

FLORIDA GULF OF MEXICO

RESTORATION

PROJECT SUBMITTAL FORM

Form Purpose and Instructions:

- To assist the project proposal and review process, please complete this Submittal Form. Completion of the Form will contribute to the appropriate information being completely and accurately submitted for each project.
- Take as much space as needed for each question, but please keep responses as focused as possible. It may assist you to review all the questions before addressing any one question.
- Please submit one Form per project, if you have multiple projects - please submit one Form for each project.
- Please submit completed Forms to Restoration.Projects@dep.state.fl.us. Once your Form is successfully submitted, you will receive a confirmation email from the Florida Department of Environmental Protection.

Project Name:

Tallahassee Community College - Wakulla E. O. Wilson Biophilia Education Center

Contact Information *(Include at least one name, phone number, email address, and organization name if applicable):*

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Project Location *(Include a map, if possible, and the city, county, longitude/latitude, and watershed):*

The project is located in Wakulla County, Florida, approximately 4.25 miles south of Crawfordville, in the Ochlocknee-St. Marks Watershed, Hartsfield River Survey Sections 504 and 505, Township 60N and Range 60E. It lies within the Gulf Coastal Plains Bioregion at 30° 08' 08.62" North by 84° 22' 41.65" West. A location map is shown as Figure 1.

Project Description *(Describe all aspects of the project):*

This proposal requests funding for the Wakulla E. O. Wilson Biophilia Education Center (WBEC) on the Campus of the [Tallahassee Community College \(TCC\)](#) [Wakulla Environmental Institute \(WEI\)](#) (Figure 2). The WBEC will be the second in a series of Biophilia Centers across the country whose core mission is to educate students and visitors on the importance of biodiversity, to promote sustainability, and to encourage conservation, preservation and restoration of ecosystems.

Coastal Wakulla County is the “gateway to the Gulf of Mexico” from Florida’s Capitol in Tallahassee, and bridges the “Forgotten Coast” of the panhandle region to the west with the “Nature Coast” of the Big bend region to the east. Besides the coastal communities of St. Marks, Panacea, and Ochlocknee Bay in Wakulla, this wider region includes Cedar Key, Suwannee River, Apalachicola, Carrabelle, St. Joseph Bay, and St. Andrews Bay, and dozens of spring-fed and blackwater creeks and rivers flowing into the Gulf. Over one-million acres of forested, bio-diverse and water-rich public lands exist within a 100-mile radius of Wakulla and most of the shoreline is protected as well. Much of the water is a result of upwelling of the Floridian aquifer in a karst plain unique to this region, and hosts a rich biodiversity of flora and fauna uniquely adapted to these environments. It is also home to the iconic “[Wakulla Springs](#),” one of the largest, deepest, and most-explored spring systems in the world, now protected as part of [Florida’s State Parks](#). The Wakulla River flows a short distance to merge with the historic St. Marks River before entering the Gulf of Mexico.

The [Wakulla Environmental Institute](#) is an initiative by TCC to take advantage of this strategic location to 1) enhance the public’s understanding and appreciation of the region’s ecology and economy of the Gulf of Mexico, 2) train the “next generation” of natural resource managers and professionals, 3) stimulate a workforce to meet the public and private needs of a more sustainable Gulf future and 4) bring new visitors from an expanded and properly marketed domestic and international ecotourism industry. WEI will have three main missions—Education, Conservation and Recreation. These will be met by the following six (6) components:

1. Degree and professional certificate programs in environmental science technology, water quality, aquaculture, parks and leisure, and agribusiness, forestry, and wildlife management; non-degree workforce development courses in nature-based business; as well as professional certification and continuing education programs in a broad range of environmental specialties (existing and planned);

2. The Wakulla E. O. Wilson Biophilia Education Center (proposed here) – a younger student and public education center focused on the region’s rich biodiversity;
3. WEI Education and Training Center (proposed) – a multi-use facility for special training, education and community/business programs;
4. TCC-WEI Lodge – a 200-room lodging facility for students and visitors to the Institute (to be privately funded and staffed by TCC);
5. WEI Aquaculture Program and Center (proposed) – a special jobs and marine products incubator for the region;
6. WEI Conservation Lands and Recreational Facilities (proposed) – natural lands adjacent to the existing TCC-WEI campus and recreational facilities needed to stimulate ecotourism.

Together these six components will provide state-of-the-art, environmentally sensitive, efficient and integrated learning laboratories for students and professionals seeking real life, hands-on training in conservation practices, resource management and restoration, and recreation while creating jobs and supporting increased regional ecotourism.

