". ECOmersion staff will assist guests who have never paddled before, providing guidance to improve their technique and learn about the sport.

Environmental Benefits and Fundraisers

ECOmersion intends to develop a broad reaching event focused on paddle sports called Paddle Pinellas. This event will feature a competitive race, a fun event for guests of all ages, food, merchandise, and beverages. We are also open to partnering with local organizations to put on benefit tours and fundraising events.

Retail

ECOmersion plans to offer the following concessions for sale at Weedon Island, depending on demand:

- Branded T-shirts and hats
- Reef safe sunscreen
- Bug repellent
- Dry bags and waterproof phone protectors
- Water (free refills)
- Limited food item

Reporting



ECOmersion will maintain detailed books and records within the FareHarbor and QuickBooks electronic systems. Smartwaiver software is integrated into the booking process and allows for paperless waiver storage and signature. The books and records will be downloaded and stored on a company computer with cloud back up on a semi-annual basis and stored for a minimum 5 years in a manner that follows the guidelines of Chapter 119, Florida Statutes and Pinellas County Code Chapter 2.

ECOmersion will obtain, store, and report to the county all customer demographic information, rental type and number of each type booked, rental cost, total number of guests serviced, time and date of the reservation, and any consumer surveys associated with the booking on a quarterly basis. **27% of Gross Equipment Rental** and **Tour Revenue** and **15% of the gross retail revenue** will be reported and paid to Pinellas County monthly prior to the 15th day of the following month. Payments shall be accompanied by a compensation report which will include the information depicted on Attachment 2-Sample Compensation Report.

ECOmersion guests will be able to provide feedback via Survey Monkey once they have completed their experience. Responses are stored in cloud-based storage, and copies of the responses are sent automatically to two members of management to maintain the integrity of the review. Customer feedback will be shared with Pinellas County as required.

2d) Proposed Compensation

ECOmersion will pay **27% of gross revenue** from paddle sport rentals, tours, special programs, and instruction courses related to paddle sports at Weedon Island to Pinellas County on a monthly basis. ECOmersion will pay **15% of gross retail revenue** and net revenue from equipment and gear (dry bag, kayak anchor, camera, etc.) rentals at Weedon Island Preserve to Pinellas County Board of County Commissioners on a monthly basis. Net rental revenue will be calculated as gross sales minus any sales concessions, discounts, or refunds provided to customers.

ECOmersion has developed lucrative revenue generating activities that take place during time periods that have historically been periods of low sales such as the winter months and early morning. ECOmersion intends to substantially improve revenue generated from Weedon Island by activating these periods.

We expect our proposed solution to Pinellas County Parks and Conservation Resources Department (Parks)'s requirements to provide the following results:

Paddle Sport Rentals Tours and Instruction

Year	1	2	3	4	5
Date	11/30/22	11/30/23	11/30/24	11/30/25	11/30/26
Revenue					
Rental Revenue	$ 275,544.58	$ 294,832.70	$ 315,470.99	$ 337,553.96	$ 361,182.74
Tour Revenue	$ 58,808.01	$ 62,924.57	$ 67,329.29	$ 72,042.34	$ 77,085.30
Instruction and Event Revenue	$ 15,645.00	$ 16,404.15	$ 17,216.44	$ 18,085.59	$ 19,015.58
Gross Revenue	$ 349,997.59	$ 374,161.42	$ 400,016.72	$ 427,681.89	$ 457,283.63
Less: Percent of Revenue	$ (94,499.35)	$ (101,023.58)	$ (108,004.52)	$ (115,474.11)	$ (123,466.58)
Net Revenue	$ 255,498.24	$ 273,137.84	$ 292,012.21	$ 312,207.78	$ 333,817.05

Retail Merchandise Sales and Gear Rental

Year	1	2	3	4	5
Date	11/30/22	11/30/23	11/30/24	11/30/25	11/30/26
Revenue					
Retail Revenue	$ 6,500.00	$ 6,955.00	$ 7,441.85	$ 7,962.78	$ 8,520.17
Gear Rental Revenue	$ 3,500.00	$ 3,745.00	$ 4,007.15	$ 4,287.65	$ 4,587.79
Gross Revenue	$ 10,000.00	$ 10,700.00	$ 11,449.00	$ 12,250.43	$ 13,107.96
Less: Percent of Revenue	$ (1,500.00)	$ (1,605.00)	$ (1,717.35)	$ (1,837.56)	$ (1,966.19)
Net Revenue	$ 8,500.00	$ 9,095.00	$ 9,731.65	$ 10,412.87	$ 11,141.77

Revenue projections indicate that ECOmersion will remit **$96,000** to Pinellas County in Year 1 of the proposal period. ECOmersion projects gross revenue to increase at 7.0% annually over the proposal period due to marketing synergies, improvement of market fundamentals, and business model optimization. Supporting data for revenue projections and detailed calculation methodology provided in Appendix J.

PROPOSED PERCENTAGE OF GROSS SALES

Proposer agree to pay the County, the following percentage of sales, due on a monthly basis, on or before the 15th of each month:

- **27% gross rental, tour, instruction and event revenue**
- **15% of gross retail and merchandise revenue**

Noah Shaffer, Manager

Print Name of Authorized Agent / Title

Sign

10/27/2021
Date

2e) Exceptions

There are no exceptions to the Request for Proposal.

CONCLUSION

ECOmersion is excited to work alongside the Pinellas County Parks and Conservation Resources Department (Parks) and supporting the efforts of Pinellas County to improve in 5 categories: 1) delivering first class service to the public, 2) fostering continual economic growth and vitality, 3) practicing superior environmental stewardship, 4) ensuring the public's safety and welfare, and 5) creating a quality workforce.

We are confident that our 80+ years of collective experience in paddle sports will allow us to exceed the current operating standards and generate a higher level of attention on Weedon Island Preserve as a destination. This will lead to increased revenue streams to Pinellas County.

ECOmersion's adherence to its core values of conservation, commerce, and community will provide a stable foundation for Weedon Island to prosper over the next 5 years. We look forward to receiving your response.

EXHIBIT B

Sample Compensation Report

PINELLAS COUNTY CONCESSION MONTHLY SUMMARY REPORT

CONCESSION NAME: **Rental and Concession vendor for Weedon Island**

MAKE CHECK PAYABLE TO: **Pinellas County Board of County Commissioners (BOCC)**

MAIL TO: **Pinellas County Parks and Conservation Resources**
Attn: Finance Section
12520 Ulmerton Road
Largo, FL 33774

DATE OF REPORT: _____

GROSS SALES		**PAYMENT DUE TO COUNTY**	
Rentals	$ _____	(27 % of gross sales)	_____
Merchandise	$ _____	(15 % of merchandise sales)	_____
Total Gross Sales:	$ _____	***Total Payment Due:***	$ _____
Total Gross Sales YTD:	$ _____	***Total Payments YTD:***	$ _____

Signature: _____ **Date:** _____

Print Name: _____

Payments must be submitted by the 15th of the month.

EXHIBIT C : EMERGENCY RESPONSE PROCEDURE

The following procedures are adapted from the Canoe / Kayak Canada Whitewater Kayak Leader 3 training manual and will be followed in case of emergency.

Gear to be fitted on every kayak (in case of emergency):

- Phone numbers
  - Trailer and Manager on Duty (MOD)
  - 911
  - Coast Guard
- Detailed map of preserve
- 1.5 ft rope and working hook
  - Fitted on front and back handles
- Type II or III PDF
  - Fitted to each guest
  - With whistle

Information to have accessible for first responders:

- Name and age of guest
- Type of vessel they are utilizing
- Likely route taken
- Quick directions to access injured guest

The following procedures will be adhered to according to severity:

Assessment 1 - Life Threatening / Serious Injury

Includes scenarios such as:

- Not breathing
- No pulse
- Bleeding profusely
- Impaired consciousness
- Injury to back, neck, or head
- Visible major physical trauma to limb or torso
- Approaching Severe Weather System

Assessment 1.1 – Unreachable by Kayak

1. Notify Coast Guard
2. Monitor Situation
3. Complete and File Incident Report

Assessment 1.2 - Reachable by Kayak

1. Experienced Kayak Guide Bring Life Saving Equipment via Sea Kayak
   1.1. Tow rope
   1.2. Life Vest and Buoy
   1.3. First Aid Kit

1.4. AED Stored at Launch Site in Secure and Dry Location

2. Scene Assessment
   2.1. Ensure you are immobilized in a safe area
   2.2. Stop all other paddlers in a safe area (ideally with access to an evacuation route)
   2.3. Extraction of dangerously pinned or entrapped and submerged paddlers automatically activates EAP
   2.4. Extraction of injured paddler may be required. If so, do an initial assessment before activating EAP.
3. Determine status of victim. Radio staff member at launch and instruct them to call 911.
   3.1. Gather information from paddler and witnesses to incident.
   3.2. Stay with paddler and keep them calm.
4. Administer first aid as needed. Control and stabilize any wounds.
   4.1. If head or neck injury, assure the victim does not move. Call the Coast Guard.
   4.2. If CPR is required, assess the scene to get the victim to a safe, flat, and relatively dry location to begin CPR. Call the Coast Guard.
   4.3. If unsure of injury severity, Call the Coast Guard.
5. Once the victim has been stabilized, connect kayaks together for a tow back to the launch. (If applicable)
   5.1. If the assessor is sure the injury is minor or the paddler has been stabilized to make it back to the launch, begin tow, communicate with staff at the launch site that victim is enroute back to the launch site.
   5.2. The best extraction point is located at the public access launch by the kayak and fishing pier. Arrange to meet medical personnel here in case of emergencies.
   5.3. Provide any details relevant to their condition and instruct staff to relay information to 911 dispatcher if not already done.
   5.4. Once the victim is returned to site and emergency medical staff is administering medical care, answer relevant questions.
6. File incident report immediately following incident. Have all witnesses file a report. Store in file.

Assessment 2 – Minor Non-Life-Threatening Issue

1. Equipment
   1.1. Broken Paddle
      1.1.1. Staff member will paddle out to guest location with new paddle.
      1.1.2. Once on site assess the situation. Make sure guest is safe and comfortable.
      1.1.3. Replace guest paddle. Address any concerns. Offer a tow if guest is no longer comfortable.
      1.1.4. Return to launch with the broken paddle.
      1.1.5. Address broken paddle, repair as needed. Set aside if irreparable.
   1.2. Kayak Leak or Water Logged
      1.2.1. Staff member will paddle out with kayak bail and repair kit.
      1.2.2. Once on site assess the situation. Make sure guest is safe and comfortable.
      1.2.3. Bail out kayak if waterlogged.
      1.2.4. Repair kayak if damage is small.
      1.2.5. Assure guest is comfortable.
      1.2.6. When kayak is returned to launch, set aside for a larger repair at end of day.

1.3. Life Vest Ripped
1.3.1. Staff member will paddle out to the guest location with a new PFD.
1.3.2. Once on site assess the situation. Make sure guest is safe and comfortable.
1.3.3. Replace guest PFD. Address any concerns. Offer a tow if the guest is no longer comfortable.
1.3.4. Return to launch with broken PFD.
1.3.5. Address broken PFD, repair as needed. Set aside if irreparable.

1. Health
1.1. Difficulty Breathing
1.1.1. First aid and CPR certified staff member will paddle out to guest location with first aid kit and CPR equipment.
1.1.2. Once on site, assess the situation. Reassure guest and assure they are comfortable and safe.
1.1.3. Remain with guest until their condition changes.
1.1.3.1. Guests with improved conditions may continue, may be guided, or towed back.
1.1.3.2. Guests with worsening conditions will have first aid and CPR administered if needed. EAP will be activated. (See above for EAP for accessible or inaccessible guests.)
1.1.4. Once back at launch site, assess guest condition again. Offer medical assistance.
1.1.5. Staff will file incident report.
1.2. Physical Exertion/Heat Stroke
1.2.1. First aid and CPR certified staff member will paddle out to guest location with first aid kit, CPR equipment and extra water.
1.2.2. Once on site, assess situation. Reassure guest and assure they are comfortable and safe.
1.2.3. Remain with guest until their condition changes.
1.2.3.1. Guests with improved conditions may continue, may be guided or towed back.
1.2.3.2. Guests with worsening conditions will have first aid and CPR administered as needed. EAP will be activated.
1.2.4. Once back at launch site, assess guest condition again. Offer medical assistance as needed.
1.2.5. Staff will file an incident report.

2. Minor Injury
2.1.1. First aid and CPR certified staff member will paddle out to guest location with first aid kit and CPR equipment.
2.1.2. Once on site, assess situation. Reassure guest and ensure they are comfortable and safe.
2.1.3. Provide guest with any necessary first aid
2.1.3.1. Receive verbal and written confirmation (if possible) that guest does or does not require Emergency Medical Services (EMS)
2.1.3.2. In situations wherein a guest requests assistance from EMS, EAP will be activated.
2.1.3.3. If EMS is not requested, once back at launch site, assess guest condition again. Offer medical assistance as needed.
2.1.3.4. Staff will file an incident report.

EXHIBIT D - RENTAL LOCATION



SERVICES AGREEMENT

EXHIBIT E

INSURANCE REQUIREMENTS

The Contractor shall obtain and maintain at all times during its performance of the Agreement, insurance of the types and in the amounts set forth. All insurance policies shall be from responsible companies duly authorized to do business in the State of Florida and have an AM Best rating of A-VIII or better. Within ten (10) calendar days of executed Agreement, the Contractor shall provide the County with properly executed and approved Certificates of Insurance to evidence compliance with the insurance requirements of the agreement. The Certificate(s) of Insurance shall be signed by authorized representatives of the insurance companies shown on the Certificate(s). A copy of the endorsement(s) referenced in paragraph three (3) for Additional Insured shall be attached to the certificate(s).

No Services shall commence under this agreement unless and until the required Certificate(s) of Insurance are received and approved by the County. Approval by the County of any Certificate of Insurance does not constitute verification by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate of Insurance is in compliance with the requirements of the Agreement. County reserves the right to require a certified copy of the entire insurance policy, including endorsements, at any time during the Agreement period.

If any insurance provided pursuant to the Agreement expires prior to the expiration of the Agreement, renewal Certificates of Insurance and endorsements shall be furnished by the Contractor to the County at least thirty (30) days prior to the expiration date.

Contractor shall also notify County within twenty-four (24) hours after receipt, of any notices of expiration, cancellation, nonrenewal or adverse material change in coverage received by said Contractor from its insurer. Notice shall be given to: Pinellas County Risk Management Department, InsuranceCerts@pinellascounty.org; and nothing contained herein shall absolve Contractor of this requirement to provide notice.

Should the Contractor, at any time, not maintain the insurance coverages required herein, the County may terminate the Agreement, or at its sole discretion may purchase such coverages necessary for the protection of the County and charge the Contractor for such purchase. The County shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the County to purchase such insurance shall in no way be construed to be a waiver of any of its rights under the Agreement.

The County reserves the right, but not the duty, to review and request a copy of the Contractor's most recent annual report or audited financial statement when a self-insured retention (SIR) or deductible exceeds $50,000.

Each insurance policy shall include the following terms and/or conditions in the policy:

(1) The Named Insured on the Certificate of Insurance must match the entity's name that Is signing the Agreement.

(2) Companies issuing the insurance policy, or policies, shall have no recourse against County for payment of premiums or assessments for any deductibles which all are at the sole responsibility and risk of the Contractor.

(3) The term "County", or "Pinellas County" shall include all Authorities, Boards, Bureaus, Commissions, Divisions, Departments and Constitutional offices of County and individual members, employees thereof in their official capacities, and/or while acting on behalf of Pinellas County.

(4) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by

County or any such future coverage, or to County's Self-Insured Retentions of whatever nature.

(5) All policies shall be written on a primary, non-contributory basis.

