

Coastal Watershed Resource Restoration and Protection Project Priorities

Northwest Florida Water Management District

April 22, 2013

The tables below provide a listing of currently identified project priorities for the restoration of water quality and coastal habitats within the coastal watersheds of northwest Florida. The project listing was compiled based on District projects and local needs identified through the Surface Water Improvement and Management (SWIM) program and further communication with local governments and non-government organizations (NGOs). The projects listed will contribute to the health and protection of the Gulf of Mexico and local economies impacted by the Deepwater Horizon oil spill.

District staff have made an effort to reach out to local governments and other stakeholders to compile current stormwater, restoration, and related water resource project funding needs. It is expected that this list will be amended over time, as it does not fully represent the needs of all local governments or entities in northwest Florida that may have been affected by the oil spill. Additionally, many project proposals and recommendations, including some identified here, will be submitted by local governments, nongovernment organizations, and other stakeholders directly to the Department and/or the Gulf Coast Ecosystem Restoration Council. While the projects compiled are representative of the scope of challenges facing communities in northwest Florida, it should be recognized that some of the project priorities received and included have not been fully evaluated or prioritized.

The projects are organized by watershed. Known priorities are identified, as well as additional projects that would need further development or evaluation. It should be noted that those projects identified as *Additional Stakeholder Priorities and Potential Projects Under Evaluation* are not necessarily of lower value for protection or restoration of Gulf of Mexico resources. Rather, they are projects developed by other watershed stakeholders and/or other projects deserving of further evaluation or project development.

The project listings identify anticipated lead and participating agencies or organizations, as well as project descriptions and benefits. For brevity, a number of abbreviations are used in the table, particularly for participating agencies and organizations. These include the following:

Abbreviations used:

ANERR – Apalachicola National Estuarine Research Reserve

CAMA – Office of Coastal and Aquatic Managed Areas

CBA – Choctawhatchee Basin Alliance

DOD – U.S. Department of Defense

DACS – Florida Department of Agriculture and Consumer Services

DEP – Florida Department of Environmental Protection

ECUA – Emerald Coast Utilities Authority

FWC – Florida Fish and Wildlife Conservation Commission

IFAS – University of Florida Institute of Food and Agricultural Sciences

NRCS – U.S. Department of Agriculture, Natural Resource Conservation Service

NWFSC – Northwest Florida State College

NWFWMD – Northwest Florida Water Management District

RC&D – Resource Conservation and Development Council

RMA – St. Andrew Bay Resource Management Association

TCF – The Conservation Fund

TDC – Tourist Development Council

TNC – The Nature Conservancy

USFWS – U.S. Fish and Wildlife Service

UWF – University of West Florida

WFF – Wildlife Foundation of Florida

Additional information concerning this document and the District's SWIM program and watershed restoration planning initiatives may be obtained through the following contacts:

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Perdido River and Bay Watershed				
Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
<i>Current Priorities Identified through the SWIM Program</i>				
Eleven Mile Creek Stream Restoration	\$6,000,000	Escambia County	- Stream habitat restoration - Estuarine and tributary water quality improvement - Natural stream channel restoration - Reduction of sedimentation and erosion	Incised stream channel will be restored to natural condition utilizing Rosgen natural stream channel design. Project will improve water quality and habitat while restoring four miles of historically degraded stream channel.
Stormwater Retrofit Projects	\$5,000,000	Escambia County	- Estuarine water quality improvement - Community flood relief	Three stormwater retrofit projects will provide significant water quality treatment for urban areas that currently discharge untreated stormwater into Perdido Bay, adjoining waters, and tributaries.
Perdido Bay Land Acquisition and Restoration - Greskovich Tract	\$880,000	NFWFMD	- Water quality and estuarine habitat protection - Wetland restoration	Provides for 160 acre fee simple acquisition in Escambia County, proximate to Perdido Bay and abutting 890 acres of NFWFMD wetland restoration lands. The tract consists of degraded wet pine flatwoods. Habitat restoration will include installing fire lines, prescribed burning, gyro tracking and groundcover restoration. Restoration cost estimated at \$400,000. Estimated acquisition cost of \$3,000 per acre for \$480,000.

Perdido River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Supplemental Landscape Restoration and Enhancement	\$500,000	NFWMD	- Water quality protection - Riparian and landscape habitat protection and restoration along major estuarine tributary - Public access and enjoyment	Supports unfunded restoration and landscape enhancement needs on water management area lands, acquired to protect and restore watershed resources in perpetuity while providing public access and use. \$100,000 annually over five years.
Bayou Marcus Emergency Power Improvements	\$600,000	ECUA	- Estuarine water quality protection	Installation of an emergency power generator and transfer switch to ensure continued operation of the water reclamation facility during loss of electrical service. Will eliminate or greatly reduce the likelihood of accidental sewage releases into Bayou Marcus and Perdido Bay.

Perdido River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects Under Evaluation

La Floresta Perdida Acquisition	\$101,200,000	TNC NFWMD	- Protects water quality within major coastal tributary - Protects natural communities, including longleaf pine forests, seepage slope communities, and creek drainages - Provides for public access	Acquisition of 46,135 acre landscape along the Perdido River would further develop landscape scale conservation corridor within the Perdido River watershed.
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Perdido River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Innerarity Island Utility System Standards Upgrade	\$7,500,000	ECUA	- Estuarine water quality protection - Public health protection	Engineering analysis and upgrade of the wastewater collection and potable water distribution systems on Innerarity Island, Perdido Bay. The system is currently privately owned; the upgrade will bring the systems up to current engineering standards, which will allow ECUA to assume public ownership, operation, and maintenance. The project will further facilitate solving inflow and infiltration and sanitary sewer overflow problems, thus preventing pollution of coastal waters.