In addition to the WEI Biophilia Education Center proposed here, separate proposals supporting other components of the WEI have been submitted. Figure 2 shows the location of properties and facilities anticipated in all three of these proposals in relation to the existing property of TCC-WEI.

This proposal is specific to the Wakulla Biophilia Education Center (WBEC) component of WEI.

Establishment of the WBEC will benefit the Gulf Coast by satisfying goals established by [December 2012 Gulf of Mexico Regional Ecosystem Restoration Strategy](#) (the Strategy), and enhance the effectiveness of a Gulf-wide Comprehensive Plan as described in the [Gulf Council’s “Path Forward Report.”](#)

According to the Strategy, “Programs that provide citizens with hands-on learning experiences increase understanding of links between the environment and their well-being. This knowledge and awareness are essential for achieving environmental stewardship, which will help to ensure sustainable Gulf communities.”

The purpose of the WBEC is to address this strategic need for greater public awareness of the importance of natural systems, to help train professionals in effective environmental education and communications, and create a focal point for increased ecotourism in the region. The Center will be modeled after and operated in cooperation with the highly successful [E. O. Wilson Biophilia Center](#) in East Freeport, Walton County, Florida, but with programming and activities focused on the interplay between human activities, community resilience, and the health of aquatic systems, including groundwater and karst features, inland streams and wetlands, coastal habitats and restoration, and the

Gulf of Mexico itself. A broad range of government, non-profit, and private stakeholders and partners will be engaged to provide input into the design and programming of the WBEC.

The Florida Panhandle has been identified as one of the five richest [biodiversity hotspots](#) in the United States.¹ As in many parts of the Gulf region, both the economy and quality of life of the region are inexorably linked to these natural resources. Over 70% of the land area in [Wakulla County](#), for example, is in public conservation lands, and over 85% of the shoreline is protected in its natural state. The importance of these resources to the integrity of the Gulf of Mexico and the preponderance of local economic activities that rely on them create the ideal location for an educational institution like the WBEC.

The WBEC facility will be designed to become an international tourist attraction, a gateway to nature-based recreation throughout the region and a model of sustainability. It will also serve as a K-12 environmental education center for the Gulf region and a learning laboratory for college-aged and professional-level students enrolled in classes through WEI. It will adopt the suite of successful educational programs and activities employed at the East Freeport Center for the Longleaf Pine Flatwoods, which have been developed in concert with Florida State educational standards, and customize them with a focus on the unique aquatic, coastal, and marine resources of the Florida Big Bend, Apalachee Bay and the greater Gulf of Mexico regions. The WBEC will also advance the job training and professional certificate aspects of WEI curriculum and serve as a training ground for students seeking further education at WEI for employment in ecotourism, environmental education and management, aquaculture, and related fields.

A 10-acre, privately owned parcel surrounded by WEI property is the ideal location for the WBEC. This parcel is immediately adjacent to two remarkable, interconnected karst features; a dramatic sinkhole lake, and a river rise that feeds Black Creek and its associated blackwater swamp forests, leading to the Gulf through a series of karst caves. The site also provides small boat (canoe/kayak) access to the Black Creek swamp forest, and is within easy walking distance of a variety of nearby habitats, including hardwood and mixed hardwood conifer forests, hardwood hammocks, sinkhole and sinkhole lakes, and managed pine plantations. An existing residence, barn, and outbuildings on the 10-acre site will be retrofitted, replaced, and/or expanded to provide space for museum quality exhibits, activity areas, and office spaces designed, built and operated according to the highest standards of sustainability. Extensive biological and hydrogeological surveys will be conducted and recommendations developed for the location and design of buildings, trails and outdoor learning laboratories, and to identify opportunities for ecological restoration.

With appropriate funding and drawing on its network of advisors and community partners, including the Biophilia Center in Walton County, the WBEC will become a state, national and international destination for ecotourism, a gateway to the many parks, forests, reserves, preserves and privately owned ecotourism interests in the region, a much-needed center for the education of thousands of K-12

¹ *Bioscience Magazine*. 2008.

students, and model for success in training the next generation of environmental educators and natural resource guide professionals.