(6) Any certificate of insurance evidencing coverage provided by a leasing company for either Workers Compensation or Commercial General Liability shall have a list of covered employees certified by the leasing company attached to the Certificate of Insurance. The County shall have the right, but not the obligation to determine that the Contractor is only using employees named on such list to perform work for the County. Should employees not named be utilized by Contractor, the County, at its option may stop work without penalty to the County until proof of coverage or removal of the employee by the Contractor occurs, or alternatively find the Contractor to be in default and take such other protective measures as necessary.

(7) Insurance policies, other than Professional Liability, shall include waivers of subrogation in favor of Pinellas County from the Contractor.

(8) The insurance requirements for this Agreement, which shall remain in effect throughout its duration, are as follows:

(A) Workers' Compensation Insurance

Limit	Florida Statutory
Employers' Liability Limits	
Per Employee	$500,000
Per Employee Disease	$500,000
Policy Limit Disease	$500,000

(B) Commercial General Liability Insurance including, but not limited to, Independent Contractor, Contractual Liability Premises/Operations, Products/Completed Operation and Personal Injury.

Limits	
General Aggregate	$2,000,000
Products/Completed Operations Aggregate	$2,000,000
Personal Injury and Advertising Injury	$1,000,000
Each Occurrence	$1,000,000

(C) Watercraft Liability Insurance (or equivalent Protection & Indemnity coverage) with Pollution Liability sub limits and cannot exclude watercraft vessels less than 26' in length or rented or leased vessels less than 26' in length.

Limits	
Each Occurrence	$1,000,000
General Aggregate	$1,000,000

APPENDIX 21
Florida Youth Conservation Centers Network Agreement

Pinellas County
REAL ESTATE MANAGEMENT
Real Property

REAL ESTATE MANAGEMENT DEPARTMENT

MEMORANDUM

TO: Robert S. LaSala, County Administrator

THROUGH: Mark Woodard, Assistant County Administrator

FROM: Paul S. Sacco, Director

SUBJECT: **Signature Memorandum**
Project Name: Florida Fish & Wildlife Commission – use of Brooker Creek/Weedon Island Preserves for Florida Youth Conservation Centers Network (FYCCN) activities

DISTRIBUTION: Paul Cozzie, Parks & Conservation Resources Director

DATE: January 4, 2012

RECOMMENDATION:
I RECOMMEND THE COUNTY ADMINISTRATOR EXECUTE THE ATTACHED AGREEEMNT BETWEEN FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION AND PINELLAS COUNTY FOR USE OF PARKS & CONSERVATION RESOURCES MANAGED LANDS.

DISCUSSION:
This Agreement allows the Florida Fish & Wildlife Commission (FWC) to use the Premises of Brooker Creek and Weedon Island Preserves to teach and encourage youth participation in fishing, wildlife viewing, watershed stewardship and other outdoor conservation-related activities.

The Agreement term will begin upon full execution by both Parties and continue in five (5) year terms until terminated by either Party. Either Party may terminate the Agreement with thirty (30) day notification.

Fiscally, this Agreement will obtain funds through the County or the FWC via donated funds specifically earmarked for the Youth Program, through grants obtained for the Youth Program, other contributions from nonprofits, local, state and federal funds and through budget allocations specifically geared to youth education..

This Agreement falls within the authority the Board of County Commissioners delegated to the County Administrator, according to Section 2-62, Pinellas County Code. Accordingly, we would appreciate your signature where indicated.

APPROVED: Robert A LaSala DATE: 1-11-12

Attachments:
Contract Review
Site Map
Agreement

CATS # 38668

NON-PURCHASING CONTRACT REVIEW TRANSMITTAL SLIP

PROJECT: Florida Fish & Wildlife Commission – use of Brooker Creek/Weedon Island Preserves for Florida Youth Conservation Center Network activities.

CONTRACT NO.: 2011-0059 ESTIMATED EXPENDITURE / REVENUE: 0.00
(Circle or underline appropriate choice above.)

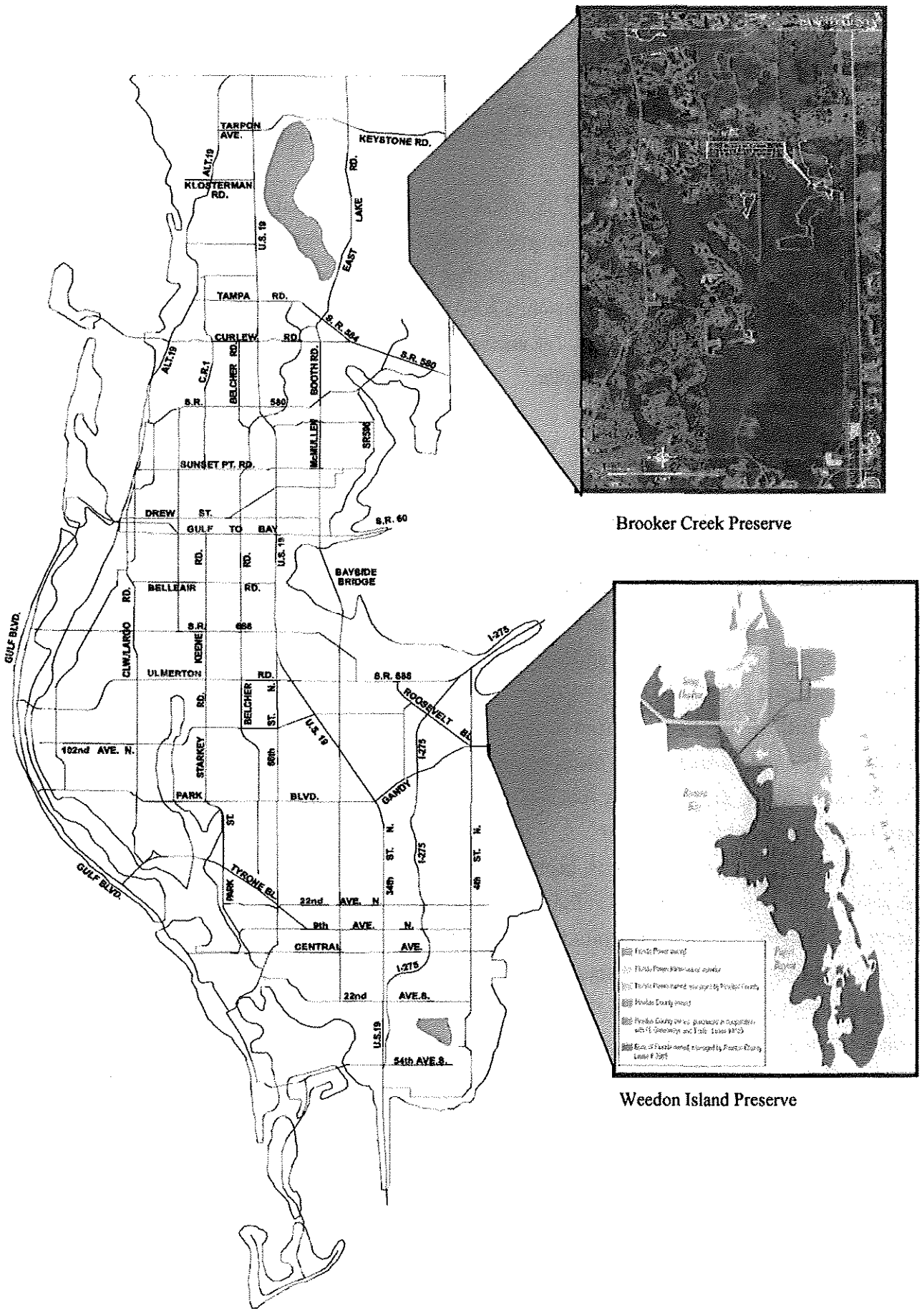
In accordance with Contract Administration and its Review Process, the attached documents are submitted for your review and comment.

Please complete this Non-Purchasing Contract Review Transmittal Slip below with your assessment, and **forward to the next Review Authority on the list, skipping any authority marked "N/A."** Indicate suggested changes by noting those in "Comments" column, or by revising, in RED, the appropriate section(s) of the document(s) to reflect the exact wording of the desired change(s).

OTHER SPECIFICS RELATING TO THE CONTRACT:

REVIEW SEQUENCE	DATE	INITIALS/ SIGNATURE	COMMENTS (IF ANY)	COMMENTS REVIEWED & ADDRESSED OR INCORPORATED *ORIGINATOR'S INITIALS & DATE*
Real Property Division D. DelMonte	12/27/11			
Real Estate Mgmt. P. Sacco	12/27/11			
Parks Dept. P. Cozzie	12/27/11			
Risk Mgmt. V. Holscher	12/29/11		Contract Parties are County & State	
County Atty M. Zas	12/29/11	MZas	See comments for	
County Admin. M. Woodard	1/3/12			

Please return to Jeanne Armstrong as soon as possible. All inquiries should be made to Jeanne at ext. 45323. Thank you.


TARPON AVE.
KEYSTONE RD.
KLOSTERMAN RD.
ALT. 19
U.S. 19
LAKE EAST RD.
TAMPA RD.
CURLEW RD.
S.R. 584
S.R. 580
C.R. 1
BELCHER RD.
BOOTH RD.
S.R. 586
SR 590
McMULLEN
SUNSET PT. RD.
DREW ST.
GULF TO BAY
S.R. 60
BAYSIDE BRIDGE
BELLEAIR RD.
CLWLARGO RD.
KEENE RD.
S.R. 688
ULMERTON RD.
S.R. 688
ROOSEVELT BLVD.
I-275
102nd AVE. N.
STARKEY RD.
66th ST. N.
PARK BLVD.
GANDY BLVD.
GULF BLVD.
TYRONE BLVD.
34th ST. N.
4th ST. N.
22nd AVE. N
9th AVE. N.
CENTRAL AVE.
22nd AVE S.
54th AVE S.
Brooker Creek Preserve
Weedon Island Preserve

LICENSE AGREEMENT BETWEEN
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
AND
PINELLAS COUNTY FOR USE OF
PARKS & CONSERVATION RESOURCES MANAGED LANDS

THIS LICENSE AGREEMENT is made and entered into as of the 11 day of January, 2012, by and between Pinellas County, whose mailing address is 315 Court Street, Clearwater, Florida 33756, hereinafter referred to as "**County,**" and the Florida Fish and Wildlife Conservation Commission, a subdivision of the State of Florida, whose mailing address is 620 South Meridian Street, Tallahassee, Florida 32399-1600, hereinafter referred to as "**FWC,**" jointly referred to as the "Parties."

WITNESSETH:

WHEREAS, The County and FWC are each concerned with the current and long-term health of Florida's youth and are encouraging youth participation in fishing, wildlife viewing, watershed stewardship and other outdoor conservation-related activities. The Parties desire to increase participation in these and other outdoor activities by offering public outreach, education, and by providing safe and hands-on facilities for youth and families to participate in the outdoors; and

WHEREAS, the Parties desire to pool their respective knowledge, expertise, and other resources to create a sustainable place where youth can learn about and enjoy activities such as off-site shooting sports, fishing, boating, archery, wildlife viewing, overnight camping, and other related outdoor activities; and

WHEREAS, the County has control and manages the Weedon Island Preserve and Brooker Creek Preserve, depicted in Exhibits "A" and "B," respectively and attached hereto and made a part hereof, hereinafter referred to as "Facilities"; and

WHEREAS, FWC has created and is involved in the management of several youth-oriented programs throughout the State of Florida aimed at providing positive experiences for children in the outdoors; and

WHEREAS, FWC has established an initiative to create the Florida Youth Conservation Centers Network, hereinafter referred to as the "FYCCN," which is a network of youth centers throughout the State of Florida aimed at youth environmental education and recreation; and

WHEREAS, on December 1, 2010, FWC's Commissioners voted unanimously to implement the FYCCN initiative with seven initial sites to be operated under the first phase of the FYCCN initiative with the evaluation of additional sites for inclusion into the first phase; and

WHEREAS, the Parties agree that the Facilities provide a venue suitable to meet the objectives of the FYCCN, and use of these Facilities by FWC will achieve the goals and objectives of each of the Parties with respect to youth education and recreation including through coordination of the Parties and inclusion of local school boards and other organizations with similar objectives.

NOW, THEREFORE the Parties, in consideration of the mutual terms, covenants and conditions set forth herein, hereby agree to the following:

1. **PURPOSE.** The Parties enter into this Agreement in furtherance of creating and allowing the operation of a youth conservation education and recreation program in the Facilities, hereinafter referred to as the "Youth Program."

2. **EFFECTIVE DATE**. This Agreement will be effective when the final Party to the Agreement has approved and executed the Agreement.

3. **TERM.** The term of this Agreement shall be five (5) years starting on the effective date, and continuing in five (5) year terms unless terminated during any term as provided herein.

4. **OBLIGATIONS OF THE COUNTY**. The County agrees to make available the Facilities and the improvements thereon, subject to County needs, for the purpose of maintaining an education center consistent with the goals and objectives of each of the Parties. The County will be responsible for natural resource management within Brooker Creek and Weedon Island Preserves. The County may provide staff members to support youth events held at the Facilities on an as-needed basis as determined between the FWC Partnership Coordinator and the County's Director of Parks and Conservation Resources.

5. **OBLIGATIONS OF FWC**. FWC will serve as the lead managing entity (based on annually and legislatively approved funds) with respect to the operation and management of the Youth Program.

6. **USE OF FACILITIES**. The County, subject to County needs, shall allow the reasonable and complimentary as-needed use of those portion of the Facilities normally accessed by the general public, or those areas within the Education Centers as provided by County to FWC or its employees and agents solely for the Youth Program; however, the County may, at its discretion, deny particular events or uses for other reasons such as, but not limited to, a conflict in scheduling or for another purpose. This reasonable use shall be compiled and

submitted yearly by FWC for review and approval by the County, and hereinafter be referred to as the "Plan." The Facilities shall be used as a shared public facility. The Facilities shall be used by the FWC employees or agents solely for Youth Program purposes. The cost of the operation, including any utilities and maintenance of the Facility shall be solely the responsibility of the County except for the Youth Program costs to be offered by FWC and any and all long distance phone/fax calls placed by the FWC Partnership Coordinator or other FWC employees or agents.

The County shall provide temporary office space at the Weedon Island Preserve and/or Brooker Creek Preserve for the FWC Partnership Coordinator or other employees or agents for the purpose of enhancing the Youth Program, on an as-needed basis. FWC shall use reasonable care with any office space and equipment provided, i.e., County telephone and furniture. FWC employees or agents are responsible for providing the basic operational supplies and equipment associated with standard office operations. The County may permit FWC to bring, use, and store additional equipment at the Facilities, but County shall not be responsible for loss or damage to said equipment. The County may permit FWC to use County equipment, and FWC is responsible for loss or damage to said County equipment.

FWC shall not permit hunting on any County-owned property. FWC will use the Facilities and all rights and privileges herein granted to the extent needed in carrying out the true intent and purpose of this Agreement. FWC shall assist, to the extent necessary, in the preservation of life and property in and upon said Facilities. FWC shall comply with all applicable Rules and Regulations for the Facilities.

FWC understands that the portion of the Facilities not in use by FWC may remain open to the public and that it is the responsibility of FWC to ensure that no uninvited guests attend an FWC function.

7. **MAINTENANCE OF FACILITIES**. The County shall be responsible for maintaining the building and appurtenances located on and near the Facilities, at a standard equal to that of existing County preserves and the Parties shall take such precautions as may be deemed reasonable, advisable and necessary, to prevent destruction or damage to property. To the extent that as a result of an FWC event, its agents, employees, or guests cause damage to the Facilities the County may seek reimbursement from FWC for that damage.

8. **AUDIT**. The Parties shall retain all records related to this contract for three (3) years after termination of this Agreement and agree to participate as requested in any audits required by Florida Law. All records shall be subject to audit by the County. The Parties shall also comply with chapter 119, Florida Statutes, the "Florida Public Records Act."