Pensacola Bay System Watershed				
Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
<i>Current Priorities Identified through the SWIM Program</i>				
Stormwater Retrofit Projects	\$13,121,727	City of Pensacola	- Estuarine Water Quality Improvement - Community Flood Relief	Sixteen stormwater retrofit projects to provide water quality treatment for urban areas that discharge into Pensacola Bay, Escambia Bay, and adjoining waters.
Stormwater Retrofit Projects	\$15,000,000	Escambia County	- Estuarine Water Quality Improvement - Community Flood Relief	Nine stormwater retrofit projects to provide water quality treatment for urban areas that discharge into Pensacola Bay, Escambia Bay, Santa Rosa Sound, and adjoining waters.
Living Shoreline Restoration	\$10,000,000	Escambia County	- Estuarine habitat and water quality restoration - Shoreline protection - Reduced sedimentation and erosion	Restoration of five miles of living shorelines along Pensacola Bay using offshore breakwaters, emergent marsh vegetation, and submerged aquatic vegetation.
Beach Haven Joint Wastewater Improvement and Stormwater Retrofit Project	\$28,900,000	ECUA Escambia County	- Estuarine water quality protection and improvement - Public health protection	Joint wastewater service extension/stormwater retrofit project in the Bayou Chico and Bayou Grande basins, Pensacola Bay watershed. Will extend sewer service to approximately 1,720 properties and facilitate septic system removals at those properties. Will also provide stormwater quality treatment. Project with within the Bayou Chico watershed, which has a TMDL BMAP targeting a reduction in fecal coliform bacteria.

Pensacola Bay System – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Ashland Park Joint Wastewater Improvement and Stormwater Retrofit Project	\$2,800,000	ECUA Escambia County	- Estuarine water quality protection and improvement - Public health protection	Joint wastewater service extension/stormwater retrofit project in the Pensacola Bay and Escambia Bay watersheds. Will extend sewer service to approximately 210 properties and facilitate septic system removal from those properties. Will also provide stormwater quality treatment, and help implement a TMDL BMAP for Escambia Bay, which targets nutrients in upper Escambia Bay.
Reclaimed Water System Expansion	\$2,500,000	ECUA	- Reduced water withdrawals and consumptive use of water - Protection of estuarine water quality	Expansion of the Central Water Reclamation Facility reclaimed water system to serve the Scenic Hills Golf Course and nearby County-owned athletic complex in the Escambia Bay basin. Includes installation of transmission and distribution pipes.
Stormwater Retrofit Projects	\$13,500,000	City of Milton	- Estuarine water quality improvement	Stormwater retrofit projects to provide water quality treatment for urban areas that discharge into Blackwater Bay and East Bay.
Sewer System Repair and Upgrade	\$32,600,000	City of Milton	- Estuarine water quality improvement	Upgrade of existing deteriorating sewer system and expansion of existing system to eliminate septic tanks which would eliminate sewage infiltration into groundwater. The project would include pump stations, manhole upgrades, sewer line repairs and treatment plant upgrades.

Pensacola Bay System – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Stormwater Retrofit Projects	\$1,053,000	City of Crestview	- Water quality improvement for major Pensacola Bay System tributary basin	Stormwater retrofit projects to provide water quality treatment for urban areas that discharge into the Pensacola Bay System watershed.
Reuse of Reclaimed Water	\$19,300,000	Santa Rosa County	- Elimination of surface water wastewater discharges - Restoration of water quality	Relocation of discharge of the WWTF effluent to land application on Eglin AFB. Includes construction of RIBs, upgrades to WWTF, 16" force main and pump stations. Reclaimed water will also be distributed to residential and commercial customers.
Stormwater Retrofit Projects	\$2,686,040	City of Gulf Breeze	- Estuarine water quality improvement	Stormwater retrofit projects to provide flood control and water quality treatment for urban areas that discharge into Pensacola Bay, Escambia Bay, and Santa Rosa Sound.
Navy Point Sewer Expansion	\$5,000,000	ECUA	- Estuarine water quality protection and improvement - Public health protection	Wastewater service extensions within the Pensacola Bay watershed. This project will extend sewer service to approximately 370 properties, facilitating septic system removals.
Thousand Oaks Sewer Expansion	\$2,800,000	ECUA	- Estuarine water quality protection and improvement - Public health protection	Wastewater service extension within the Escambia Bay watershed. This project will extend sewer service to approximately 215 properties, facilitating septic system removals. The project will also help implement a TMDL BMAP targeting nutrients in upper Escambia Bay.

Pensacola Bay System – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Pensacola Beach Reclaimed Water System Expansion	\$2,300,000	ECUA	- Estuarine water quality protection and improvement - Public health protection	Expansion of the Pensacola Beach wastewater reuse system. Includes design, pipes, pumping, storage, and distribution. Will further reduce surface water discharge into Santa Rosa Sound, and will reduce potable water demand in Pensacola Beach. ECUA has already funded and constructed the associated treatment upgrades.
Downtown Pensacola (South) Wastewater Collection System Rehabilitation	\$23,350,000	ECUA	- Estuarine water quality protection and improvement - Public health protection	Rehabilitation of wastewater collection system in downtown Pensacola. Will reduce and prevent inflow and infiltration and sanitary sewer overflows, significantly reducing pollution of Pensacola Bay during major storm events.
Downtown Pensacola (Middle) Wastewater Collection System Rehabilitation	\$21,000,000	ECUA	- Estuarine water quality protection and improvement - Public health protection	Rehabilitation of wastewater collection system in downtown Pensacola. Will reduce and prevent inflow and infiltration and sanitary sewer overflows, significantly reducing pollution of Pensacola Bay during major storm events.
Pensacola Beach Wastewater Collection System Rehabilitation	\$5,500,000	ECUA	- Estuarine water quality protection and improvement	Rehabilitation of the wastewater collection system on Pensacola Beach (Santa Rosa Island). Will reduce inflow and infiltration and sanitary sewer overflows, significantly reducing pollution of coastal waters during major storm events.