Estimated Project Costs *(Describe the estimated costs of the project, including any assumptions for contingency and ongoing operations/maintenance. Identify other secured funding sources such as matching funds, in-kind contributions or state/federal dollars. In addition, if possible, complete and submit the Cost Appendix Sheet associated with this Form):*

• Purchase 10-Acre (+/-) Land Plus Existing Structures	\$ 450,000
• 7,500 sq. ft. Exhibit, Office and Ancillary Space at \$ 533/sq. ft.	\$ 4,000,000
• Project Design PM/CM	\$ 950,000
• Environmental Assessment and Permitting	\$ <u>175,000</u>
Total	\$ 5,575,000

Other Funding *(Indicate if the project is submitted for any potential funding or if it may be used to leverage additional funding, if so please describe the funding source [e.g. State/Federal Grants]):*

TCC and the State of Florida will provide staffing, administrative support, and maintenance of the proposed WBEC facility through annual Public Education Capital Outlay (PECO) funds. The TCC Foundation, WEI volunteers and other partners and parties will provide support of this project.

Technical Feasibility *(Describe the technologies involved and any relevant past experience or proven success with similar projects):*

Project partners including TCC, the Biophilia Center in Walton County, cooperating resource agencies and stakeholders, and Ecology and Environment Inc., will provide the necessary experience and technical knowledge to assess environmental assets and constraints on current properties and those scheduled for acquisition, to develop plans for the sensitive siting of buildings, trails, outdoor learning labs, demonstration areas, and other facilities, and to provide construction oversight. The WBEC has been approved by TCC, which has ample experience in the administration of educational campuses and training facilities throughout the region. Besides the TCC-WEI, which received a \$4.5 million appropriations last year by the Florida Legislature and Governor, TCC has administered and grown the highly successful Public Safety Institute in Gadsden County, Florida, for law enforcement education and training.

Environmental Benefits *(Describe the nature, magnitude, and timing of any environmental benefits attributable to the project. If possible, describe potential environmental performance measures [e.g. pollutant reduction]. Please address any potential environmental impacts associated with implementing or maintaining the project [e.g. loss of a habitat or conversion of habitat from one type to another during implementation]):*

The educational activities of the WBEC will be designed to increase public awareness and appreciation of nature and natural systems, particularly aquatic and marine systems, and the relationship between human activities and ecosystem services throughout the Gulf of Mexico region. This knowledge is

essential to long-term environmental stewardship and community resilience. A primary purpose of the master planning process will be to acquire, protect, and manage properties adjacent to the WEI containing a variety of habitats, evaluate these properties in terms of environmental quality, sensitivity, and restoration potential, assure that buildings and associated facilities are designed and located so as to avoid environmental impacts, and create a long-term net improvement in overall environmental quality. The planning and design process will focus on current and innovative approaches to sustainable design and practices that reduce waste, environmental pollution, and the consumption of energy and water to assure that the environmental footprint of the WBEC is improved as a result of the development. The WBEC will also interpret and demonstrate current and emerging technologies and approaches to sustainability, including sustainable energy sources, water conservation and energy conservation that will encourage current and future developments in the region to be more resilient and sustainable.

Where opportunities exist, WBEC will engage in environmental restoration activities in concert with the TCC-WEI to enhance the quality and biodiversity of the grounds and nearby habitats and provide students and teachers with opportunities to become personally engaged in these stewardship activities.

Economic and Social Benefits *(Describe the economic and social benefits including those related to the project's improved ecosystem services and any estimates on jobs created or preserved):*

The world-class parks, preserves and natural amenities of Wakulla and surrounding counties are essential to the quality of life for the region's residents, but they are also important economic drivers of tourism, job growth, and overall economic vitality (Figure 3). A center that introduces visitors to these natural wonders and invites them to develop a deeper understanding and affinity for nature is essential to raising the region's profile as a destination for nature and outdoor enthusiasts. The WBEC will become a must-see tourist destination that will attract visitors to the region while promoting nearby parks and reserves, privately operated lodging facilities, and nature-based recreation and ecotourism services.

The WBEC expects to provide educational benefits on the K-12 level similar to those provided by the existing E. O. Wilson Biophilia Center in East Freeport, but in a much larger market area. That institution currently educates 6,500 students in a six-county area each year and averages more than 140 students every school day. The WBEC will seek to emulate that success by offering regular programming to cooperating schools in Wakulla, Leon, Franklin, Jefferson, Taylor, Gadsden, Gulf and other counties, as well as special programming for schools from throughout the Gulf Region and nation as a whole. Students who visit the WBEC will learn first-hand about the natural environment through interpretive exhibits, outdoor learning labs and nature trail systems, and ecological restoration sites. By offering four days of curriculum that coincide with the Florida's Next Generation Sunshine State Standards and the National Common Core Standards, young citizens will increase understanding and knowledge for science portions of the Florida Comprehensive Assessment Test (FCAT). While promoting Science, Technology, Engineering, and Mathematic (STEM) subjects, students will also be provided opportunities to develop critical thinking skills through science-based investigation, inquiry, and innovation, as well as

explorations in other subject areas such as art and literature. Teachers will come to see the facility as an extension of their classroom; the WBEC will become their science education, project-based learning facility, and the place where academics are linked to real world experience.