9. **FUNDING**. The Parties agree to use funds donated to either the County or FWC that are earmarked for the Youth Program, grants obtained for the Youth Program, contributions from other nonprofit organizations, local, state and federal funding for the Youth Program, and those funds available within any Party's budget designated specifically for youth education to support the purposes for which the Youth Program was established.

10. **TERMINATION**. Either Party may, during any term hereof, cancel this agreement with or without cause by giving thirty (30) days prior notice to the other Party, in writing, of the intention to terminate. Failure of a Party to comply with any provisions herein shall be considered a material breach and shall be cause for immediate termination of the agreement at the discretion of the other Party.

Upon termination of this Agreement, FWC may remove from the Facilities all equipment and appurtenances which they may have brought on said real property provided that no real damage is done to the real property; and provided further that it shall not remove the buildings, equipment and appurtenances which are located on the said Facilities at the expense of the County whether or not constructed thereon at the date of execution of this Agreement.

11. **ASSIGNMENT**. No assignment or sub-assignment of any obligations hereunder shall be allowed without the prior written permission of the County.

12. **COMPLIANCE WITH APPLICABLE LAWS**. FWC shall comply with all local State and Federal laws, codes, requirements and regulations relative to construction, safety, sanitation, permits and licenses, and any other, otherwise pertaining to the educational facility, which it operates on the real property. FWC shall not discriminate against any person or persons because of race, creed, color, national origin, gender, disability, or sexual orientation in said premises. FWC shall comply with the provisions of Chapter 90, Pinellas County Code, unless specifically exempted under the provisions of this Agreement.

13. **GOVERNING LAW**. The Laws of the State of Florida shall govern this Agreement.

14. **INDEMNIFICATION**. The Parties agree to be fully responsible for their own acts of negligence, or their respective employees' or agents' acts of negligence when acting within the scope of their employment, and agree to be liable for any damages proximately caused thereby; provided, however, that the Parties' liability is subject to the monetary limitation and defenses imposed by Section 768.28, Florida Statutes. Nothing herein is intended to serve as a waiver of sovereign immunity by the Parties, nor shall anything herein be construed as consent by the Parties to be sued by any third Party for any cause or matter arising out of or related to this Agreement.

15. **INSURANCE**. The Parties agree to provide each other, if requested, proof of insurance coverage or self-insurance in the amount set forth in Florida Statutes.

16. **FISCAL NON-FUNDING**. In the event that sufficient budgeted funds are not available for a new fiscal period, either FWC and/or the County, shall notify the other of such occurrence and the Agreement shall terminate on the last day of the current fiscal period without penalty or expense to the County.

17. **EMERGENCY PROCEDURES**. In the event of a local state of emergency, the County reserves the right to close the Facility as necessary, including but not limited due to weather conditions or pending natural disaster.

18. **THIRD PARTIES**. This Agreement is not intended, nor shall it be construed as granting any rights, privileges, or interests in any third Party without mutual written agreement of the Parties.

19. **AMENDMENTS**. The provisions of this Agreement may not be waived, altered, amended, modified, or repealed in whole or in part, except upon written consent of the Parties.

20. **USE OF NAME**. No Party shall use any logos, trademarks, images or the name of any other Party without such Party's prior written consent (including but not limited to any press release, publicity, advertising or marketing); provided, however, the Parties agree that each Party's name may be included in customary distributions of a newsletter for the Youth Program upon advance submission to each Party for review and approval and the County may indicate that the FYCCN is operated at the Facilities, run by FWC in partnership with the County.

21. **RELATIONSHIP OF PARTIES**. The Parties shall perform all their respective obligations hereunder only as independent contractors, and nothing herein contained shall be construed to be inconsistent with that relationship or status. Nothing contained in this Agreement shall be construed to place the Parties in a relationship of partners, joint ventures, or principal and agent. No Party is authorized to make, assume or undertake any obligation, express or implied, on behalf of any other Party.

22. **DOCUMENTS REVIEW**. Each Party shall have the opportunity to review and approve any agreements or subagreement with contractors engaged to develop the Plan or the Youth Program or to carry out the Youth Program's events and programs. Each such agreement or subagreement will contain appropriate provisions whereby the contractor shall be required to provide appropriate insurance and indemnification to the Parties.

23. **NOTICES.** Any notices required to be given pursuant to the terms and provisions of this Agreement shall be in writing and shall be sent by certified mail, return receipt requested, to:

County:

Mary Campbell, Pinellas Extension Director
12520 Ulmerton Road
Largo, FL 33774

FWC:

Rae Waddell, Director, Florida Youth Conservation Centers Network
Florida Fish and Wildlife Conservation Commission
P.O. Box 59, Midway, FL 32343

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24. **ENTIRE AGREEMENT**. This Agreement contains all of the covenants and agreements and supersedes any and all other agreements, whether oral or written, between the Parties hereto with respect to the subject matter hereof. Each Party acknowledges that no representations, inducements, promises, or agreements, oral or otherwise, have been made by any Party, or anyone acting on behalf of any Party, which are not embodied herein and that no other agreement, statement or promise not contained in this Agreement shall be valid or binding. In the event of any conflict between the terms of this Agreement and applicable law, such law shall be controlling.

<SIGNATURE PAGE FOLLOWS>

IN WITNESS WHEREOF, the Parties herein have executed this Agreement on the day and year first above written.

PINELLAS COUNTY, FLORIDA
By and through its County Administrator

Robert S. LaSala
Pinellas County Administrator

DATE:

1-11-12

Reviewed as to form and legal sufficiency

Office of the County Attorney

FLORIDA FISH & WILDLIFE
CONSERVATION COMMISSION

Nick Wiley, Executive Director
Florida Fish & Wildlife Conservation
Commission

DATE:

1.31.12

Reviewed as to form and legal sufficiency

Exhibit "A"

Weedon Island Preserve

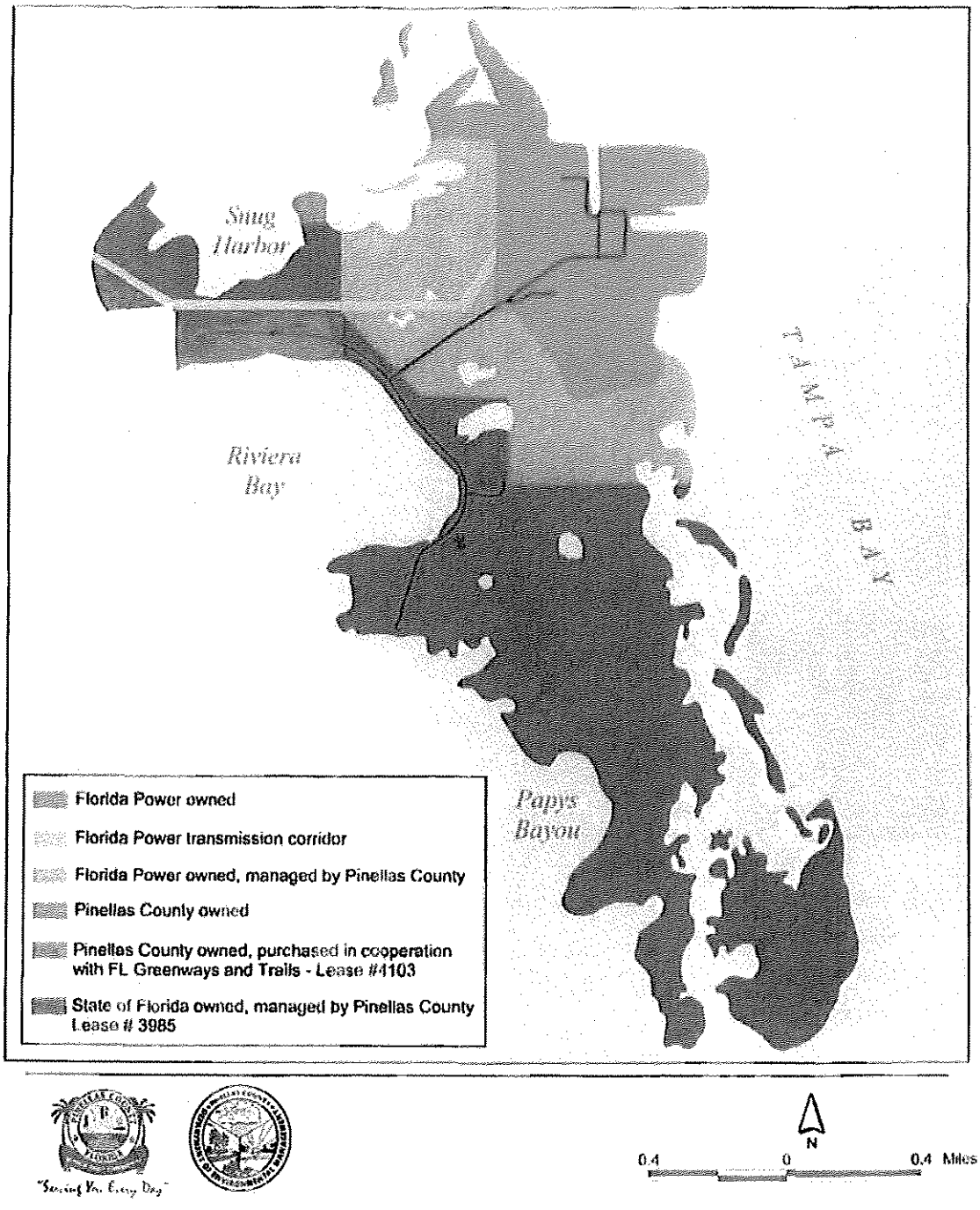


Figure 7. Weedon Island Preserve Management Plan. Ownership map (South)

Exhibit "B"
Brooker Creek Preserve

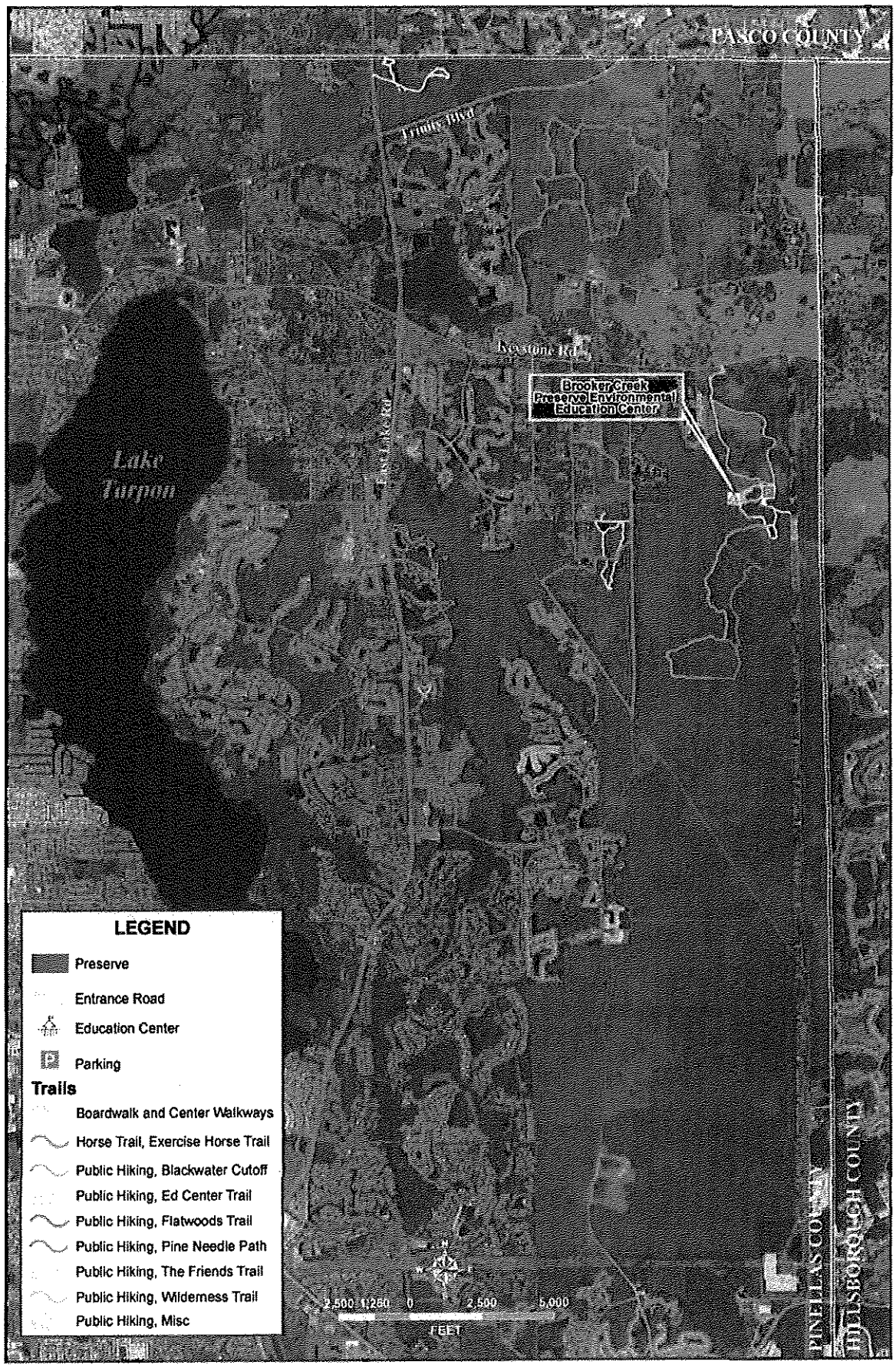


Figure 27. Brooker Creek Preserve Existing Recreation

APPENDIX 22
Florida Public Archaeology Network Agreement

LICENSE AGREEMENT BETWEEN
FLORIDA PUBLIC ARCHAEOLOGY NETWORK
AND
PINELLAS COUNTY FOR USE OF
WEEDON ISLAND PRESERVE CULTURAL AND NATURAL HISTORY CENTER

THIS LICENSE AGREEMENT is made and entered into as of the 25 day of February, 2013, by and between Pinellas COUNTY, a political subdivision of the State of Florida, whose mailing address is 315 Court Street, Clearwater, Florida 33756, hereinafter referred to as "COUNTY," and the University of South Florida Board of Trustees, a public body corporate, on behalf of the West Central Region, Florida Public Archaeology Network, referred to as "FPAN," whose mailing address is 4202 E. Fowler Avenue, NEC116, Tampa, Florida 33620, hereinafter referred to as "FPAN," jointly referred to as the "Parties."

WITNESSETH:

WHEREAS, COUNTY and FPAN agree that FPAN staff presence at Weedon Island Preserve Cultural and Natural History Center will enhance and enrich cultural resource education and outreach programming; and

WHEREAS, the Parties desire to pool their respective knowledge, expertise, and other resources to ensure that adequate measures are taken to locate, identify, protect, preserve, and interpret archaeological and historical sites and properties for the benefit of the public; and

WHEREAS, the COUNTY has control and manages the Weedon Island Preserve, depicted in Exhibit "A," attached hereto and made a part hereof, hereinafter referred to as "Facilities"; and

WHEREAS, FPAN will provide support in regards to school programming and teacher training and develop meaningful and informative education program that support local issues tied to the preservation of our cultural resources; and

WHEREAS, FPAN staff presence will offer support to Pinellas County staff, members of the Alliance for Weedon Island Archaeological Research and Education (AWIARE), Friends of Weedon Island, Florida Youth Conservation Centers Network and volunteers and will help train volunteers on archaeology-themed activities; and

WHEREAS, the Parties agree that the Facilities are a suitable venue for FPAN to achieve the goals and objectives of each of the Parties with respect to public outreach opportunities, meetings, lectures and special events.