Pensacola Bay System – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Central Water Reclamation Facility (CWRF) Transmission Main Interruption Response plan	\$6,000,000	ECUA	- Estuarine water quality protection and improvement	Development of interruption plan responsive to loss of service or operation of CWRF transmission main. Includes engineering design and construction of emergency storage and associated facilities. Facilitates rapid response and repair and facilitates avoidance of significant sanitary sewer overflows, thus preventing significant pollution of coastal waters. The affected main conveys an average flow of 14 million gallons per day and is thus very important to the protection of coastal waters.
Sewer System Repair and Upgrade	\$11,252,721	City of Gulf Breeze	- Estuarine water quality improvement	Upgrade of existing sewer system and expansion of existing system to eliminate septic tanks which would eliminate sewage infiltration into groundwater. The project would also include pump stations, force mains and construction of a system of aquifer storage and recovery wells on the Tiger Point Golf Course to store and retrieve reclaimed water.
Supplemental Landscape Restoration and Enhancement	\$250,000	NWFWMD	- Water quality protection; - Riparian and landscape habitat protection and restoration within major estuarine peninsula - Public access	Supports unfunded restoration and landscape enhancement on water management area lands, acquired to protect and restore watershed resources in perpetuity while providing public access and use. \$50,000 annually over five years.

Pensacola Bay System – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Bayou Chico Sediment Removal	\$8,737,400	Escambia County City of Pensacola NFWFMD (tech. assistance)	- Estuarine water quality improvement - Benthic habitat restoration - Recreational boating enhancement - Water quality restoration for a 303(d) listed waterbody	Dredge the upper arms of Bayou Chico to improve water circulation and water quality. Helps to complement and further complete major restoration initiative that has been the focus of many years of local, state, and federal investment.

Pensacola Bay System – Additional Stakeholder Priorities and Potential Projects Under Evaluation

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Julian Mill Tributary Stabilization	To be determined	UWF, Center for Environmental Diagnostics and Bioremediation	- Stream channel restoration - Water quality improvement for tributary of the Yellow River and East Bay (Pensacola Bay System)	Stabilization, erosion abatement, and natural channel restoration of steephead tributary of Julian Mill Creek and the Yellow River.
Wolfe Creek Forest	\$19,300,000	TNC	- Large scale preservation of forested landscape proximate to the Blackwater River State Forest and Whiting Field Naval Air Station.	The project encompasses 10,075 acres and connects Blackwater River State Forest and Whiting Field Naval Air Station. The project is part of a landscape-scale, watershed-based acquisition and restoration project seeking to connect these lands with Eglin AFB and the Conecuh National Forest in Alabama, and other public and conservation lands. The project would afford protection to seepage and blackwater stream tributaries of the Blackwater River. Includes ecologically significant, scenic and paddling creeks. Blackwater River and bay are designated Outstanding Florida Waters. By extending and buffering existing managed areas in the region, the project enhances management of the series of public lands and waters—including protection of the vital military mission at Whiting Field.

Pensacola Bay System – Additional Stakeholder Priorities and Potential Projects (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Additional Living Shoreline and Oyster Habitat Restoration	\$16,700,000	TNC Local governments and state and regional agencies	- Estuarine habitat and water quality restoration - Shoreline protection - Reduced sedimentation and erosion	Creation of up to eight miles of non-contiguous living shoreline/oyster breakwater habitat and restoration of salt marsh habitat. The goals are to create a living shoreline that serves as a natural approach to help prevent shoreline erosion, increase oyster habitat and the amount of habitat available for recreationally and commercially important shellfish and finfish, and promote the growth of submerged aquatic vegetation.
Rattlesnake Bluff Road and Riverbank Restoration	\$3,000,000	TNC DOD USFWS FWC	- Reduced sedimentation and suspended solids affecting the Yellow River and downstream waters in East Bay.	This project will stabilize Rattlesnake Bluff Road and nearby eroded riverbank sites to reduce sediment pollution to the Yellow River and Pensacola Bay and provide a safe, reliable thoroughfare for the public.

Choctawhatchee River and Bay Watershed				
Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
<i>Current Priorities Identified through the SWIM Program</i>				
City of Niceville Stormwater Retrofits	\$10,914,000	City of Niceville	- Water quality improvements for Choctawhatchee Bay - Community flood relief	Construction of five major stormwater retrofit projects, improving water quality for over 700 acres draining into Boggy and Rocky bayous and Choctawhatchee Bay. These can be broken into separate priority projects, depending on funding availability. The retrofit projects will provide significant water quality treatment for areas developed prior to current stormwater regulations, as well as local flood relief. Project components include construction of detention facilities, drainage improvements, and treatment vaults, as well as right-of-way acquisition and engineering design.
Gap Creek Stormwater Retrofit Improvements	\$1,146,500	Okaloosa County City of Ft. Walton Beach NFWFMD DEP	- Estuarine water quality improvement - Community flood relief	Seven stormwater retrofit projects in the Gap Creek watershed. The projects were identified in the 2008 Gap Creek Watershed Water Quality Improvement Project. They will provide significant water quality treatment for urban areas that currently discharge directly into Gap Creek and ultimately into Cinco Bayou and Choctawhatchee Bay.
City of Destin Stormwater Retrofit	\$4,401,899	City of Destin	- Estuarine water quality improvement; Choctawhatchee Bay - Community flood relief	Seven stormwater retrofit projects in the City of Destin in Okaloosa County. These stormwater retrofit projects will provide significant water quality treatment and flood relief for urban areas that currently discharge into Choctawhatchee Bay.

Choctawhatchee River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Coastal Dune Lakes Hydrologic Restoration	\$4,320,000	CBA Walton County NFWMD DEP Walton County TDC USFWS IFAS	- Restoration of water quality - Hydrologic restoration - Restoration of aquatic and wetland habitats for unique coastal ecosystems -	Replacement of culverts with bridges to reestablish natural hydrologic connectivity for four coastal dune lakes (Deer Lake, Big Redfish Lake, Little Redfish Lake, and Alligator Lake) where County Road 30A crosses the lakes. The coastal dune lakes are unique blackwater ecosystems that exchange water with the Gulf of Mexico. They have been designated as globally rare and critically imperiled by the Florida Natural Areas Inventory (1990). The undersized culverts, which are continuously dammed by beavers, function as barriers. As a result, the north side of each lake has become a freshwater system while the south side remains brackish. The project will restore approximately 730 acres of brackish marsh, open water, and pine flatwoods ecosystems. It will improve water quality in the four targeted lakes, thereby further enhancing fish and wildlife habitat. The project will also decrease effects of stormwater runoff and improve flood protection. The project can be subdivided by lake to accommodate available funds; \$360,000 in match funding currently identified.
Stormwater Retrofit Projects	\$12,038,000	Walton County	- Water quality improvement	Fifteen stormwater projects throughout the county to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.