Young people who develop personal understanding and affinity for nature during their formative years are far more likely to become adults who support responsible environmental planning and management. Early experiences may also inspire them to become the environmental managers, leaders and innovators of the future. The WBEC will help to develop a sense of environmental stewardship among ecotourists and visitors, children who participate in K-12 programming, and students of the WEI.

Tallahassee Community College is a recognized leader in education and training that leads to employment in the panhandle region. Through development of the WEI, TCC intends to become a regional leader in training environmental and conservation professionals. Using the National Conservation Training Center in Shepherdstown, West Virginia, as a model and relying on TCC's success with its Public Safety Institute in Gadsden County, the WEI will train a new workforce of environmental managers and technicians to meet the need for increased environmental stewardship in the Northwest Florida Region, the State, Gulf wide, and beyond. WEI will also serve a number of public agencies and private concerns throughout the Gulf Region by offering specialized training, certifications and continuing education units (CEU) in topics such as equipment operation and safety, oil spill and hazard response, land management techniques, computer applications, leadership and teambuilding, writing and critical thinking, regulatory compliance, and up-to-date sampling protocols and methods. The WBEC will be employed as a venue for hands-on training in environmental education and effective communications as part of a WEI's broader spectrum of educational programming.

Community Resilience (*Describe if the project assists Florida's ability to anticipate, withstand, or recover from hazards or threats [e.g. hurricane preparedness, establishing living shorelines]*):

The *Gulf of Mexico Regional Ecosystem Restoration Strategy* emphasizes knowledge and awareness of the connections between the environment and community as essential to achieving environmental stewardship and long-term community resilience. "*Enhance Environmental Education and Outreach*," in fact, is identified as a Major Action Item under the Strategy's Goal of "*Enhancing Community Resilience*." WBEC will enhance Florida's ability to anticipate, withstand, and recover from hazards and threats by increasing the public's understanding of the value of protecting and restoring wetland, riparian, hydrogeologic, and coastal resources, as well as the value of responsible land use and planning. Panhandle/Big Bend Florida and Apalachee Bay in particular have been identified by the Federal Emergency Management Agency (FEMA) as one of the most at-risk locations in the Nation for coastal flooding and damage, in some cases requiring construction of living structures 21-23 feet above ground level. It also has some of the most extensive undisturbed coastal wetlands (oyster, salt marsh, sea grass beds, and offshore live and hard-bottom reefs) in the Nation. WEI and the WBEC will also play a major role in enhancing community resilience by training new environmental professionals, honing the skills of those already working in the fields of conservation, environmental and land use planning, and advancing best management practices in resiliency construction and planning.

Conflicts or Complements to Existing Efforts *(Describe any ongoing activities in the project implementation area, if the project is part of another plan, and why the project does or does not interfere with that work. Please consider how the project may complement existing local, regional, and state efforts/plans/objectives):*

Acquisition of land and development of the WBEC compliments and is an essential element of the overall WEI master plan, including the WEI Education and Training Center, eco-recreation facilities, aquaculture program, and the broad array of other degree and non-degree continuing education programs to be offered by the Institute.

There are no known conflicts with existing or planned projects in the implementation area. Other environmental training and education institutions in the area (FSU, FAMU, Gulf Specimen Marine Lab, Florida Sea Grant/ IFAS, USF/FIO, E. O. Wilson Biophilia Center in Walton County, Apalachicola NERR and others) have been approached as partners and supporters of WEI and the WBEC. The proposed project actually supports a number of local, state, regional, and national goals, objectives and strategies in the areas of comprehensive land management and planning, environmental education, visitation, job creation, and water and other natural resource conservation. A partial list of WEI partners are provided in the Partner Key to Figure 3. A complete list of these local, regional, state and federal plans and efforts supported by the TCC – WEI and WBEC proposal can be compiled and referenced upon request.

Complies with Federal, State, Local, and Tribal Laws/Regulations *(Describe any concerns or potential conflicts):*

The project does not conflict with and will be developed in strict compliance with all relevant regulations.