NOW, THEREFORE, in consideration of the mutual terms, covenants and conditions set forth herein, the Parties hereby agree to the following:

1. **PREMISES.** COUNTY agrees to grant access to FPAN to the property located at 1800 Weedon Drive NE, Saint Petersburg, FL 33702 and known as the Weedon Island Preserve Cultural and Natural History Center, and those areas of the Weedon Island Preserve open to the public, hereinafter referred to as "Premises," as detailed in Exhibit "A" attached hereto and made a part herein.

2. **PURPOSE.** The Parties enter into this Agreement in furtherance of creating and allowing the operation of an archeology program in the Facilities, hereinafter referred to as the "Program."

3. **EFFECTIVE DATE**. This Agreement will be effective when the final Party to the Agreement has approved and executed the Agreement.

4. **TERM.** The term of this Agreement shall be up to five (5) years starting on the effective date. Upon mutual agreement between the Parties, this License may continue for additional terms of up to five (5) years. Notwithstanding the above, either Party may, without cause, revoke this License Agreement at any time by providing thirty (30) days written notice to the other Party.

5. **OBLIGATIONS OF THE COUNTY**. The COUNTY agrees to make available the Facilities and the improvements thereon, subject to COUNTY needs, for the purpose of maintaining an education center consistent with the goals and objectives of each of the Parties. The COUNTY will be responsible for natural resource management within Weedon Island Preserves.

6. **OBLIGATIONS OF FPAN**. FPAN will serve as the lead managing entity (based on annually and legislatively approved funds) with respect to the operation and management of Archeology programs on the Premises. FPAN will provide an annual plan for review by the Director of the Parks & Conservation Resources Department outlining programs and activities that will take place at Weedon Island Education Center by October 1 of each year for the following fiscal year. Regular reports and updates of program attendance will be provided upon request.

7. **USE OF FACILITIES**. The COUNTY, subject to COUNTY needs, shall allow the reasonable and complimentary as-needed use of those portion of the Facilities normally accessed by the general public, or those areas within the Education Centers as provided by COUNTY to FPAN or its employees and agents solely for the Archeology Program; however,

the COUNTY may, at its discretion, deny particular events or uses for other reasons such as, but not limited to, a conflict in scheduling or for another purpose. This reasonable use shall be compiled and submitted yearly by FPAN for review and approval by the COUNTY, and hereinafter be referred to as the "Plan." The Facilities shall be used as a shared public facility. The Facilities shall be used by the FPAN employees or agents solely for Archeology Program purposes. The cost of the operation, including any utilities and maintenance of the Facility shall be solely the responsibility of the COUNTY except for the Program costs to be offered by FPAN and any and all long distance phone/fax calls placed by the FPAN Coordinator or other FPAN employees or agents.

The COUNTY shall provide temporary office space at the Weedon Island Preserve for the FPAN Coordinator or other employees or agents for the purpose of enhancing the Archeology Program, on an as-needed basis. FPAN shall use reasonable care with any office space and equipment provided, i.e., COUNTY telephone and furniture. FPAN employees or agents are responsible for providing the basic operational supplies and equipment associated with standard office operations. The COUNTY may permit FPAN to bring, use, and store additional equipment at the Facilities, but COUNTY shall not be responsible for loss or damage to said equipment. The COUNTY may permit FPAN to use COUNTY equipment, and FPAN is responsible for loss or damage to said COUNTY equipment.

FPAN will use the Facilities and all rights and privileges herein granted to the extent needed in carrying out the true intent and purpose of this Agreement. FPAN shall assist, to the extent necessary, in the preservation of life and property in and upon said Facilities. FPAN shall comply with all applicable Rules and Regulations for the Facilities.

FPAN understands that the portion of the Facilities not in use by FPAN may remain open to the public and COUNTY is not responsible for ensuring that no uninvited guests attend an FPAN function.

8. **MAINTENANCE OF FACILITIES**. The COUNTY shall be responsible for maintaining the building and appurtenances located on and near the Facilities, at a standard equal to that of existing COUNTY preserves and the Parties shall take such precautions as may be deemed reasonable, advisable and necessary, to prevent destruction or damage to property by their respective employees and agents. To the extent that, as a result of an FPAN event, FPAN employees and/or agents negligently cause damage to the Facilities the COUNTY may seek reimbursement from FPAN for that damage.

9. **AUDIT**. The Parties shall retain all records related to this contract for three (3) years after termination of this Agreement and agree to participate as requested in any audits

required by Florida Law. All records shall be subject to audit by the COUNTY. The Parties shall also comply with chapter 119, Florida Statutes, the "Florida Public Records Act."

10. **FUNDING**. The Parties agree to use funds donated to either the COUNTY or FPAN that are earmarked for the Program, grants obtained for the Program, contributions from other nonprofit organizations, local, state and federal funding for the Program, and those funds available within any Party's budget designated specifically for archaeology education to support the purposes for which the Program was established.

11. **COVENANT AGAINST LIENS.** LICENSEE shall have no power or authority to create any lien to attach to the present estate, reversion or other estate of COUNTY in the Premises herein demised or on the building or other improvements thereon, and all materialmen, contractors, artisans, mechanics and laborers and other persons contracting with LICENSEE with respect to the demised Premises or any part thereof, are hereby charged with notice that they must look to LICENSEE to secure payment of any bill for work done or material furnished or for any other purpose during the term of this Agreement.

12. **REVOCATION**. Either Party may, during any term hereof, revoke this agreement with or without cause by giving thirty (30) days prior notice to the other Party, in writing, of the intention. Failure of a Party to comply with any provisions herein shall be considered a material breach and shall be cause for immediate revocation of the Agreement at the discretion of the other Party.

Upon revocation of this License, FPAN may remove from the Facilities all equipment and appurtenances which they may have brought on said real property provided that no real damage is done to the real property; and provided further that it shall not remove the buildings, equipment and appurtenances which are located on the said Facilities at the expense of the COUNTY whether or not constructed thereon at the date of execution of this Agreement.

13. **ASSIGNMENT**. No assignment or sub-assignment of any obligations hereunder shall be allowed without the prior written permission of the COUNTY.

14. **COMPLIANCE WITH APPLICABLE LAWS**. FPAN shall comply with all local State and Federal laws, codes, requirements and regulations relative to construction, safety, sanitation, permits and licenses, and any other, otherwise pertaining to the educational facility, which it operates on the real property. FPAN shall not discriminate against any person or persons because of race, creed, color, national origin, gender, disability, or sexual orientation in said premises. FPAN shall comply with the provisions of Chapter 90, Pinellas COUNTY Code, unless specifically exempted under the provisions of this Agreement.

15. **GOVERNING LAW**. The Laws of the State of Florida shall govern this Agreement. Venue shall be Pinellas County, Florida.

16. **INDEMNIFICATION**. The Parties agree to be fully responsible for their own acts of negligence, or their respective employees' or agents' acts of negligence when acting within the scope of their employment, and agree to be liable for any damages proximately caused thereby; provided, however, that the Parties' liability is subject to the monetary limitation and defenses imposed by Section 768.28, Florida Statutes. Nothing herein is intended to serve as a waiver of sovereign immunity by the Parties, nor shall anything herein be construed as consent by the Parties to be sued by any third party for any cause or matter arising out of or related to this Agreement.

17. **INSURANCE**. The Parties agree to provide each other, if requested, proof of insurance coverage or self-insurance in the amount set forth in Florida Statutes.

18. **FISCAL NON-FUNDING**. In the event that sufficient budgeted funds are not available for a new fiscal period, either FPAN and/or the COUNTY, shall notify the other of such occurrence and the Agreement shall terminate on the last day of the current fiscal period without penalty or expense to the COUNTY. All obligations undertaken hereunder are subject to the availability of funds lawfully appropriated or otherwise made available for the Program, and no levels of participation are guaranteed.

19. **EMERGENCY PROCEDURES**. In the event of a local state of emergency, the COUNTY reserves the right to close the Facility as necessary, including but not limited due to weather conditions or pending natural disaster.

20. **THIRD PARTIES**. This Agreement is not intended, nor shall it be construed as granting any rights, privileges, or interests in any third party without mutual written agreement of the Parties.

21. **AMENDMENTS**. The provisions of this Agreement may not be waived, altered, amended, modified, or repealed in whole or in part, except upon written consent of the Parties.

22. **USE OF NAME**. No Party shall use any logos, trademarks, images or the name of any other Party without such Party's prior written consent (including but not limited to any press release, publicity, advertising or marketing); provided, however, the Parties agree that each Party's name may be included in customary distributions of a newsletter for the Program upon advance submission to each Party for review and approval and the COUNTY may indicate that FPAN is operated at the Facilities, run by FPAN in partnership with the COUNTY.

23. **RELATIONSHIP OF PARTIES**. The Parties shall perform all their respective obligations hereunder only as independent contractors, and nothing herein contained shall be

construed to be inconsistent with that relationship or status. Nothing contained in this Agreement shall be construed to place the Parties in a relationship of partners, joint ventures, or principal and agent. No Party is authorized to make, assume or undertake any obligation, express or implied, on behalf of any other Party.

24. **DOCUMENTS REVIEW**. Each Party shall have the opportunity to review and approve any agreements or subagreement with contractors engaged to develop the Plan or the Program or to carry out the Program's events and programs. Each such agreement or subagreement will contain appropriate provisions whereby the contractor shall be required to provide appropriate insurance and indemnification to the Parties.

25. **NOTICES.** Any notices required to be given pursuant to the terms and provisions of this Agreement shall be in writing and shall be sent by certified mail, return receipt requested, to:

COUNTY:

Mary Campbell, Pinellas Extension Director
12520 Ulmerton Road
Largo, FL 33774

FPAN:

Jeff Moates, MA
University of South Florida
Dept. of Anthropology
4202 E. Fowler Avenue, SOC107
Tampa, FL 33620
---

26. **HAZARDOUS SUBSTANCES.** LICENSEE shall not cause or permit the presence, use, disposal, storage, or release of any Hazardous Substances on or in the Premises. LICENSEE shall not do, nor allow anyone else to do, anything affecting the Premises that is in violation of any Environmental Law. The preceding two sentences shall not apply to the presence, use, or storage on the Premises of small quantities of Hazardous Substances that are generally recognized to be appropriate to normal maintenance use.

LICENSEE shall promptly give COUNTY written notice of any investigation, claim, demand, lawsuit or other action by any governmental or regulatory agency or private party involving the Premises and any Hazardous Substance or Environmental Law of which

LICENSEE has actual knowledge. If LICENSEE learns or is notified by any governmental or regulatory authority, that any removal or other remediation of any Hazardous Substance affecting the Premises is necessary, LICENSEE shall promptly take all necessary remedial actions in accordance with Environmental Law.

As used in this Paragraph, "Hazardous Substances" are those substances defined as toxic or hazardous substances by Environmental Law and the following substances: gasoline, kerosene, other flammable or toxic petroleum products, toxic pesticides and herbicides, volatile solvents, materials containing asbestos or formaldehyde, and radioactive materials. As used in this Paragraph, "Environmental Law" means Federal Laws and laws of the jurisdiction where the Premises is located that relate to health, safety or environmental protection.

27. **ENTIRE AGREEMENT**. This Agreement contains all of the covenants and agreements and supersedes any and all other agreements, whether oral or written, between the Parties hereto with respect to the subject matter hereof. Each Party acknowledges that no representations, inducements, promises, or agreements, oral or otherwise, have been made by any Party, or anyone acting on behalf of any Party, which are not embodied herein and that no other agreement, statement or promise not contained in this Agreement shall be valid or binding. In the event of any conflict between the terms of this Agreement and applicable law, such law shall be controlling.

<SIGNATURE PAGE FOLLOWS>

IN WITNESS WHEREOF, the Parties herein have executed this Agreement on the day and year first above written.

PINELLAS COUNTY, FLORIDA
By and through its County Administrator

Mark S. Woodard

Robert S. LaSala
Pinellas County Administrator

DATE: 2/25/13

Reviewed as to form and legal sufficiency

MZ as

Office of the COUNTY Attorney

UNIVERSITY OF SOUTH FLORIDA
BOARD OF TRUSTEES
(For and on behalf of the West Central Region, Florida Public Archeology Network)