Choctawhatchee River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Choctaw Beach Enhancement	\$300,000	CBA Walton County	- Estuarine water quality improvement - Reduced bacteria counts in public swimming area - Restoration of approximately three acres and 0.31 miles of shoreline - Reduced shoreline erosion - Public access enhancement - Flood relief - Public awareness	Implementation of stormwater and habitat enhancement and protection BMPs, including (1) re-grading and paving parking lot and adding stormwater pond with native vegetation, (2) planting native vegetation along the waterside of the park with the help of community volunteers, and (3) evaluating removal of septic tank and connection of public restrooms to sewer/lift stations. Features that would increase access will also be evaluated, to include improving and extending boat ramp, installing docks around ramp, improving park equipment, and installing educational signage. This project would address historic problems at Choctaw Beach, including sedimentation and flooding of the park, as well as reoccurring high bacteria counts. It will restore 3 acres of coastal land and an additional 0.31 miles of shoreline.
Live Oak Point Shoreline Protection and Enhancement	\$600,000	NFWFMD	- Estuarine marsh protection	Construction of oyster shell breakwaters on the eroding northern face of the peninsula and planting natural marsh vegetation to restore aquatic and emergent habitat and provide erosion protection for sensitive shoreline in Choctawhatchee Bay.
Annual Health Assessment of Choctawhatchee Bay	\$300,000	CBA	- Development and refinement of management recommendations for Choctawhatchee Bay	Prepare annual trend analysis and report, focusing on 10 years of water quality and five years of seagrass distribution data.

Choctawhatchee River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Community Resilience Through Living Shorelines and Public Education	\$2,600,000 (or \$520,000 annually over five years)	CBA Walton County USFWS NFWFMD South Walton Community Council and more	- Protection and restoration of productive littoral habitat - Estuarine water quality protection - Erosion abatement - Public Education Enhancement	Multi-pronged approach to restoration and health assessments, to include oyster shell recycling program, living shorelines initiative, oyster reef construction and shoreline plantings, and associated K-12 salt marsh nursery projects. Includes comprehensive monitoring of water quality, seagrass and constructed oyster reefs. The long-term, permanent result of all of these projects will be a more balanced, connected and sustainable coastal/estuarine ecosystem.
Living Shorelines Projects Protecting Eglin AFB shorelines	\$1,500,000	CBA Eglin AFB	- Protection and restoration of productive littoral habitat - Estuarine water quality protection - Erosion abatement	Shoreline restoration projects along the northern shore of Choctawhatchee Bay, including on and adjacent to Eglin AFB, with potential habitat restoration on private lands. A living shoreline concept will be used to establish oyster bar and salt marsh habitat to stabilize severely eroded shoreline resources affected by anthropogenic and storm-induced destruction.

Choctawhatchee River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Supplemental Landscape Restoration and Enhancement	\$1,000,000	NFWFMD	- Water quality protection - Riparian and landscape habitat protection and restoration along major estuarine and Gulf coastal tributary river - Public access	Supports unfunded restoration and landscape enhancement on water management area lands acquired to protect and restore watershed resources in perpetuity while providing public access and use. \$200,000 annually over five years.
Brunson Landing Acquisition	\$1,470,000	NFWFMD	- Water quality protection - Protection of riparian habitat along major spring-fed tributary of the Choctawhatchee River and Choctawhatchee Bay - Protection of rare and endemic fish and invertebrate species, as well as spring-run and floodplain habitat	Acquisition of approximately 360 acres along Holmes Creek. Holmes Creek provides unique habitat within the Choctawhatchee River and Bay watershed; it is important for the Gulf sturgeon, as well as rare and endemic fish and invertebrate species
Live Oak Point Acquisition	\$1,380,000	NFWFMD	- Tidal marsh protection - Water quality and estuarine habitat protection	Acquisition of approximately 460 acres, encompassing the major salt marsh on Choctawhatchee Bay. Will add to existing public lands.

Choctawhatchee River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Unpaved road paving and stabilization	\$992,500	Walton County	- Reduction in sedimentation from unpaved roads	Paving of 7,050 LF (approximately 1.4 miles) along three currently unpaved roads proximate to Choctawhatchee Bay to prevent sedimentation into the bay.
Unpaved road paving and stabilization	\$1,531,000	Holmes County	- Reduction in sedimentation from unpaved roads	Paving of 35,380 LF (approximately 6.7 miles) along three currently unpaved roads proximate to Choctawhatchee River to prevent sedimentation into the river.
Unpaved road paving and stabilization	\$1,435,000	Washington County	- Reduction in sedimentation from unpaved roads	Paving of 20,890 LF (approximately four miles) along three currently unpaved roads proximate to Choctawhatchee River to prevent sedimentation into the river.

Choctawhatchee River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects Under Evaluation

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Knight Family Trust Conservation Easement Acquisition	\$60,000,000	Florida Audubon DOD USFWS FWC DACS	- Water quality and forested recharge area protection - Protection of crucial DOD training airspace - terrestrial habitat protection - Protection of diadromous species (Gulf Sturgeon; American eel) - Protection of freshwater mussels and wading bird habitat	Landscape scale, perpetual protection of habitats and water quality. Sustains working forest. Encompasses 63 square miles, primarily within the Choctawhatchee River watershed. Includes Pine Log Creek, Choctawhatchee River, and Holmes Creek corridors and floodplains, as well as three major springs. Affected coastal species include American eel, Gulf sturgeon, and freshwater mussels. Combines resource based and regional DOD mission needs in large coastal landscape.
Marine Fisheries Hatchery/ Enhancement Center	\$30,671,975	CBA Walton County FWC NWFSC WFF	- Establishment of marsh plant nursery and fish hatchery - Support for Choctawhatchee Bay and regional restoration projects - Public education	Facility will serve as a Gulf Coast plant nursery, a recreational fish hatchery, and a water quality testing laboratory. Additionally, the facility will support the CBA's oyster shell recycling, Grasses in Classes, and Living Shorelines programs. NWFSC will also use the facility for educational and job training purposes.