Readiness for Implementation *(Describe if the project has had any design or permitting work started or completed [attach permits or design work]. Please address any issues that may delay start or finish of the project):*

The initial property for the TCC-WEI education and training facilities (158 acres) has been purchased and all land use and zoning requirements have been met. Ground breaking for the initial WEI education and administration building is occurring April 15, 2013. A master conceptual plan for the TCC-WEI campus has been developed and is moving forward. This proposal is a part of that master plan.

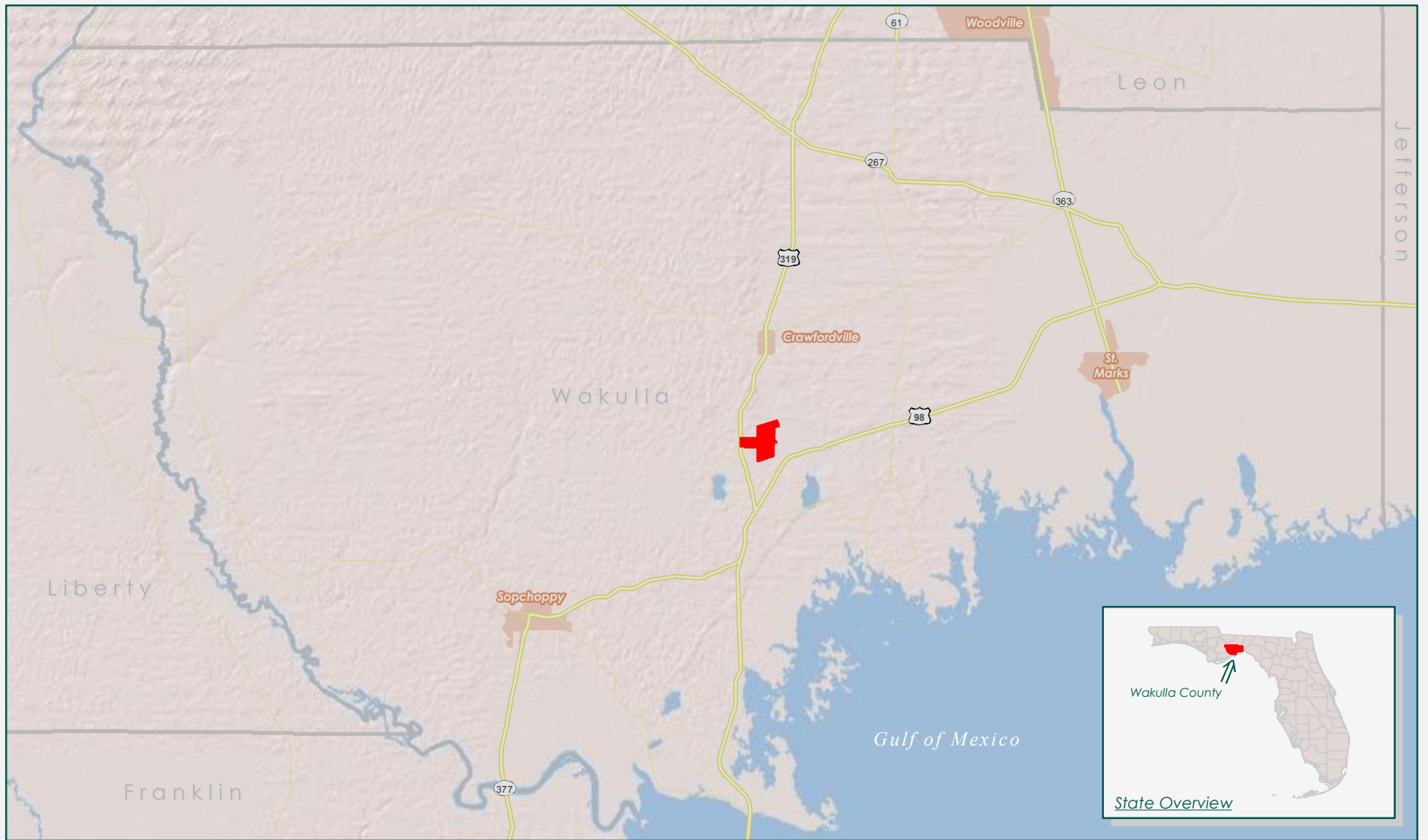
There are no anticipated issues that might delay start or completion of the proposed WBEC if funded. As we intend to avoid impact to any regulated features such as wetlands or streams, we do not anticipate any delays due to environmental applications or permits. WEI has secured an agreement to acquire the 10-acre subject parcel intended as the project site. Through its partnership with Ecology and Environment, Inc., WEI is well positioned to begin environmental assessments and design processes as soon as funding is secured.