Name/Title Michael J. Abernethy
Director Purchasing Services

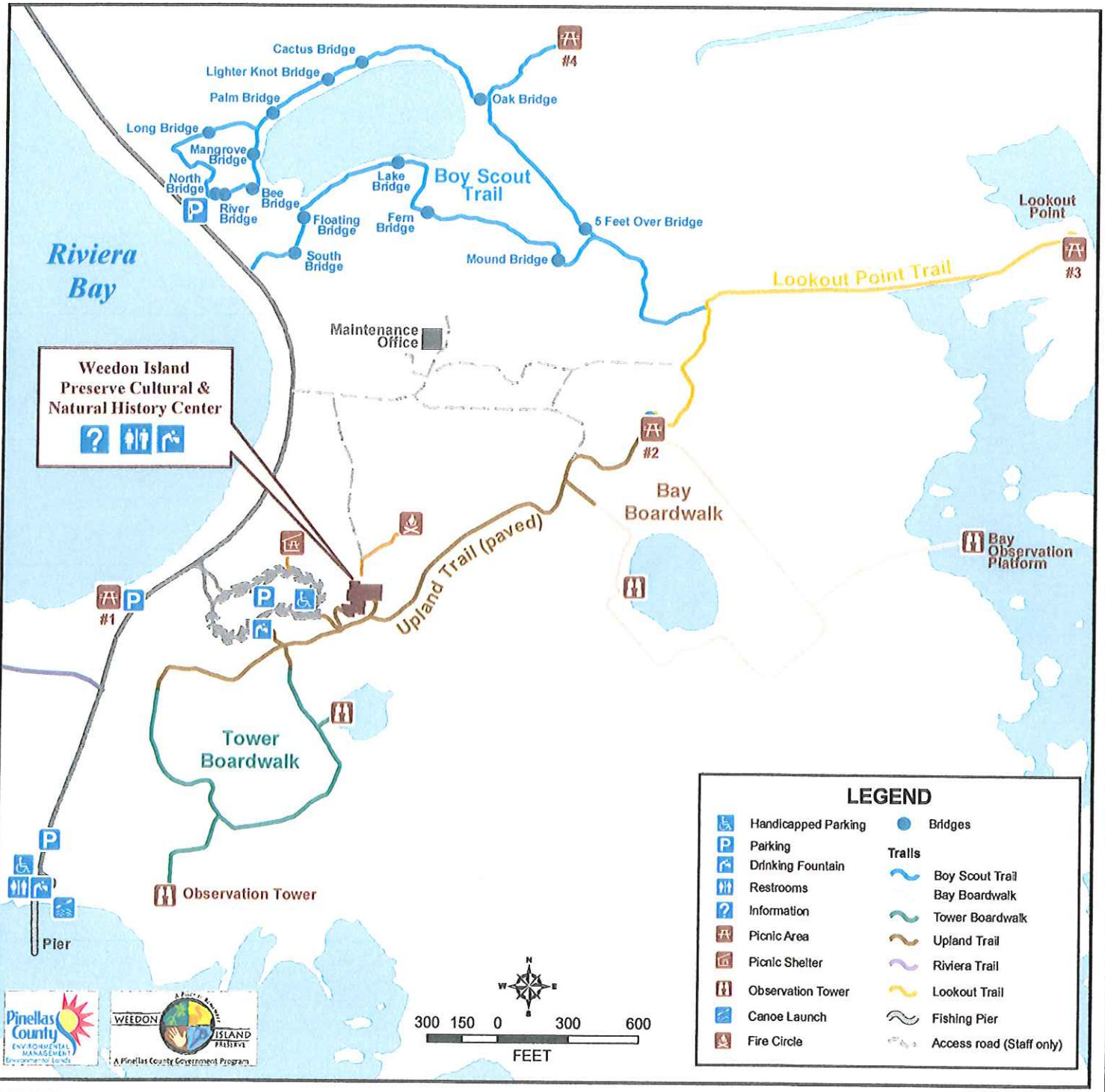
DATE: 2-7-2013

Reviewed as to form and legal sufficiency

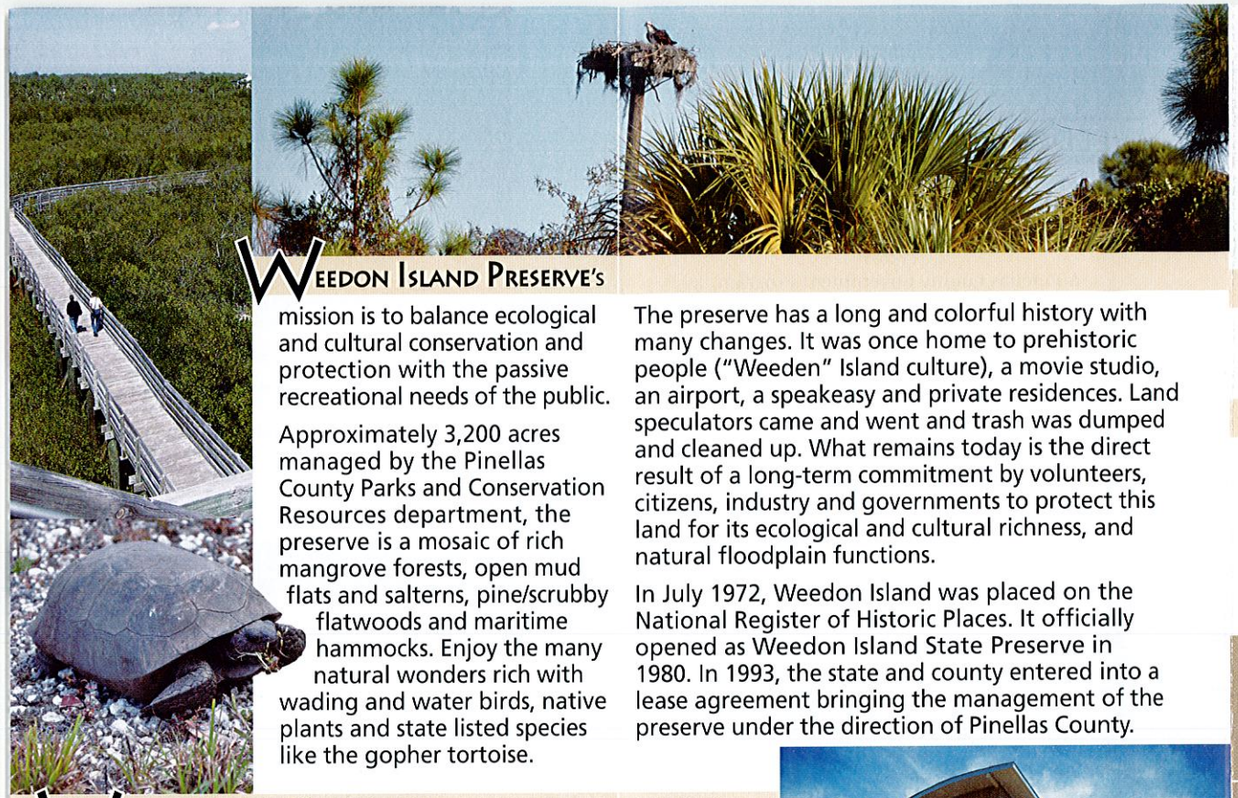
Purchasing Dept., Univ. of South Florida

Approved as to Form and
Legal Sufficiency
Henry W. Lavandera
Attorney USF

WEEDON ISLAND PRESERVE PUBLIC AREAS - EXHIBIT "A"



Appendix 23
Weedon Island Preserve Visitor Guide



Weedon Island Preserve's

mission is to balance ecological and cultural conservation and protection with the passive recreational needs of the public.

Approximately 3,200 acres managed by the Pinellas County Parks and Conservation Resources department, the preserve is a mosaic of rich mangrove forests, open mud flats and salterns, pine/scrubby flatwoods and maritime hammocks. Enjoy the many natural wonders rich with wading and water birds, native plants and state listed species like the gopher tortoise.

The preserve has a long and colorful history with many changes. It was once home to prehistoric people ("Weeden" Island culture), a movie studio, an airport, a speakeasy and private residences. Land speculators came and went and trash was dumped and cleaned up. What remains today is the direct result of a long-term commitment by volunteers, citizens, industry and governments to protect this land for its ecological and cultural richness, and natural floodplain functions.

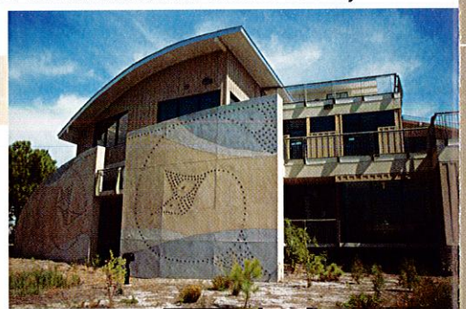
In July 1972, Weedon Island was placed on the National Register of Historic Places. It officially opened as Weedon Island State Preserve in 1980. In 1993, the state and county entered into a lease agreement bringing the management of the preserve under the direction of Pinellas County.

Weedon Island Preserve Cultural and Natural History Center

Understanding the natural and cultural history of the preserve empowers citizens to make informed decisions about the environment and demonstrates how people and the natural world shape each other. The center offers this opportunity through interpretive tours and hikes, programs, exhibits, presentations and workshops, and other events.

Designed with the help of Native Americans, and keeping with their tradition, the orientation of the center in the landscape is along the four cardinal points of the compass, with the entrance facing east. A special curved wall is representative of the remarkable pottery of the early "Weeden" people who lived on the island some 1000 to 1800 years ago. The roof lines resemble the curved wings of a bird as it soars through the sky.







Completed in 2002, the center blends the past and present into a truly exciting experience. The Native American and early European history of the preserve is fascinating and helped shape the preserve as we know it today. Come explore the center's exhibits and learn how we still depend on the Tampa Bay estuary through workshops and presentations.

To hear an audio about Weedon Island Preserve, scan this QR code or visit: www.weedonislandpreserve.org/audio_tours/WeedonEntrance.mp3

Pinellas County

Weedon Island Preserve Cultural and Natural History Center

1800 Weedon Drive NE, St. Petersburg, FL 33702

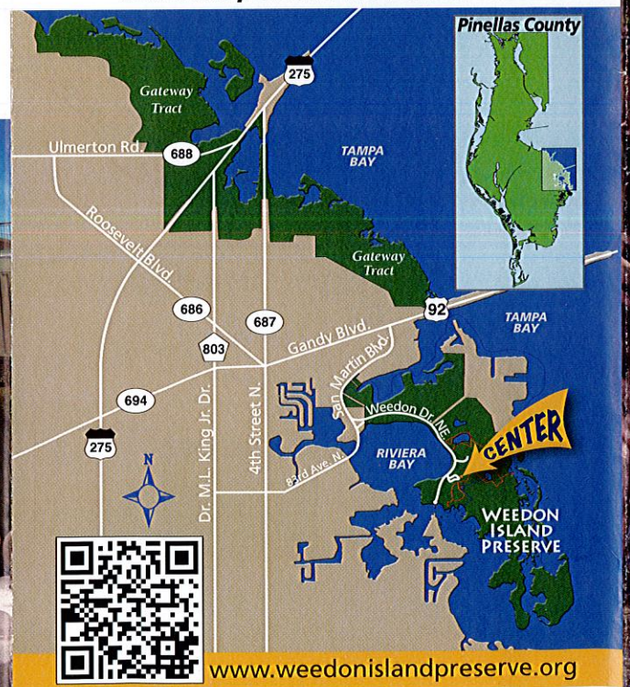
Center Hours:

- Visit ***www.weedonislandpreserve.org*** or call (727) 453-6500 for current hours.
- Closed all county holidays.

Preserve Hours:

- Open daily, 7 a.m. to time posted, approximately 15 minutes before sunset.
- Daily closing time is posted at the entrance to the preserve.
- Closed day after Thanksgiving & December 25.

Wild animals live here; domestic pets are NOT allowed.



www.weedonislandpreserve.org

Pinellas County complies with the Americans with Disabilities Act. To obtain accessible formats of this document, please call (727) 464-4062 (V/TDD). Funding for this brochure was provided by Pinellas County Parks and Conservation Resources. 7,500 copies were printed at a cost of $887 or $0.12 each. Produced in cooperation with the Pinellas County Marketing & Communications Department.

Reprinted on recycled paper 05/17



WEEDON ISLAND PRESERVE

Visitor Guide



Weedon Island Preserve is located along the shores of Old Tampa Bay. This coastal system, comprised of aquatic and upland ecosystems, is home to numerous species of flora and fauna, an outstanding environmental education facility and a rich cultural history. Come experience *A Place to Remember.*



A Place to Remember
WEEDON ISLAND PRESERVE

A Pinellas County Government Program



The Rules

- All plants and animals are protected under Pinellas County Code (PCC), Chapter 90 - 50.
- Releasing animals into the preserve is illegal.
- Stay on marked trails.
- Park only in designated areas.
- Place trash in designated containers.

The following are ***PROHIBITED:***

- ***Smoking*** on trails
- ***Pets***
- ***Alcohol***
- ***Weapons*** as defined in PCC Chapter 90 - 60
- ***Fireworks*** and unauthorized ***campfires***
- Unauthorized ***motor vehicles***
- ***Overnight parking***
- ***Bicycles*** on trails and Boardwalks
- ***Fishing*** on the Bayside and Tower Boardwalks
- ***Drones***

Hiking Trails

- 2 miles of boardwalk and paved trails
- 2.7 miles of natural trail loops
- 45-foot observation tower
- 3 observation platforms
- Picnic facilities

Pier and Paddling Trail

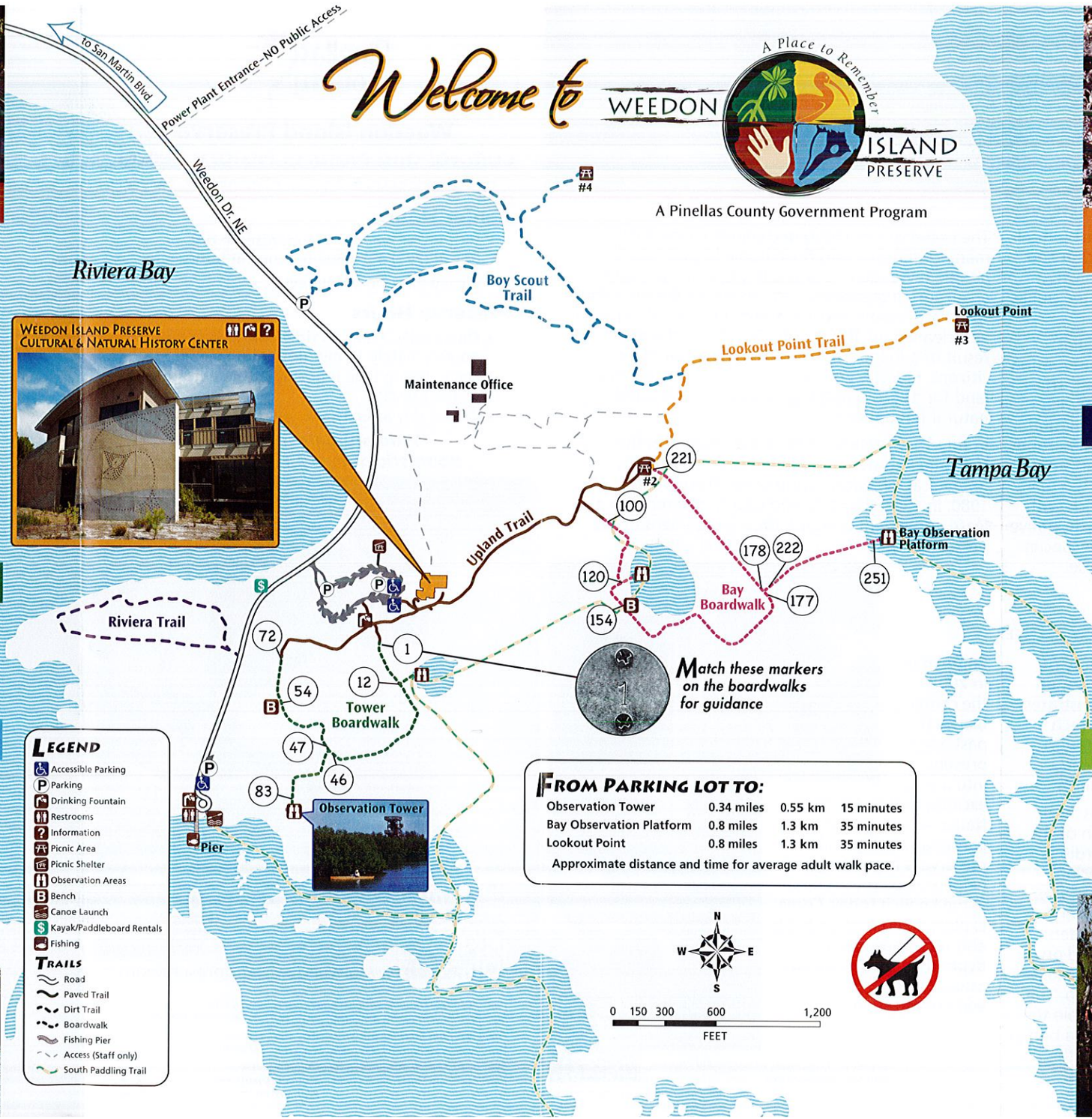
- 200-foot fishing pier with restroom facilities
- State and federal fishing regulations apply
- 4-mile loop, self-guided paddling trail
- Canoe/kayak launch site
- Wash station for canoes/kayaks
- All water activity must end 30 minutes prior to posted closing time.
- On-site kayak/canoe/paddleboard rentals available through Sweetwater Kayaks (727) 570-4844 $



Welcome to WEEDON ISLAND PRESERVE

A Place to Remember

A Pinellas County Government Program





Center Activities and Amenities

- Environmental education programs for all ages
- Guided hikes, including specialty hikes
- Exhibit gallery
- Gift shop
- Refreshment vending machine

Be Prepared to Explore

Lock your vehicle. Preserve is not responsible for your property.

Strongly recommended for the outdoors:

- Sturdy walking shoes
- Drinking water
- Sun hat/glasses
- Sunscreen
- Bug repellent
- Trail map and compass

Suggested Items:

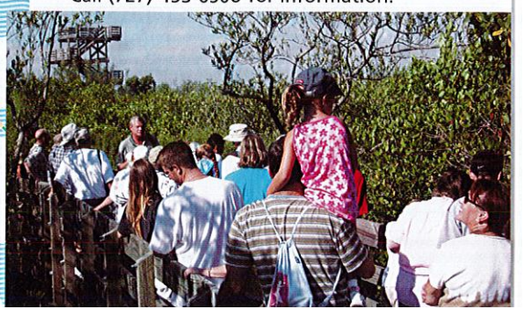
- Cell phone (water protected if paddling)
- Camera (water protected if paddling)
- Binoculars
- Identification guides

Get Involved

Volunteer opportunities:

- Exhibit Hall Docents
- Hike Guides
- Land Management Assistants

Join ***Friends of Weedon Island, Inc.***
Call (727) 453-6500 for information.



APPENDIX 24
Supporting Pinellas County Documents
Letter of Self-Insurance
Letter of Comprehensive Plan Compliance
Board of County Commissioners Approval of Draft Plan
(Board Agenda, Board Agenda Approval)

BOARD OF COUNTY COMMISSIONERS
Dave Eggers
Pat Gerard
Charlie Justice
Janet C. Long
Karen Williams Seel
Rene Flowers
Kathleen Peters

Pinellas County
DEPARTMENT OF ADMINISTRATIVE SERVICES
400 South Fort Harrison Ave
Clearwater, Florida 33756

MEMORANDUM

To: Office of Environmental Services, Division of State Lands
Florida Department of Environmental Services
Attn: Keith Singleton
3900 Commonwealth Blvd, MS 140
Tallahassee, FL 32399-3000

From: Rick Kahler, Insurance Manager

Subject: Pinellas County Self-Insurance

Date: February 15, 2022

In accordance with Florida Statute §768.28 Pinellas County is self-insured for Liability. The County is also a State of Florida-qualified self-insured for statutory Workers' Compensation benefits.