Choctawhatchee River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Enhancements to the Kellogg Property in Walton County	\$250,000	CBA Walton County	- Coordination of Living Shorelines projects - Public education and outreach - Establishment of demonstration site	Construction of site improvements and renovations, to include boatlifts, sea wall, water access points, boardwalk, signage, water well, and associated structures. Site will be used as a staging area for restoration projects as well as for demonstration and educational purposes.
Unpaved road paving and stabilization	\$6,078,000	Walton County	- Reduction in sedimentation from unpaved roads	Paving of 72,870 LF (approximately 13.8 miles) along seven currently unpaved roads proximate to creeks within the Choctawhatchee River basin to prevent sedimentation into the creeks and wetlands.
Unpaved road paving and stabilization	\$2,765,000	Holmes County	- Reduction in sedimentation from unpaved roads	Paving of 48,000 LF (approximately 9.1 miles) along seven currently unpaved roads proximate to creeks within the Choctawhatchee River basin to prevent sedimentation into the creeks and wetlands.
Unpaved road paving and stabilization	\$4,995,500	Washington County	- Reduction in sedimentation from unpaved roads	Paving of 86,200 LF (approximately 16.3 miles) along seven currently unpaved roads proximate to creeks within the Choctawhatchee River basin to prevent sedimentation into the creeks and wetlands.

Choctawhatchee River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Northwest Florida Erosion Site Assessment	To be determined	NFWMD Local governments	- Further definition of the scope and extent of watershed-wide water quality and habitat degradation problem - Development of specific restoration projects	Encompasses watershed-wide identification and assessment of active erosion features, together with project planning for erosion abatement and site restoration. Erosion and sedimentation have been identified as major issues affecting the Choctawhatchee watershed, resulting in water quality degradation and benthic and riparian habitat smothering.
Develop Canoe Trails Map	\$40,000	Washington County	- Promotion of tourism, fishing, educational opportunities, and planning assistance	Development of a coordinated map identifying existing river access facilities on the Choctawhatchee River, Holmes Creek, and Econfinia Creek. The brochure would identify the distance between access points, natural resources in the area, and roadway access to the river access facilities. Note: Also applies to and benefits St. Andrew Bay Watershed
Watershed Management Plan	\$100,000	Washington County	- Water quality improvements within the Choctawhatchee River, St. Andrew Bay, and Apalachicola River watersheds	Identified in both the Capital Improvement Plan and Local Mitigation Strategy of Washington County – to provide guidance in protecting natural resources through watershed management planning Note: Also applies to and benefits St. Andrew Bay and Apalachicola River and Bay watersheds

St. Andrew Bay Watershed				
Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
<i>Current Priorities Identified through the SWIM Program</i>				
Stormwater Retrofit Projects	\$36,376,497	City of Panama City	- Estuarine water quality improvement for St. Andrew Bay	Twenty stormwater projects throughout the city to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.
Stormwater Retrofit Projects	\$191,839,000	Bay County	- Estuarine water quality improvement for St. Andrew Bay	One-hundred-twenty stormwater projects throughout the county to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.
Stormwater Retrofit Projects	\$25,406,376	City of Panama City Beach	- Estuarine water quality improvement for St. Andrew Bay	Eleven stormwater projects throughout the city to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.
Stormwater Retrofit Projects	\$5,118,000	City of Parker	- Estuarine water quality improvement for St. Andrew Bay	Nine stormwater projects throughout the city to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.

St. Andrew Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Stormwater Retrofit Projects	\$12,733,000	City of Lynn Haven	- Estuarine water quality improvement for St. Andrew Bay	Eleven stormwater projects throughout the city to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.
Stormwater Retrofit Projects	\$5,160,000	City of Callaway	- Estuarine water quality improvement for St. Andrew Bay	Nine stormwater projects throughout the city to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.
Stormwater Retrofit Projects	\$2,423,000	Gulf County	- Estuarine water quality improvement for St. Joseph Bay and East Bay	Two stormwater projects throughout the county to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.
Stormwater Retrofit Projects	\$7,290,000	City of Mexico Beach	- Estuarine water quality improvement for St. Andrew Bay	Three stormwater projects throughout the city to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.
Stormwater Retrofit Projects	\$735,000	City of Wewahitchka	- Water quality improvement; East Bay watershed	Two stormwater retrofit projects to provide water quality treatment and/or storage to address flooding issues. The proposed stormwater facilities will remove sediments, debris, and associated pollutants from stormwater runoff.

St. Andrew Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Watershed Monitoring, Restoration, and Outreach	\$250,000	St. Andrew Bay RMA Friends of St. Andrew Bay Bay County Audubon Bay County Conservancy More	- Development of long-term database of water quality and seagrass conditions and trends - Restoration of estuarine shoreline and seagrass habitat - Public outreach and education	Implementation of a long-term, community-based water quality and seagrass monitoring initiative. The RMA will also coordinate with local governments and the public, implement estuarine habitat restoration projects, and provide supporting public outreach. Costs estimated at \$50,000 annually for five years. Also includes collaboration in development of the proposed regional community resilience center.
Stormwater Planning and Retrofit	\$1,200,000	City of Port St. Joe	- Estuarine water quality and habitat improvement for St. Joseph Bay	Construct three stormwater retrofit projects (\$1,150,000) to provide water quality treatment for basins that discharge into St. Joseph Bay. The project also includes funding (\$50,000) for development of a citywide stormwater master plan to prioritize for future stormwater treatment systems and retrofits. St. Joseph Bay is noteworthy in that it includes one of the major intact seagrass communities of the northern Gulf coast, with associated shellfish and other fishery resources. These resources are uniquely accessible for public access and use but require protection to ensure long-term sustainability.