Public Acceptance *(Describe any known or potential public approval or opposition to the project):*

There is no anticipated public opposition to this project. The project has been approved by the President and Board of Trustees of TCC, and a broad range of stakeholders, including the Wakulla County Commission and many other government officials, have been engaged on an ongoing basis to provide input into this project's planning. The TCC-WEI has broad public acceptance and support in the County and region. It intends to continue with the support of state, local and federal resource agencies (i.e. USFWS, NFS, NPS, DEP, FWC, DACS, DEO, DOH, etc.), Visit Florida and Workforce Plus, and other academic institutions (i.e., FSU, FAMU and others), in the region.

Additional Information you wish to provide *(Please include any maps, designs, drawings, photos, or background resources that may assist in completely and accurately understanding the project):*

See Figures 1-3 and the TCC-WEI Partner Key attached.



- Project Area
- County Boundary
- Highway
- Major Highway
- City or Town

FIGURE 1

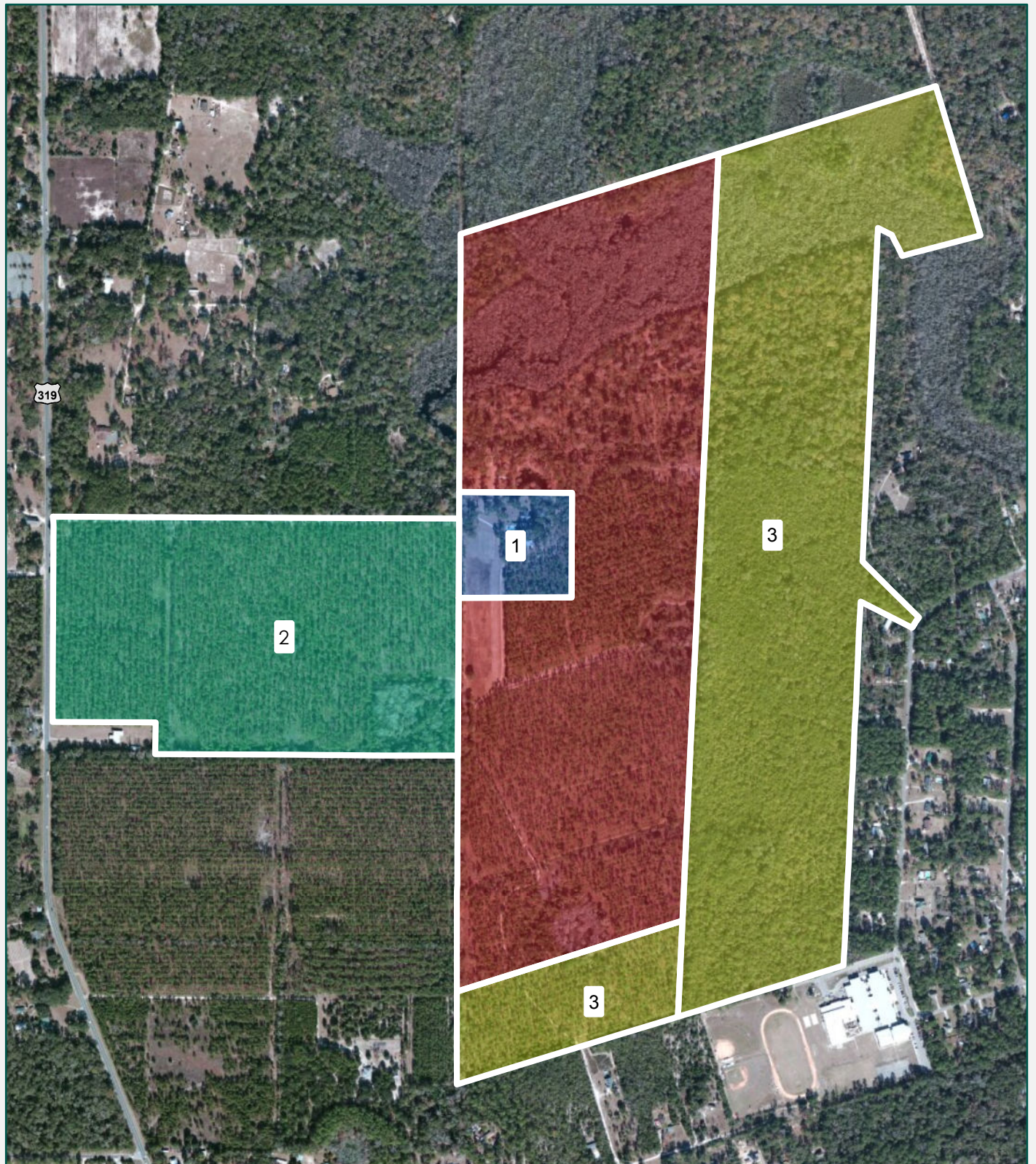
Project Location
Wakulla Environmental Institute