Pinellas County purchases Public Entity Excess Liability insurance coverage above a $2 million self-insured retention. This insurance policy includes coverage for General Liability, Auto Liability, Public Officials Liability, Employment Related Practices Liability, and Law Enforcement Liability. The insurance carriers for the Casualty Package are Brit Global Specialty USA and Genesis Management and Insurance Service Corporation.

The County also purchases Workers' Compensation and Employers' Liability Excess insurance coverage above a $2 million self-insured retention. The insurance carrier for our Excess Workers' Compensation is Arch Insurance.

PLEASE ADDRESS REPLY TO:
400 S Fort Harrison Avenue
Clearwater, Florida 33756
Phone: (727) 464-3664
Fax: (727) 464-4060

Pinellas County
Housing & Community Development

MEMORANDUM

TO: Paul Cozzie, Director, Pinellas County Parks & Conservation Resources Department

FROM: Carol Stricklin, Director, Pinellas County Housing & Community Development Department CS

SUBJECT: 2022 Weedon Island Preserve Management Plan Update – Review for consistency with the Pinellas County Comprehensive Plan

DATE: February 9, 2022

After reviewing the November 17, 2021 draft of the 2022 Weedon Island Preserve Management Plan Update for consistency with the current Pinellas County Comprehensive Plan, it has been determined that the following Goals, Objectives, and Policies in the plan are applicable and relevant:

NATURAL RESOURCE CONSERVATION AND MANAGEMENT ELEMENT

GOAL TWO: NATURAL SYSTEMS AND LIVING RESOURCES

Pinellas County will conserve, protect, restore, and appropriately manage its natural systems and living resources to ensure the highest environmental quality possible.

2.1. Objective: Pinellas County shall continue to implement management programs for the conservation of natural ecosystems and species of conservation concern (inclusive of native vegetative communities, terrestrial, marine, estuarine, and aquatic ecosystems, and native wildlife species).

GOAL THREE: ENVIRONMENTAL LANDS AND RESOURCE-BASED PARKS

Pinellas County's environmental lands and resource-based parks are the hallmark of this County's environmental commitment, and these lands are to be protected and managed in perpetuity for their contribution to the biodiversity and biological sustainability of the region, as a means of providing respite from urban life and because they instill future generations with a sense of appreciation for Florida's natural heritage.

3.1. Objective: Pinellas County will, at all times and in all actions, be a leader in urban ecology by being a conscientious steward of its environmental lands and resource-based parks and will maintain the integrity of these lands for their ecological, hydrological and open space value, in a manner that contributes towards a net environmental and ecosystem benefit.

RECREATION, OPEN SPACE AND CULTURE ELEMENT

GOAL ONE: THE PROVISION OF RECREATON AND OPEN SPACE

To administer outstanding countywide recreational, open space and environmental systems that provide, through acquisition, development and maintenance, sufficient resource-based regional parks and environmental lands that are environmentally sustainable, foster environmental stewardship, and enhance the County's economic vitality and the quality of life for residents and visitors.

1.1. Objective: Pinellas County shall continue to provide a system of regional resource-based County parks and environmental lands to adequately meet the needs of Pinellas County residents through the Year 2025.

1.2. Objective: Pinellas County shall continue to coordinate efforts with all levels of government and the private sector to increase the availability of public resource-based parklands and open space acreage to meet adopted level of service standards.

1.7. Objective: Pinellas County will continue to implement and enhance a comprehensive countywide system of greenways, Blueways, and trails.

1. 8. Objective: Pinellas County Departments shall cooperatively develop educational programs and materials concerning the conservation, protection, restoration, and interpretation of natural, historic, and cultural resources.

GOAL TWO: PROTECTION AND MANAGEMENT OF PARKS AND ENVIRONMENTAL LANDS

To protect, in perpetuity, the open space value and countywide public purpose of the County's regional parks, environmental lands and open spaces, and to develop, implement and adhere to the individual management plans and strategies for these irreplaceable public assets.

2.1. Objective: Pinellas County shall continue to design and develop its resource-based parks, open spaces, and environmental lands with a focus on the conservation, protection, restoration, management, and interpretation of natural and cultural resources.

2.2. Objective: Pinellas County will continue to protect, enhance, and manage the resource-based parks for their habitat value and resource-based recreational purpose, balancing recreational activities and opportunities with environmental and cultural stewardship, so as to not negatively impact the critical and irreplaceable ecosystems found in the regional resource-based park system.

GOAL FIVE: CULTURAL, HISTORIC AND ARCHAEOLOGICAL RESOURCES

To promote the arts, culture, and historic and archaeological resources within Pinellas County, and their preservation, through public and private investment and by raising awareness of existing facilities and programs.

5.1. Objective: Pinellas County recognizes that cultural resources enhance the County's quality of life and shall increase awareness, appreciation, and opportunities for engagement with the County's cultural resources among both residents and visitors.

5.3. Objective: The County shall continue to identify, protect, and preserve historic and archaeological resources in Pinellas County, including coastal areas. Particular emphasis will be given to increasing the interpretation and appreciation of such resources.

FUTURE LAND USE AND QUALITY COMMUNITIES' ELEMENT

GOAL THREE: A BALANCED RELATIONSHIP BETWEEN THE NATURAL ENVIRONMENT AND DEVELOPMENT

3.1. Objective: The Pinellas County Land Development Code shall be applied in a manner that ensures compatibility between the Future Land Use Map, existing environmental conditions and constraints, as well as environmental management goals

.

3.1.1. Policy: Environmentally sensitive lands which are designated by the Preservation land use category on the Future Land Use Map, shall be protected through the application of existing land development regulations or the development of new regulations.

3.1.2. Policy: Designated preservation areas shall be retained as undeveloped land suitable for passive recreation, conservation, or aesthetic uses to provide opportunities to appreciate the natural environment.

3.2. Objective: Pinellas County shall continue its proactive program for managing the impacts of development upon the County's natural resources (including wetlands, uplands, and the marine environment), and shall continue to ensure that these resources are successfully integrated into the urban environment such that the overall function and viability of these areas is maintained, or where practical, enhanced or restored.

COASTAL MANAGEMENT ELEMENT

GOAL FOUR: COASTAL LAND USE

Land use designations and decisions in the coastal planning area shall be consistent with the Future Land Use and Quality Communities Element of this Comprehensive Plan and compatible with protection of the County's natural and historic resources, reflecting the need for long-term sustainability, continued economic vitality, and consideration for the vulnerability of the County's coastal location.

4.3. Objective: Pinellas County will continue, and improve upon as necessary, its longstanding efforts to manage and protect its coastal and marine resources, including manatees and their essential habitat.

In conclusion, Housing & Community Development Department staff find the 2022 Weedon Island Preserve Management Plan Update consistent and in compliance with applicable and relevant Goals, Objectives, and Policies of the Pinellas County Comprehensive Plan, as outlined above.

Pinellas County Board of County Commissioners

315 Court Street
Clearwater, FL 33756
www.pinellascounty.org

Hybrid In-Person and Virtual Regular Meeting Agenda

Tuesday, February 22, 2022

2:00 P.M.

Public Hearings at 6:00 P.M.

Charlie Justice, Chairman
Janet C. Long, Vice-Chair
Dave Eggers
Rene Flowers
Pat Gerard
Kathleen Peters
Karen Williams Seel

Barry A. Burton, County Administrator
Jewel White, County Attorney
Ken Burke, Clerk of the Circuit Court and Comptroller

ROLL CALL

INVOCATION

PLEDGE OF ALLEGIANCE

PRESENTATIONS AND AWARDS

1. 22-0028A Black History Month Proclamation:
- Terri Lipsey Scott, Executive Director, Dr. Carter G. Woodson African American Museum

2. 22-0029A Partner Presentation:
- Mike Sutton, President & Chief Executive Officer, Habitat for Humanity of Pinellas and West Pasco Counties

CITIZENS TO BE HEARD

3. 22-0030A Citizens To Be Heard - Public Comment.

CONSENT AGENDA - Items 4 through 15

CLERK OF THE CIRCUIT COURT AND COMPTROLLER

4. 22-0232A Minutes of the in-person and virtual regular meetings held on October 26 and November 9, 2021.

5. 22-0233A Vouchers and bills paid from January 16 through 22, 2022.

Reports received for filing:

6. 22-0234A Division of Inspector General, Clerk of the Circuit Court and Comptroller, 2022 Inspector General's Annual Plan.

7. 22-0235A Dock Fee Report for the month of January 2022.

Miscellaneous items received for filing:

8. 22-0236A City of Seminole Notice of Public Hearing to be held March 22, 2022, regarding proposed Ordinance No. 02-2022 and voluntary annexation.

COUNTY ADMINISTRATOR DEPARTMENTS

Administrative Services

9. 22-0173A Quarterly report of claim settlements for the period of October 1, 2021 through December 31, 2021.

Recommendation: Accept the receipt and file quarterly report of claim settlements for the period of October 1, 2021 through December 31, 2021.

County Administrator

10. 22-0032A Receipt and file report of non-procurement items delegated to the County Administrator for the month ending January 31, 2022.

Recommendation: Accept the receipt and file report of non-procurement items delegated to the County Administrator.

11. 21-2623A Receipt and file report of purchasing items delegated to the County Administrator for the quarter ending December 31, 2021.

Recommendation: Accept the receipt and file report of purchasing items delegated to the County Administrator.

Public Works

12. 22-0126A Cooperative Funding Agreement with the Southwest Florida Water Management District for Habitat Restoration at Roosevelt Creek Channel 5.

Recommendation: Approval of the Cooperative Funding Agreement with the Southwest Florida Water Management District (SWFWMD) for Habitat Restoration at Roosevelt Creek Channel 5.

* Agreement provides $350,000.00 in SWFWMD funding.
* County match of $350,000.00 is programed in the Penny for Pinellas Capital Improvement Program six-year plan.
* Funding will be allocated for construction, construction engineering inspection, geographical information systems data, and as-built survey for modification of the salinity weir and restoration of the creek channel habitat.
* A 2019 SWFWMD Cooperative Funding Agreement was cancelled for an earlier version of the project, that when bid, was rejected for funding shortfall. The project has been rescoped and this SWFWMD Agreement restarts the process.
* Work under this Agreement is part of the Roosevelt Creek Channel 5 Improvement project, which is expected to be advertised for bid in late spring 2022.
* Companion Legistar No. 22-0053D is an agreement with the Tampa Bay Estuary Program which provides the County $100,000.00 for the habitat restoration and salinity weir modification work for the improvement project.

SWFWMD Agreement No. 22CF0003721 and SWFWMD Project No. W103; PID No. 002123A; Agreement provides $350,000.00 in SWFWMD funding; Agreement expires December 31, 2025; Authorize the Chairman to sign and the Clerk of the Circuit Court to attest.

Utilities

13. 22-0160A Cooperative Funding Agreement with the Southwest Florida Water Management District for the Advanced Metering Infrastructure Project.

Recommendation: Approval of the Cooperative Funding Agreement with the Southwest Florida Water Management District (SWFWMD) for the Advanced Metering Infrastructure (AMI) project.

* Agreement provides co-funding from SWFWMD in the amount of $139,414.00 toward purchase and installation of a software system planned within the technology aspects of the AMI Project.
* The County is required to match the $139,414.00, in the same amount for a total of 278,828.00, toward the AMI technology costs. Funding is available within the project budget to meet the match requirement. The SWFWMD funding will be available October 2022.
* This funding will support setup of an AMI software program that will promote and encourage water conservation by utility customers.
* The AMI Project involves conversion of all Pinellas County Utilities analog meters (manually read) to an AMI-based, electronic meter reading network for the County's water and reclaimed water utilities.
* The AMI Project is programmed in the Fiscal Year 2022 - 2027 Approved Capital Improvement Program.
* In addition to seeking this SWFWMD funding, the AMI Project is proposed for funding with $35 million from the County's ARPA allocation.
* The recommendation of an overall award for the AMI Project, including the software program, will be brought to the board at a future meeting.
* This was not a planned revenue for the project, but SWFWMD submitted a request for agreement for our project, which must be executed within ninety days of their requesting date requiring approval no later than March 7, 2022.

SWFWMD Agreement No. 22CF0003711; County PID Numbers 001601A and 003769A. Agreement total is $278,828.00 and County match is $139,414.00. Agreement term is October 1, 2021 through February 1, 2029; Authorize the Chairman to sign and the Clerk of the Circuit Court to attest.

COUNTY ATTORNEY

14. 22-0083A Receipt and file report of civil lawsuits filed against Pinellas County as delegated to the County Attorney.

Recommendation: Accept the receipt and file report of civil lawsuits filed against Pinellas County.

AUTHORITIES, BOARDS, CONSTITUTIONAL OFFICERS AND COUNCILS

Tax Collector

15. 22-0110A Award of quote to Gulf Coast Review, Inc. d/b/a Business Observer for the advertisement of delinquent real estate tax lists.

Recommendation: Approval of the award of quote to Gulf Coast Review, Inc. d/b/a Business Observer (Gulf Coast) for the advertisement of delinquent real estate tax lists.

* This contract provides legal newspaper advertising for delinquent real estate tax lists as required by the Tax Collector.
* Pursuant to Florida Statute 197.402, subsection (1): "If advertisements are required, the Board of County Commissioners (Board) shall make such notice as provided in chapter 50. The Tax Collector shall pay all charges, and the proportionate cost of the advertisements shall be added to the delinquent taxes collected." In order to satisfy this statutory requirement, the Office of County Attorney has advised that this quotation be submitted to the Board for consideration and approval.
* An invitation to quote was released to certified small business vendors. There was only one quote submission received from Gulf Coast. Other vendors contacted stated they were unable to handle this work at this time.
* This contract replaces the current contract, also with Gulf Coast; they are a certified small business enterprise vendor with the County.

Contract No. 22-0128-Q(SCB) in the annual amount of $13,000.00 for a twenty-four-month term total of $26,000.00 based on the lowest responsive, responsible quote received meeting specifications.

REGULAR AGENDA

ITEMS FOR DISCUSSION FROM THE CONSENT AGENDA

COUNTY ADMINISTRATOR DEPARTMENTS

Administrative Services

16. 21-1548A Ranking of firms and agreement with Creative Contractors, Inc. for construction manager at risk services (Phase One) pertaining to the Jail Security and Entry Center project. (Companion to Agenda Item No. 17)

Recommendation: Approval of the ranking of firms and award of an agreement with the number one ranked firm, Creative Contractors, Inc. for construction manager at risk services pertaining to the Jail Security and Entry Center (SEC) project (Phase One).

* Companion to Granicus item 21-833A for award of a design firm (Williams Dacar Associates) pertaining to the Jail Security and Entry Center project.
* Due to complexities and security concerns, this project will be delivered via a construction manager at risk (CMAR) delivery process. The CMAR process involves hiring two firms, the CMAR and a design firm. Both firms report to the owner and both work together to program, design, price and build the project.
* The project consists of the demolition of Mini Buildings 1 and 2 and A Barracks to prepare for the construction of the new SEC at the Detention Facility located on 49th Street in Clearwater.
* The new SEC will be approximately 11,200 square feet and will consolidate and replace existing programmatic functions on the site. The goal of the SEC is to enhance security operations by ensuring all visitors enter through one site and to redesign the flow of traffic through the facility to ensure all visitors are screened appropriately. Such visitors include attorneys, clergy, bonding agencies, and the public.
* The new SEC will contain relocated and streamlined prisoner release facilities, including dress out spaces, holding and release processing areas.
* The Board of County Commissioners will review two distinct phases of this project for consideration. The First Phase (currently) contains pricing and services to program, design, and price the project. The Second Phase involves the development of a guaranteed maximum price to construct the project and will be presented to the BCC for consideration later.
* Award recommendation to Creative in the amount of $45,000.00 for Phase One services in accordance with the Consultants Competitive Negotiation Act, per Florida Statute 287.055.
* Small Business Enterprise participation will be negotiated and finalized for Phase 2 consideration.