St. Andrew Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Seagrass Restoration	\$3,000,000	Gulf County DEP CAMA	- Seagrass and shellfish bed protection and restoration in St. Joseph Bay	Restoration of prop-damaged seagrass beds within one of the region's most important and otherwise intact coastal seagrass communities. Project implementation would be phased and can be scaled based on funding availability – from a minimum of \$50,000.
Reuse of Reclaimed Water	To be determined	Bay County	- Elimination of surface water wastewater discharges - Restoration of estuarine water quality - Integrated water resource management	Extension of reuse lines to serve landscape irrigation needs.
Reuse of Reclaimed Water	To be determined	City of Panama City Beach	- Elimination of surface water wastewater discharges - Restoration of estuarine water quality - Integrated water resource management	Extension of reuse lines to serve landscape irrigation needs.
Reuse of Reclaimed Water	To be determined	City of Panama City	- Elimination of surface water wastewater discharges - Restoration of estuarine water quality - Integrated water resource management	Extension of reuse lines to serve landscape irrigation needs.

St. Andrew Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Supplemental Landscape Restoration and Enhancement	\$2,750,000	NFWFMD	- Water quality and recharge protection in the Econfina Recharge Area - Riparian and landscape habitat protection and restoration along major estuarine tributary - Public access - Protection of recharge area for major water supply reservoir	Supports unfunded restoration and landscape enhancement on water management area lands, acquired to protect and restore watershed resources in perpetuity while providing public access and use. \$550,000 annually over five years.
Econfina Recharge Area Inholdings Acquisitions	\$11,445,000	NFWFMD	- Water quality and recharge area protection	Acquisition of approximately 2,762 acres within the Econfina Recharge Area; protecting the quality and quantity of recharge within the Econfina Creek and St. Andrew Bay watershed.
Econfina Creek Shoreline Parcel Acquisition	\$85,000	NFWFMD	- Water quality protection for major tributary of drinking water reservoir and North Bay (St. Andrew Bay estuary)	Acquisition of approximately three acres on the waterfront of Econfina Creek.

St. Andrew Bay Watershed – Additional Stakeholder Priorities and Potential Projects Under Evaluation

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Wetland Hydrologic Restoration	To be determined	NFWFMD Local governments	- Coastal wetland and water quality restoration	Hydrologic and habitat restoration for coastal wetland systems. Includes addressing major ditch systems connecting to West Bay.
Florida Landings LLC Acquisition	\$3,800,000	DEP NFWFMD	- Water quality and recharge area protection	Lands within Econfinia Creek watershed and recharge area. Acquisition provides water quality protection and recharge protection. Cost estimated at \$2,000 per acre for 1,900 acres.
Marifarms Estuarine Habitat Restoration	To be determined	NFWFMD	- Assessment of the potential for restoration of estuarine habitat in West Bay	Evaluation of needs for hydrologic and habitat restoration for estuarine marsh, seagrass, and littoral habitat complex.
Regional Community Resilience Center	To be determined	St. Andrew Bay RMA Friends of St. Andrew Bay Bay County Audubon Bay County Conservancy	- Enhanced community awareness and support for coastal resource stewardship - Support for habitat enhancement and water quality protection initiatives	Create a coalition of the eight NWFL counties to establish a regional center. Commit funds to establishment of an endowment. Support operational concepts of habitat conservation and enhancement, water quality restoration, monitoring, and overall community resilience.

St. Andrew Bay Watershed – Additional Stakeholder Priorities and Potential Projects Under Evaluation (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
West Bay Watershed	\$20,000,000	Bay County	- Protects tidal streams and marsh habitats; wet pine flatwoods, and contiguous xeric uplands - Protects regional DOD airspace and training needs - Consolidates regional conservation area management	Acquire remainder of rights for ongoing ecological management and public conservation uses on bayfront forested landscapes within the West Bay Sector Plan, complementing the Regional General Permit and airport permit conservation set asides.
Upgrade Washington County Parks Map	\$40,000	Washington County	- Promotion of tourism, fishing, education, and planning assistance	Development of a coordinated map identifying existing park facilities in Washington County. This brochure would identify all state, county, and NFWMD park sites, natural resources, public facilities, and roadway access. Note: Also benefits and applies to the Choctawhatchee River and Bay Watershed

Apalachicola River and Bay Watershed				
Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
<i>Current Priorities Identified through the SWIM Program</i>				
Stormwater Retrofit Projects	\$3,644,800	City of Apalachicola NFWFMD	- Estuarine water quality improvement for Apalachicola Bay - Community flood relief	Engineering and design of 10 stormwater retrofit projects in the City of Apalachicola, within coastal Franklin County. Projects prioritized in the city's stormwater master plan to provide significant water quality treatment for urban areas that currently discharge directly into the lower Apalachicola River and bay.
Sod-Based Crop Rotation BMP Pilot Project	\$2,740,000	UF IFAS NFWFMD Private producers	- Reduced nutrient applications - Reduced water withdrawals - Improved productivity and profitability	Implement innovative agricultural BMPs on approximately 5,000 acres over three years to reduce nutrient loading and water use while improving productivity and profitability.
Agricultural Pivot Irrigation System Retrofits	\$2,400,000	DACS NRCS West Florida RC&D Council Private producers	- Enhanced water conservation - Reduced nutrient loading into proximate ground and surface waters - Enhanced productivity and efficiency	Retrofit approximately 240 center pivot irrigation systems, essentially all of these systems within Jackson County, Florida (primarily within the Apalachicola River and Bay watershed) to improve water use efficiency, reduce ground water withdrawals, and reduce nutrient loading - all of which will help protect water quality and quantity within the Apalachicola River and Bay watershed.