Source - ESRI 2010, FDOR 2012



0 1 2 3 4 5 Miles





Purchased Property

■ Wakulla Environmental Institute

Proposed Property Purchase

- 1 Biophilia Center
- 2 Lodge and Training Center
- 3 Conservation & Recreation Area

FIGURE 2

Tallahassee Community College
Wakulla Environmental Institute

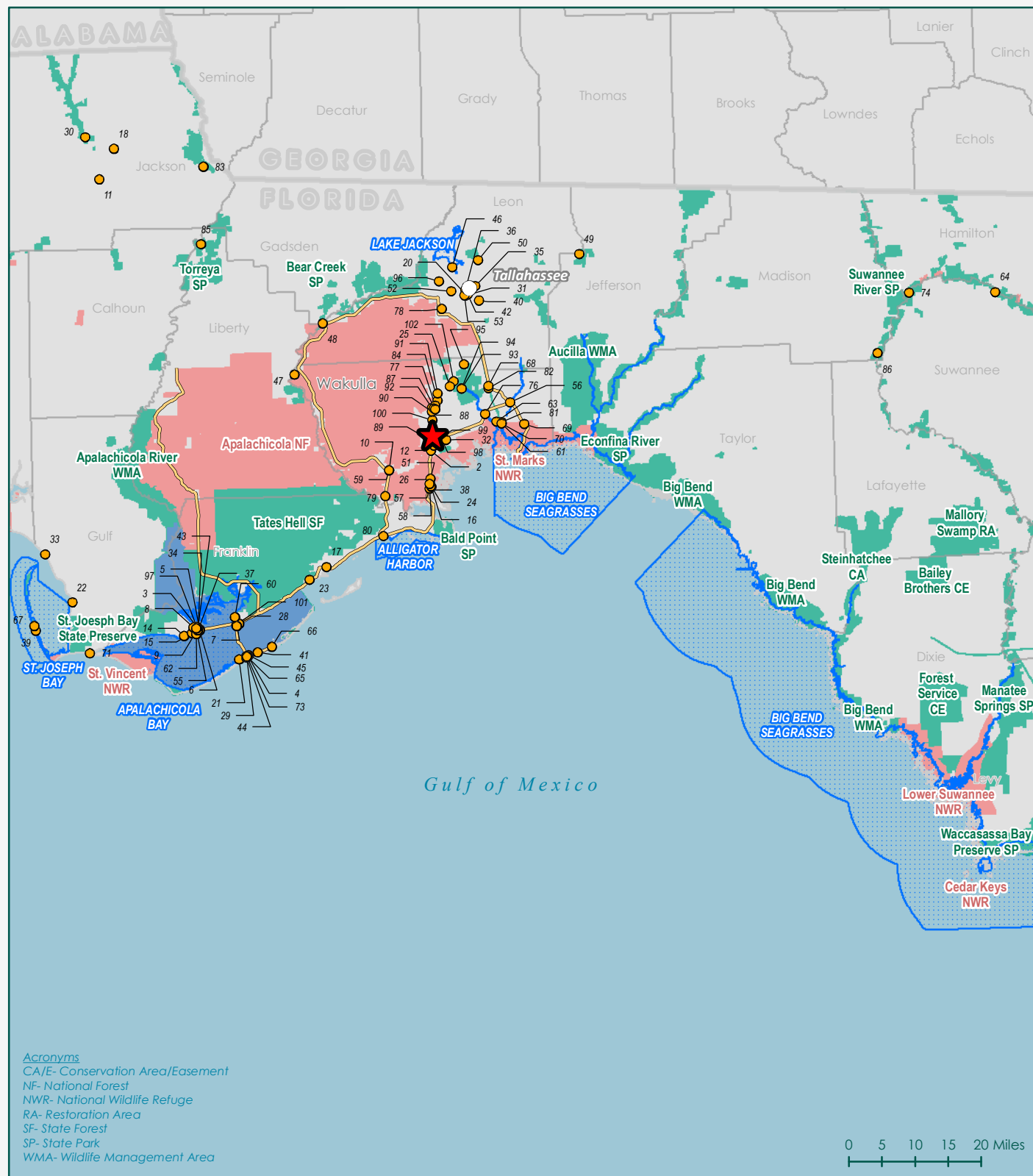
Source - ESRI 2010, FDOR 2012



ecology and environment, inc.
Global Specialists in the Environment

0 500 1,000 Feet





- Major City
- TCC-WEI Partner*
- County Boundary
- State Boundary

- Big Bend Scenic Byway
- Apalachicola National Estuarine Research Reserve
- Aquatic Preserve
- Florida Conservation Land**
 - Federal
 - State