Contract No. 21-0704-NC(PLU), in the amount of $45,000.00 for Phase One services for a term of seven hundred thirty consecutive calendar days; Authorize the Chairman to sign and the Clerk of the Circuit Court to attest.

17. 21-833A Ranking of firms and agreement with Williamson Dacar Associates, Inc. for design services pertaining to the Jail Security Entry Center project. (Companion to Agenda Item No. 16)

Recommendation: Approval of the ranking of firms and agreement with Williamson Dacar Associates, Inc. d/b/a Williamson Design Associates (Williamson) for design services pertaining to the Jail Security Entry Center (SEC) project.

* Companion to Granicus item 21-1548A for award of a contract to Creative Contracting pertaining to construction manager at risk services (CMAR) for the SEC project.
* Due to complexities and security concerns, this project will be delivered via a CMAR delivery process. The CMAR process involves hiring two firms, the CMAR and a design firm. Both firms report to the owner and both work together to program, design, price and build the project.
* The new SEC will contain relocated and streamlined prisoner release facilities, including dress out spaces, holding and release processing areas.
* The purpose of this agreement with Williamson is to provide programming/design services and working with CMAR Creative Contracting, establish a guaranteed maximum price (GMP) for construction services for the new SEC and associated infrastructure at the County Detention Center on 49th Street in Clearwater.
* The Board of County Commissioners (BCC) will review two distinct phases of this project for consideration. The First Phase (currently) contains pricing and services to program, design, and price the project. The Second Phase involves the development of a GMP to construct the project and will be presented to the BCC for consideration later.
* Award recommendation is in accordance with the Consultants Competitive Negotiation Act, per Florida Statute 287.055; the upset limit over the seven hundred thirty-day term is $796,308.00.
* Williamson is a Certified Small Business Enterprise (SBE) with Pinellas County, and they are using Master Consulting Engineers as a subconsultant who is also a Certified SBE with Pinellas County.

Contract No. 21-0489-NC(PLU); upset limit over the seven hundred thirty-day term is $796,308.00; Authorize the Chairman to sign and the Clerk of the Circuit Court to attest.

Economic Development

18. 22-0069A Resolution expressing support of Project C1110944724 as a qualified applicant for an Economic Development Ad Valorem Tax Exemption.

Recommendation: Adopt a resolution expressing support of Project C1110944724 (Company) as a qualified applicant for an Economic Development Ad Valorem Tax Exemption (EDAVTE) pursuant to Section 196.1995, Florida Statutes, and authorizing Project C1110944724 to make improvements before an EDAVTE Ordinance is adopted.

* The Company is a supplement manufacturer currently headquartered in the United Kingdom with a production facility in unincorporated Pinellas County.
* The Company is considering expanding their current 150,000+ square foot Pinellas facility which is located in a Brownfield Area.
* The Company will invest $5,000,000.00 in real property improvements at and $6,500,000.00 in tangible property for the expanded facility, totaling $11.5 million in capital investment. The economic impact of this capital investment is $7.8 million.
* The Company will create at least 20 new jobs in Pinellas County at an average wage of $38,000.00 per year, which meets the wage threshold for a facility located in a Brownfield Redevelopment Area.
* The economic impact of 20 new jobs with an average wage of $38,000.00 a year is $1.1 million. The economic impacts were calculated using the U.S. Bureau of Economic Analysis Regional Input Modeling System (RIMS II) Model for Pinellas County.
* Based on the County's current millage rate of 5.2092, and assuming that 80% of the investment would contribute to taxable value, the maximum annual impact of the real property portion could be approximately in the range of $10,000.00 to $20,800.00
* The maximum initial, annual impact of the tangible portion could be approximately in the range of $15,000.00 to $33,900.00. The tangible value would be subject to depreciation in future years.

Housing & Community Development

19. 21-2517A Advantage Pinellas Housing Compact to create a coordinated approach to addressing affordable housing in Pinellas County.

Recommendation: Approval of the Advantage Pinellas Housing Compact, an agreement between the County, Forward Pinellas, St. Petersburg, Clearwater, Largo, and Pinellas Park providing for a common framework for collaboration on housing related initiatives for the next 10 years (through 2031).

The Housing Compact includes a commitment for partners to work together on a number of affordable housing related initiatives including:

* Development of a housing action plan and regulatory toolkit including best practices to facilitate housing production/preservation.
* Creating corridor planning strategies to locate housing, jobs, and educational opportunities in proximity.
* Addressing housing inequality and the impacts of affordable housing and health.
* Providing a diversity of housing types to provide for different needs.
* Joint education and communication initiatives.

Parks and Conservation Resources

20. 22-0182A 2022 Weedon Island Preserve Management Plan Update as required by two Lease Agreements with the State of Florida Board of Trustees of the Internal Improvement Trust Fund.

Recommendation: Approval of the 2022 Weedon Island Management Plan Update (Plan) as required by the lease agreements with the Florida Department of Environmental Protection's (FDEP) State of Florida Board of Trustees of the Internal Improvement Trust Fund.

* Lease agreements require the Weedon Island properties be managed: "only for the conservation and protection of natural and historical resources and for resource-based public outdoor recreation with is compatible with the conservation and protection of these public lands."
* FDEP requires the Plan be updated every 10 years.
* The previous Plan was updated and approved in June 2012.
* FDEP requires public input of the draft Plan at an advertised public meeting.
* The Weedon Island Preserve Advisory Group held the required public meeting on January 14, 2022 and has approved the Plan for submittal to FDEP.
* The Plan will be reviewed by FDEP's Acquisition and Restoration Council for approval on June 10, 2022.

Public Works

21. 22-0225A Declare a portion of fee owned County property as surplus and grant the authorization to exchange it for property owned by Kenneth M. McAlpin Trustee of the Huey Kenneth McAlpin Revocable Trust Agreement.

Recommendation: Recommend the adoption of the attached resolution to declare a portion of fee owned County property as surplus and grant the authorization to exchange it for property owned by Kenneth M. McAlpin Trustee of the Huey Kenneth McAlpin Revocable Trust Agreement (McAlpin).

* McAlpin and the County mutually desire to exchange portions of McAlpin-owned and county-owned parcels.
* The property exchange will resolve inconsistencies of record and clearly define right of way of North Highland Avenue.
* The new right-of-way alignment is necessary to proceed with roadway and drainage improvements to mitigate roadway flooding.
* The exchange of the property is in accordance with Section 125.37, Florida Statutes.

Authorize the Chairman to sign the resolution and the County Deed, and the Clerk of the Circuit Court to attest and record the resolution in the public records of Pinellas County.

22. 21-1033A Road Transfer Interlocal Agreement with the City of Clearwater for the transfer and acceptance of specific roadway segments and easements.

Recommendation: Approval of the Road Transfer Interlocal Agreement with the City of Clearwater for the transfer and acceptance of specific roadway segments and easements.

* The County is partnering with municipalities to transfer right-of-way and maintenance responsibility for streets within, or partially within, municipal limits.
* Agreement transfers operation and maintenance responsibilities of various road segments to the City (17.01 centerline miles).
* Transfers include maintenance responsibilities for stormwater facilities.

Authorize the Chairman to sign and the Clerk of the Circuit Court to attest the Interlocal Agreement and record the Interlocal Agreement with Exhibits A, B and C, record separately Exhibit C, and the corresponding right-of-way maps (Mylars) in the official records of the County.

Utilities

23. 21-2305A Third Amendment to the Agreement with The Forestry Company for Ecosystem Management pertaining to the Al-Bar and Cross Bar Ranches.

Recommendation: Approval of the Third Amendment to the Agreement with The Forestry Company for Ecosystem Management pertaining to the Al-Bar and Cross Bar Ranches.

* This contract provides for ecosystem management at the County owned property in Pasco County known as Al-Bar and Cross Bar Ranches. A map of the property location is attached to the agenda item.
* The Third Amendment increases the contract in the amount of $940,000.00 for contract services through the remaining of the contract term expiration on March 19, 2023.
* The Third Amendment replenishes funds which have been utilized by additional operation and maintenance activities and revenue generating pursuits. Additional operation and maintenance expenditures include road improvements, staff gauge replacements, and on-site housing repairs. Revenue generating pursuits include additional fertilization of planted pines and wildlife habitat restoration.
* There are sufficient funds budgeted in the Utilities Operating Budget to cover the contract increase.
* The Board of County Commissioners approved the 5-year contract on March 20, 2018 in the amount of $3,479,518.00.
a.) The County Administrator approved the First Amendment on October 11, 2019 in the amount of $260,000.00 for potential revenue; and
b.) The Second Amendment on May 4, 2021 adding a $300.00 monthly credit on land management services related to allowing the Forestry Company to place a mobile home near the northern property boundary.

Contract No. 167-0365-P(LN); increase in the amount of $940,000.00 for a revised total contract value of $4,419,518.00 effective through March 19, 2023; Authorize the Chairman to sign and the Clerk of the Circuit Court to attest.

COUNTY ATTORNEY

24. 22-0165A Proposed initiation of litigation in the case of Lina Lindberg v. Lakeview of Largo South Condominium Association, Inc. et al; HUD Case No. 04-21-7231-8; PC Case No. 21-041 - alleged housing discrimination.

Recommendation: Approval and authorization for the County Attorney to initiate litigation on behalf of Lina Lindberg through outside counsel retained for these legal services.

25. 22-0188A Proposed initiation of litigation in the case of Patricia Lang v. Rosetree Village Association, Inc./Real Manage, LLC; HUD Case No. 04-20-2631-8; PC Case No. 20-035 - alleged housing discrimination.

Recommendation: Approval and authorization for the County Attorney to initiate litigation on behalf of Patricia Lang through outside counsel retained for these legal services.

26. 22-0164A Resolution approving the delegation of the Board of County Commissioner's duties to make the delinquent tax advertisements.

Recommendation: Adopt a resolution approving any duty the Board of County Commissioners has to make delinquent tax notices pursuant to Section 197.402, Florida Statutes, directing the Tax Collector to take all required actions to effectuate delinquent tax advertisements, and directing the Clerk to deliver the resolution to the Tax Collector.

27. 22-0033A County Attorney Reports.

COUNTY ADMINISTRATOR

28. 22-0034A County Administrator Reports.

COUNTY COMMISSION

29. 22-0215A Appointment to the Feather Sound Community Services District, Inc. (Individual appointment by Commissioner Eggers).

Recommendation: Approve one appointment to the Feather Sound Community Services District, Inc. to fill the remainder of a current term, ending December 31, 2022.

* Nick Pfeifer nominated for appointment by Commissioner Eggers.

30. 22-0035A County Commission New Business: Pertinent and Timely Committee/Board Updates, Policy Considerations, Administrative/Procedural Considerations, and other New Business.

6:00 PM

PUBLIC HEARINGS

AUTHORITIES, BOARDS, CONSTITUTIONAL OFFICERS AND COUNCILS

Educational Facilities Authority

31. 22-0002A Tax Equity Fiscal Responsibility Act Resolution for issuance by the Pinellas County Educational Facilities Authority of its Revenue Bonds in an aggregate principal amount not to exceed $7,000,000.00 on behalf of Learning Independence for Tomorrow, Inc. d/b/a LiFT Academy.

Recommendation: Conduct a public hearing to adopt a Tax Equity Fiscal Responsibility Act (TEFRA) Resolution granting TEFRA approval of the Pinellas County Educational Facilities Authority Revenue Bonds in an aggregate principal amount not to exceed $7,000,000.00 on behalf of Learning Independence for Tomorrow, Inc. d/b/a LiFT Academy (Borrower).

* Borrower is requesting issuance of bonds for the acquisition, construction, and renovation of existing facilities located at 1005 South Highland Avenue, Clearwater, Florida 33756.
* Borrower is responsible for payments of all fees and expenses.
* Issuance of these bonds will have no fiscal impact on the County.

BOARD OF COUNTY COMMISSIONERS

32. 22-0111A Q ZON-21-08 (Pinellas County)
A request for a change of Zoning from RMH, Residential Mobile/Manufactured Home to R-5-CO, Urban Residential-Conditional Overlay with the Conditional Overlay limiting the maximum building height to 35 feet and requiring a minimum 20-foot setback from 46th Avenue North, excluding front porches, decks, and covered entryways, which will require a minimum of 15 feet from 46th Avenue North, on approximately 1.55 acres located at 3901 46th Avenue North in Lealman.
(Quasi-Judicial)

Recommendation: Based upon evidence and findings contained in the staff report and attachments, Case No. ZON-21-08 is recommended for approval:

A Resolution approving the application of the County for a change in zoning from, Residential Mobile/Manufactured Home to Urban Residential-Conditional Overlay (R-5-CO), with the Conditional Overlay limiting the maximum building height to 35 feet and requiring a minimum 20-foot setback from 46th Avenue North, excluding front porches, decks, and covered entryways, which will require a minimum of 15 feet from 46th Avenue North.

* The applicant is seeking a zoning change on a vacant 1.55-acre site.
* The proposed use is residential affordable housing.
* At the October 14, 2021 public hearing, the Local Planning Agency continued the case to provide the applicant an option to pursue a Conditional Overlay to address concerns with setbacks and height. (The vote was 4-0, in favor)
* At the January 13, 2022 public hearing, the Local Planning Agency finds the proposed Zoning Atlas amendment with a Conditional Overlay, is consistent with the Pinellas County Comprehensive Plan and recommends approval with an amendment to the conditional overlay as follows:
- A Conditional Overlay limiting the maximum building height to 35 feet and requiring a minimum 20-foot setback from 46th Avenue North, excluding front porches, decks, and covered entryways, which will require a minimum of 15 feet from 46th Avenue North. (The vote was 4-0, in favor)
* One person appeared in favor of the request.
* One letter of objection was received.

33. 22-0112A Q ZON-21-12 (First Capital Trusts, LLC)
A request for a change of Zoning from R-A, Residential Agriculture to R-5, Urban Residential on approximately 2.3 acres located on the west side of Starkey Road, approximately 483 feet north of 94th Avenue North in unincorporated Seminole. (Quasi-Judicial)

Recommendation: Based upon the evidence and findings contained in the staff report and attachments, Case No. ZON-21-12 is recommended for approval:

A Resolution approving the application of First Capital Trusts, LLC for a change in zoning from Residential Agriculture (R-A) to Urban Residential (R-5).

* The applicant is seeking a zoning change on a vacant 2.3-acre site.
* The proposed use is a 29-unit townhome development.
* The subject property is located along a four-lane divided arterial roadway with similar uses in the immediate vicinity.
* The Local Planning Agency unanimously recommended approval of the request (vote 4-0). Five-people appeared in opposition citing increased density, ecological impacts, light pollution, setbacks, and traffic.
* Two letters of objection have been received.
a.) The maximum density is based on the land use category, which is not changing. Ecological impacts, light pollution, and setbacks will be addressed during site plan review per Code requirements and other regulations. Traffic impacts will not affect the carrying capacity of area roadways.
b.) The applicant has spoken with neighbors within the townhome community to the north to discuss their concerns. They reported positive results and have indicated plans to meet further.

34. 21-2576A Ordinance amending the Pinellas County Code by adding Article VII to Chapter 126 that provides regulation pertaining to private sewer laterals and provides permitting and regulation of private sanitary sewer collection systems. (Companion to Agenda Item No. 35)

Recommendation: Adopt the Ordinance amending the Pinellas County Code by adding Article VII to Chapter 126 that provides regulation pertaining to private sewer laterals and provides permitting and regulation of private sanitary sewer collection systems.