Apalachicola River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Wastewater System Improvements	\$230,000	Eastpoint Water and Sewer District NFWFMD	- Estuarine water quality improvements - Reduced bacteria loading into Apalachicola Bay - Reduced nutrient loading into Apalachicola Bay	Construction of wastewater system improvements for the community of Eastpoint, on Apalachicola Bay. Includes connection of residences currently on septic tanks to central sewer system and replace old leaking vacuum sewer pits. Improvements will significantly reduce bacteria and nutrients leaching into groundwater and Indian Creek, which discharge directly into the bay.
Stormwater retrofit and nutrient baffle box maintenance program	\$210,000	Eastpoint Water and Sewer District Franklin County NFWFMD	- Estuarine water quality improvements	Stormwater retrofit for Eastpoint, providing nonpoint source pollution abatement to improve conditions in Apalachicola Bay. Also, long-term bi-annual maintenance of eight nutrient separating baffle box units on outfalls discharging directly to the bay.
Tates Hell Swamp Hydrologic Restoration	\$6,910,000	Tates Hell State Forest NFWFMD ANERR Franklin County USFWS	- Hydrologic restoration for major coastal wetland system - Estuarine water quality improvement in Apalachicola Bay - Wetland freshwater inflow and hydroperiod restoration	Restoration of historic hydrology to over 88,000 acres of freshwater swamp and tidal marsh. Specific actions include strategic installation of bridges, culverts, low water crossings and vegetation planting and enhancement.
AWT upgrades	\$500,000	City of Wewahitchka	- Apalachicola River water quality improvement - Reduced nutrient loading	Additional funding needed to upgrade treatment processes to advanced wastewater treatment. Remainder of the funds will be provided by the state.

Apalachicola River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Sewer System Extensions	\$800,150	City of Apalachicola	- Estuarine water quality improvement in Apalachicola Bay	Extend sewer lines, connecting approximately 53 existing parcels now served by septic tanks. Upgrade lift station for additional flow. Many parcels are within 500 feet of Apalachicola Bay. Includes the City of Apalachicola's Two Mile Sewer Extension and Bobby Cato Area sewer upgrade projects.
Stormwater Retrofit and Wetland Restoration	\$2,350,000	City of Carrabelle	- Estuarine water quality improvement in Apalachicola Bay - Community flood relief	Stormwater retrofit in the 10th Street Basin, to include restoring 200 acre wetland that will be used in stormwater treatment train to provide storage and improve quality of runoff discharging to St. George Sound. Additional drainage improvements will attenuate peak storm flows providing localized flood relief. Project will include conservation easements and limited land acquisition, and will incorporate park and trail amenities and passive recreational elements.
Sewer System Repair and Upgrade	\$2,225,000	City of Blountstown	- Water quality improvement in the Apalachicola River	Upgrade of existing deteriorating sewer system to eliminate sewage infiltration into groundwater. Project will include pump stations, manhole upgrades, sewer line repairs, and treatment plant upgrades.
Wet weather storage pond	\$957,000	City of Apalachicola	- Estuarine water quality improvement	Construction of an enlarged wet weather storage pond for the City of Apalachicola's WWTP. Will reduce frequency of wet weather WWTP overflows into tributary of Apalachicola Bay.

Apalachicola River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Stormwater Retrofit Project	\$2,500,000	City of Marianna	- Estuarine water quality improvement	Construction of a regional stormwater management facility to provide water quality treatment for an existing 650 acre drainage basin that discharges directly into the Chipola River. The project will improve the conveyance system and prevent sediments and untreated runoff from discharging directly into the Chipola River. The project will provide protection of the natural resources, ecosystems, fisheries, and wildlife habitats. The project will also provide an opportunity for work force development and job creation in the area.
Jackson Blue Spring Shoreline Restoration	\$200,000	Jackson County	- Water quality and resource protection in springshed and Chipola and Apalachicola rivers	Replacement of a damaged and eroding bulkhead around Jackson Blue Spring, a first magnitude spring in Jackson County. Sediment and runoff are discharging into the spring and Merritt's Mill Pond. The Mill Pond discharges to the Chipola River and connects to the Apalachicola River.

Apalachicola River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Apalachicola River Watershed Sedimentation Abatement	\$1,364,000	Jackson County	- Water quality improvements within the Apalachicola River Watershed	Hilltop-to-hilltop paving of rural dirt roads that cross streams and wetlands. Best management practices will be used to reduce sedimentation including vegetated swales, use of pervious pavement for the lower trafficked areas, installation of catch basins and removal of sediments from severely impacted sites to restore habitat. Approximately nine high priority road crossings would be treated.
Stormwater Retrofit Project	\$200,000	Jackson County	- Water quality and resource protection in springshed and Chipola and Apalachicola rivers	Construct stormwater facility to treat runoff from Chipola College and City of Marianna before discharging into the Chipola River.
Stormwater and Erosion Control	\$1,200,000	City of Chattahoochee	- Water quality in the Apalachicola River - Tributary water and habitat quality - Public access enhancement - Fish and wildlife enhancement	Encompasses Gholson Nature Park erosion control, River Landing stabilization and erosion control, and Mosquito Creek tributary restoration projects. BMPs will be implemented to reduce erosion and sedimentation, gulley erosion abatement, and stormwater BMPs to retrofit and improve existing conditions. Stormwater BMPs and LID practices may include bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements to preserve natural landscape features, minimizing effective imperviousness and create functional and appealing site drainage features.

Apalachicola River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
St. George Island Stormwater Improvements	\$2,000,000	Franklin County	- Estuarine water quality improvement in Apalachicola Bay	Construction of swales along roadways proximate to Apalachicola Bay.
Stormwater Improvements	\$109,517	City of Bristol	- Water quality improvement within the Apalachicola River - Community flood relief	Construction of two stormwater retrofit projects, to include stabilization and paving of unpaved Ramsey Road, that currently discharge turbidity into the river. Additionally, the project will provide flood relief and stormwater quality improvement through construction of a vegetated swale system and other drainage improvements on CR 12.
Watershed Restoration and Outreach	\$100,000	Apalachicola River and Bay Keeper	- Local outreach and project coordination	Continued efforts by the Apalachicola River and Bay Keeper to provide public outreach and restoration project coordination throughout the Florida portion of the watershed. \$20,000 annually over five years.