*Figure 3 Partner Key Attached

FIGURE 3

Tallahassee Community College
 Wakulla Environmental Institute



Source - ESRI 2010, FDOR 2012,
 FNAI 2012, FDOT 2012, FDEP 2012



Figure 3 TCC-WEI Partner Key

Name	Map ID				
Adios Light Tackle Fishing Guide	1	Goodwood Museum and Gardens	35	St. Marks National Wildlife Refuge	69
Angie's Marine Supply, Inc	2	Governor's Mansion	36	St. Marks Smokehouse & Oyster bar	70
Apalachicola Bay Chamber of Commerce	3	Grady Market	37	St. Vincent Island Shuttle and Fishing Charters	71
Apalachicola Bay Serenity Charters	4	Gulf Specimen Marine Labratories Inc	38	Stephen Foster Folk Cultural Center State Park	72
Apalachicola Marina, Inc	5	Inshore Charters	39	Survivor's Bait and Tackle	73
Apalachicola Maritime Museum	6	Inspired Technologies	40	Suwannee River State Park	74
Apalachicola National Estuarine Research Reserve	7	Island Outfitters	41	Suwannee River Wilderness Trail	75
Apalachicola Nature Center	8	John G. Riley Museum of African American History	42	T-N-T Hide-Away, Inc	76
Apalachicola Riverkeeper	9	John Gorrie Museum State Park	43	Talk of the Town Deli	77
Backwoods Bistro	10	Jolly Roger	44	Tallahassee Museum	78
Bearpaw Adventures Kayak and Canoe Trips	11	Journeys of St. George Island	45	Ochlockonee River State Park	79
Best Western Plus Wakulla Inn & Suites	12	Lake Jackson Mounds Archaeological State Park	46	The Florida State University Coastal and Marine Laboratory	80
Big Shoals State Park	13	Lake Talquin State Forest	47	The Sweet Magnolia Bed & Breakfast	81
Book Me A Charter	14	Lake Talquin State Park	48	The Wilderness Way	82
Boss Charters	15	Letchworth-Love Mounds Archaeological State Park	49	Three Rivers State Park	83
Buoy's Bayside Restaurant	16	MaClay and BaClay Gardens State Park	50	ThreeY Ranch and Outdoor Equipment	84
Camp Gordon Johnston WWII Museum	17	Mineral Springs by the Bay	51	Torreya State Park	85
Canoe Adventures	18	Mission San Luis	52	Twin Rivers State Park	86
Captain James PIC	19	Museum of Florida History	53	U.S. National Forest Service	87
Challenger Learning Center	20	O'Leno State Park	54	Wakulla Area Times	88
Charlie's Charters	21	Ormon House Historic State Park	55	Wakulla County Public Library	89
Constitution Convention Museum State Park	22	Ouzts Too Oyster Bar & Grill	56	Wakulla Extension Office/Florida Sea Grant	90
Crooked River Lighthouse	23	Panacea RV Park	57	Wakulla Produce	91
Crum's Mini Mall	24	POND	58	Wakulla Senior Citizen Center	92
Cypress Run Farms	25	Posh Java Organics & Gifts	59	Wakulla Springs Lodge	93
Dockside Cafe	26	Reel Time Charters	60	Wakulla Springs State Park	94
Falling Waters State Park	27	Riverside Cafe	61	Wakulla State Forest	95
Fisherman's Choice	28	Scipio Creek Marina	62	WAVE 94.1 FM	96
Fisherman's Headquarters	29	Shell Island Fish Camp & Marina	63	Wheelhouse Adventure Tours	97
Florida Caverns State Park	30	Spirit of the Suwannee Music Park and Campground	64	Wildwood Hotel	98
Florida Historic Capitol Museum	31	St. George Island Lighthouse	65	Wildwood Restaurant	99
Florida Wild Mammal Association	32	St. George Island State Park	66	Workforce PLUS	100
Forgotten Coast Adventures	33	St. Joe Peninsula State Park	67	WOYS Oyster Radio	101
Forgotten Coast Outfitters	34	St. Marks Historic Railroad Trail State Park	68	YMCA Camp Indian Springs	102