* Ordinance further defines requirements for defective sewer laterals, and ensures the County has legal authority to implement new regulations to reduce inflow and infiltration and sanitary sewer overflows.
* Ordinance adds Article VII to the Code, providing regulation pertaining to private sewer laterals and provides permitting and regulation of private sanitary sewer collection systems.
* The Ordinance requires a public hearing.
* The Ordinance is effective when filed with the Department of State.
* Companion to Legistar file # 21-2613A - Resolution.

35. 21-2613A Resolution authorizing the County Administrator to establish and implement programs to address the conditions of private sewer laterals and collection systems and reduce related impacts to the County sewer system. (Regular Agenda Item that is Companion to Item No. 34)

Recommendation: Approval of a Resolution authorizing the County Administrator to establish and implement programs to address the conditions of private sewer laterals and collection systems and reduce related impacts to the County sewer system.

These programs should be adopted only after the:
* Adoption of the Ordinance amending the Pinellas County Code by adding Article VII to Chapter 126 that provides regulation pertaining to private sewer laterals and provides permitting and regulation of private sanitary sewer collection systems.
* Adoption of the Resolution to implement programs to address the conditions of private sewer laterals and collection systems.
* Resolution includes four policies authorizing the County to implement programs (attached to this item) including Find and Fix Policy, Permitting Policy, Rebate Policy, and Private Sewer Collection Systems Policy.
* The Resolution becomes effective once companion item, Ordinance 22, is filed with the State of Florida.

36. 22-0168A Petition of Mikhail A. Fokin, Zilya Ruga, Hugo E. Gonzalez, Rosemary Craig Gonzalez, Kimble McNeal, and Mary McNeal to vacate the 50-foot-wide right-of-way of Palmetto Avenue lying east of Elm Street and west of Church Street. (Legislative Hearing)

Recommendation: Continuation of the request to grant the petition to vacate of the petition to vacate a 50-foot-wide right-of-way of Palmetto Avenue to a future meeting date. If a specific meeting date is chosen no additional advertising will be required.

However, if the Palmetto Avenue vacation is granted, adopt the attached resolution pursuant to □336, Florida State Statutes.

* The petitioners are requesting to vacate a 50-foot-wide right-of-way of Palmetto Avenue
* The petitioners are requesting the vacation to a.) allow for an increase in property size, b.) avoid the need to improve Palmetto Avenue, and c.) remain within unincorporated Pinellas County (i.e., not annex into Safety Harbor).
* County staff initially recommend denial of the vacation request for Palmetto Avenue because the right-of-way provides the ability to improve stormwater drainage for the surrounding area, provides connectivity to Church Street, and maintains the opportunity for future infrastructure improvements. The current recommendation is to continue this matter to a future date to allow the applicant the opportunity to provide the necessary water quality testing for the proposed well water, which will support the fire prevention and utilities requirements for the new single-family residence.
* The County and City's position is the petitioner's property can be developed without the need to vacate Palmetto Avenue.
* The 50-foot-wide right-of-way of Palmetto Avenue are being evaluated for transfer from Pinellas County to the City of Safety Harbor for municipal purposes.
* The Board of County Commission, at its January 11, 2022 meeting granted the vacation request for the alley.
* A follow up meeting was held on January 18, 2022 with the City of Safety Harbor, the petitioner, and County staff to discuss the permitting process for the single-family home and associated driveway.
* The permitting review has been completed and permits are ready to be issued pending several outstanding items:
o Verification of the water quality testing
o Request for a habitat inspection
o Authorization to cross the City of St. Petersburg's water main
o Authorization from the City of Safety Harbor to connect to Elm Street
* A letter has been issued to applicant communicating this information to provide confirmation that BDRS is ready to issue the permit once those items are addressed.

Authorize the Clerk of the Circuit Court to record the resolution in the public records of Pinellas County.

ADJOURNMENT

Special Accommodations

Persons with disabilities who need reasonable accommodations to effectively participate in this meeting are asked to contact Pinellas County's Office of Human Rights by e -mailing such requests to accommodations@pinellascounty.org at least three (3) business days in advance of the need for reasonable accommodation. You may also call (727) 464-4882.

Public Participation Procedures

Persons wishing to comment regarding a specific agenda item should do so:
In person - by preregistering at pinellascounty.org/comment or by filling out a comment card with the County staff person in the meeting room; or,
Virtually - in advance in accordance with the instructions in the notice of this meeting, or on the virtual platform or phone after preregistering.
Members of the public wishing to make comments on the virtual platform or by phone must preregister by 5 p.m. the day before the meeting. At the scheduled section of the meeting when the item is before the Board of County Commissioners (Board), the Chairman or Clerk will call on each individual, one by one, to be heard. Each individual may speak for up to three minutes as may be modified by the Chairman. Comments or behavior that violate Pinellas County Commission Public Participation and Decorum Rules will be disconnected. Members of the public who cannot attend at the time an agenda item is before the Board may offer comments during the Citizens to Be Heard section near the beginning of the meeting. More information is available at www.pinellascounty.org/BCC_Participation.htm or by calling (727) 464-4400.

Public Hearing Procedures

The procedure used by the Board in conducting Public Hearings is to have a staff presentation followed by the applicant presenting the specific proposal. The Board will then hear comments from the proponents, the opponents and a staff summary. The applicant will then be given an opportunity to close and the Board will decide on the matter. Public Hearings before the Board are governed by the provisions of Section 134 -14 of the Pinellas County Land Development Code as may be modified by Pinellas County Emergency Order. That code provides that at the conclusion of each person's presentation, any speaker may seek the Chairman's permission to ask questions of staff.
Specifically:

1. At the conclusion of the presentations by the applicant and any proponents, all affected parties may seek the Chairman's permission to ask questions of or seek clarification from the applicant and/or the proponents.
2. At the conclusion of the presentation by the opponents, all affected parties may seek the Chairman's permission to ask questions of or seek clarification from any opponent.

The applicant's closing comments will address testimony subsequent to his or her presentation. Continuing rebuttal of other than directly preceding testimony will not be allowed. Because much testimony has already been submitted in writing, the following guidelines accommodate efficient presentations:

1. The applicant should present his or her entire case, including rebuttal, in no more than 20 minutes.
2. Persons wishing to speak regarding a Public Hearing item may speak for up to three minutes each.
3. Persons wishing to attend virtually must preregister at pinellascounty.org/comment by 5 p. m. the day before the meeting.

Appeals

Persons are advised that, if they decided to appeal any decision made at this meeting/hearing, they will need a record of the proceeding, and, for such purposes, they may need to ensure that a verbatim record of the proceeding is made, which includes the testimony and evidence upon which the appeal is to be based.

If a Board meeting beginning at 9:30 A.M. has not concluded by noon, a recess will be taken from noon to 12:30 P.M., and the remainder of the meeting will continue at 12:30 P.M.
If a Board meeting beginning at 2:00 P.M. has not concluded by 5:30 P.M., a recess will be taken from 5:30 to 6:00 P.M. The remainder of the afternoon agenda will resume at 6:00 P.M., followed by Public Hearings.

Pinellas County

315 Court Street
Clearwater, FL 33756

Follow-up Agenda

Tuesday, February 22, 2022

2:00 P.M.

Hybrid In-Person and Virtual Regular Meeting

Public Hearings at 6:00 P.M.

Board of County Commissioners

Charlie Justice, Chairman
Janet C. Long, Vice-Chair
Dave Eggers
Rene Flowers
Pat Gerard
Kathleen Peters
Karen Williams Seel

ROLL CALL - 2:05 PM

INVOCATION

PLEDGE OF ALLEGIANCE

PRESENTATIONS AND AWARDS

1. Black History Month Proclamation:
- Terri Lipsey Scott, Executive Director, Dr. Carter G. Woodson African American Museum

2. Partner Presentation:
- Mike Sutton, President & Chief Executive Officer, Habitat for Humanity of Pinellas and West Pasco Counties

CITIZENS TO BE HEARD

3. Citizens To Be Heard - Public Comment.

Jeff Fusco, Gulfport
Jeff Maddux, St. Petersburg
Richard Griswold, Palm Harbor (submitted documents)
David Ballard Geddis, Jr., Palm Harbor (submitted documents)
Rory King, St. Petersburg
Patti Sidote, St. Petersburg
Julie Vayne, Seminole
William Henderson, Seminole
David Happe, Tarpon Springs
Lizbet Lorez, no address given
Gisela Laubitz, South Pasadena
Rocky Benslimane, St. Petersburg
Vincent Nowick, St. Petersburg
Dan Tucker, Seminole
Michael Benjamin, Largo
Mike Greiger, St. Petersburg
John Kieffer, St. Petersburg
Mack Johnson, Largo
Rick Dumont, Tierra Verde
Virginia Frizzle, Largo
Greg Pound, Largo
Aden Barnes, Largo
Eileen Posch, Tarpon Springs
Stacy Geier, Largo
Barbara Haselden, St. Petersburg

CONSENT AGENDA - Items 4 through 15 (Item No. 13 addressed under Regular Agenda)

APPROVED

CLERK OF THE CIRCUIT COURT AND COMPTROLLER

4. Minutes of the in-person and virtual regular meetings held on October 26 and November 9, 2021.

APPROVED AS PART OF THE CONSENT AGENDA

5. Vouchers and bills paid from January 16 through 22, 2022.

APPROVED AS PART OF THE CONSENT AGENDA

Reports received for filing:

6. Division of Inspector General, Clerk of the Circuit Court and Comptroller, 2022 Inspector General's Annual Plan.
APPROVED AS PART OF THE CONSENT AGENDA

7. Dock Fee Report for the month of January 2022.

APPROVED AS PART OF THE CONSENT AGENDA

Miscellaneous items received for filing:

8. City of Seminole Notice of Public Hearing to be held March 22, 2022, regarding proposed Ordinance No. 02-2022 and voluntary annexation.
APPROVED AS PART OF THE CONSENT AGENDA

COUNTY ADMINISTRATOR DEPARTMENTS

Administrative Services

9. Quarterly report of claim settlements for the period of October 1, 2021 through December 31, 2021.
APPROVED AS PART OF THE CONSENT AGENDA

County Administrator

10. Receipt and file report of non-procurement items delegated to the County Administrator for the month ending January 31, 2022.
APPROVED AS PART OF THE CONSENT AGENDA

11. Receipt and file report of purchasing items delegated to the County Administrator for the quarter ending December 31, 2021.
APPROVED AS PART OF THE CONSENT AGENDA

Public Works

12. Cooperative Funding Agreement with the Southwest Florida Water Management District for Habitat Restoration at Roosevelt Creek Channel 5.
APPROVED AS PART OF THE CONSENT AGENDA

COUNTY ATTORNEY

14. Receipt and file report of civil lawsuits filed against Pinellas County as delegated to the County Attorney.
APPROVED AS PART OF THE CONSENT AGENDA

AUTHORITIES, BOARDS, CONSTITUTIONAL OFFICERS AND COUNCILS

Tax Collector

15. Award of quote to Gulf Coast Review, Inc. d/b/a Business Observer for the advertisement of delinquent real estate tax lists.
APPROVED AS PART OF THE CONSENT AGENDA

REGULAR AGENDA

ITEMS FOR DISCUSSION FROM THE CONSENT AGENDA

Utilities

13. Cooperative Funding Agreement with the Southwest Florida Water Management District for the Advanced Metering Infrastructure Project.
APPROVED

COUNTY ADMINISTRATOR DEPARTMENTS

Administrative Services

16. Ranking of firms and agreement with Creative Contractors, Inc. for construction manager at risk services (Phase One) pertaining to the Jail Security and Entry Center project. (Companion to Agenda Item No. 17)
CONTINUED TO MARCH 8, 2022

17. Ranking of firms and agreement with Williamson Dacar Associates, Inc. for design services pertaining to the Jail Security Entry Center project. (Companion to Agenda Item No. 16)
CONTINUED TO MARCH 8, 2022

Economic Development

18. Resolution expressing support of Project C1110944724 as a qualified applicant for an Economic Development Ad Valorem Tax Exemption.
APPROVED

Housing & Community Development

19. Advantage Pinellas Housing Compact to create a coordinated approach to addressing affordable housing in Pinellas County.
APPROVED

Parks and Conservation Resources

20. 2022 Weedon Island Preserve Management Plan Update as required by two Lease Agreements with the State of Florida Board of Trustees of the Internal Improvement Trust Fund.
APPROVED

Public Works

21. Declare a portion of fee owned County property as surplus and grant the authorization to exchange it for property owned by Kenneth M. McAlpin Trustee of the Huey Kenneth McAlpin Revocable Trust Agreement.
APPROVED

22. Road Transfer Interlocal Agreement with the City of Clearwater for the transfer and acceptance of specific roadway segments and easements.
APPROVED

Utilities

23. Third Amendment to the Agreement with The Forestry Company for Ecosystem Management pertaining to the Al-Bar and Cross Bar Ranches.
APPROVED

COUNTY ATTORNEY

24. Proposed initiation of litigation in the case of Lina Lindberg v. Lakeview of Largo South Condominium Association, Inc. et al; HUD Case No. 04-21-7231-8; PC Case No. 21-041 - alleged housing discrimination.
APPROVED

25. Proposed initiation of litigation in the case of Patricia Lang v. Rosetree Village Association, Inc./ Real Manage, LLC; HUD Case No. 04-20-2631-8; PC Case No. 20-035 - alleged housing discrimination.
APPROVED

26. Resolution approving the delegation of the Board of County Commissioner's duties to make the delinquent tax advertisements.
APPROVED

27. County Attorney Reports:
- Update on ad valorem tax litigation against Pasco County Property Appraiser and Tax Collector.

COUNTY ADMINISTRATOR

28. County Administrator Reports:
- COVID-19 Update

COUNTY COMMISSION

29. Appointment to the Feather Sound Community Services District, Inc (Individual appointment by Commissioner Eggers).
APPROVED

30. County Commission New Business: Pertinent and Timely Committee/Board Updates, Policy Considerations, Administrative/Procedural Considerations, and other New Business.

The Commissioners reported on the activities of their assigned boards and committees and discussed various issues.

A motion was made to bring forth an agenda item on the March 8 meeting requesting a discussion of implementing term limits.
FAILED

Meeting Recessed: 4:50 P.M.

Meeting Reconvened: 6:03 P.M.

PUBLIC HEARINGS

AUTHORITIES, BOARDS, CONSTITUTIONAL OFFICERS AND COUNCILS

Educational Facilities Authority

31. Tax Equity Fiscal Responsibility Act Resolution for issuance by the Pinellas County Educational Facilities Authority of its Revenue Bonds in an aggregate principal amount not to exceed $7,000,000.00 on behalf of Learning Independence for Tomorrow, Inc. d/b/a LiFT Academy.
APPROVED

BOARD OF COUNTY COMMISSIONERS

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APPROVED

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APPROVED

34. Ordinance amending the Pinellas County Code by adding Article VII to Chapter 126 that provides regulation pertaining to private sewer laterals and provides permitting and regulation of private sanitary sewer collection systems. (Companion to Agenda Item No. 35)
APPROVED

35. Resolution authorizing the County Administrator to establish and implement programs to address the conditions of private sewer laterals and collection systems and reduce related impacts to the County sewer system. (Regular Agenda Item that is Companion to Item No. 34)
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36. Petition of Mikhail A. Fokin, Zilya Ruga, Hugo E. Gonzalez, Rosemary Craig Gonzalez, Kimble McNeal, and Mary McNeal to vacate the 50-foot-wide right-of-way of Palmetto Avenue lying east of Elm Street and west of Church Street. (Legislative Hearing)
WITHDRAWN

ADJOURNMENT - 6:46 PM.