Apalachicola River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects Under Evaluation

Stormwater Retrofit Projects	\$1,903,857	Town of Sneads	- Apalachicola River water quality improvement - Community flood relief	Retrofit stormwater drainage system to provide storage and water quality treatment upstream of natural wetland systems that discharge to the Apalachicola River. Improvements will also alleviate in-town flooding.
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Apalachicola River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Apalachicola River Watershed Sedimentation Abatement	\$1,364,000	Gadsden County	- Apalachicola River water quality improvement	Hilltop-to-hilltop paving of rural dirt roads that cross streams and wetlands. Best management practices to be used to reduce sedimentation include vegetated swales, pervious pavement for lower trafficked areas, installation of catch basins and removal of sediments from severely impacted sites to restore habitat. Approximately nine high priority road crossings would be treated.
Local Land Acquisition	To be determined	Franklin County	- Apalachicola Bay shoreline protection - Public access	Acquisition of land on St. George Island for the St. George Island Marine Park.
Apalachicola Bay Shoreline Restoration	To be determined	City of Apalachicola ANERR	- Estuarine Water quality protection	Restoration of shoreline habitat.
Unpaved road Paving and Stabilization	\$4,090,803	Calhoun County	- Reduction in sedimentation from unpaved roads	Paving of 237,200 LF (nearly 45 miles) along 12 currently unpaved roads proximate to the Apalachicola River, Chipola River, and lakes within the watershed to prevent sedimentation into the surface waters.

Apalachicola River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
St. Vincent Sound to Lake Wimico Acquisition	\$40,000,000	TNC DEP DACS USFWS	- Estuarine water quality protection within ANERR and proximate to commercial shellfish beds and existing public lands; - Protection of crucial DOD mission flyway and state conservation corridor	Acquisition of approximately 40,000 acres via conservation easement to buffer St. Vincent Sound, Apalachicola Bay, and Lake Wimico. Protects major estuarine waterfront and drainage area for the Apalachicola River and bay. Preserves working forest and DOD mission flyway and state conservation corridor.
Bear Creek Forest, Bay, Calhoun, and Gulf Counties	\$25,000,000	DACS DOD FWC TCF	- Protects water quality, watershed values, and ecological linkage to downstream Apalachicola River and Bay	Preserves approximately 30,000 acres of forested tributary stream basins connections, water quality and quantity values, imperiled species connections to healthy headwater streams, and sports and commercial fisheries. Sustains working forest resources and regional DOD landscape corridor needs.

Apalachicola River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
St. James Island Acquisition	\$77,000,000	TNC	- Landscape scale protection and restoration of forested upland and wetland communities.	The project will acquire and restore 19,588 acres of forested upland and wetland communities into state or federal ownership. The lands buffer and are contiguous with the southwestern edge of St. Marks National Wildlife Refuge and serve as a significant connector between the Tate's Hell State Forest, Bald Point State Park, Alligator Harbor Aquatic Preserve and Ochlockonee Bay which is particularly important for the local population of Florida black bear. Restoring uplands will protect the quality of freshwater entering the highly productive waters of the Gulf, including three State of Florida Aquatic Preserves—Apalachicola Bay, Alligator Harbor, and Big Bend Seagrasses. This project area has a high likelihood of urban development.

Ochlockonee River and Bay Watershed				
Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
<i>Current Priorities Identified through the SWIM Program</i>				
Stormwater Retrofit Projects	\$1,200,000	City of Sopchoppy	- Water quality improvement for the Sopchoppy River and Ochlockonee Bay - Stabilization of current erosion sites - Enhanced public safety	This project provides for stabilization of and construction of stormwater treatment for drainage ditches constructed in the 1930s-1950s. These ditches currently contributed sediment, turbidity, and other pollutants into the Sopchoppy River, a tributary of Ochlockonee Bay. They are also currently eroding and pose a public safety hazard. Project divided into two remaining phases, at approximately \$600,000 each for completion.
Stormwater Retrofit Projects	\$1,065,000	City of Quincy	- Water quality improvements within the Ochlockonee River Watershed - Community flood relief	Three stormwater retrofit drainage system improvements in Tanyard Branch drainage basin to provide storage and water quality treatment for urban runoff that discharge to Telogia Creek which is a major tributary of the Ochlockonee River. Improvements will also alleviate in-town flooding.

Ochlockonee River and Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Sewer Distribution System	\$14,900,000	Leon County	- Water quality improvement - Protection of groundwater and springshed water quality	Wastewater system improvements to connect residences in the Harbinwood/Jackson Heights Subdivision currently on septic tanks to central sewer system. Improvements will significantly reduce nutrients leaching into groundwater. This extension of public central sewer will provide significant benefit to the environment and public health.

Ochlockonee River and Bay Watershed – Additional Stakeholder Priorities and Potential Projects Under Evaluation

Unpaved road paving and stabilization	\$1,804,073	Gadsden County	- Water quality improvement	Paving of 20,055 LF (approx. 3.8 miles) along four currently unpaved roads with improved swales and installation of pervious paver parking areas proximate to Lake Talquin and creeks within the Ochlockonee River basin to prevent sedimentation into the creeks and wetlands.
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St. Marks River and Apalachee Bay Watershed				
Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
<i>Current Priorities Identified through the SWIM Program</i>				
Wakulla Springs Basin Acquisition	\$5,050,000	DEP NFWFMD Wakulla County	- Water quality - Recharge protection	Ferrell property acquisition, approximately 1,010 acres. Contains a mixture of high-quality wetlands, sinkholes and forested uplands within the Wakulla Springs springshed. The property is adjacent to the Apalachicola National Forest and is near Edward Ball Wakulla Springs State Park. It is also within the Wakulla Springs Protection Zone—an area identified as needing protection for the ecological well-being of the springs. Wakulla Springs is the headwaters of the Wakulla River, a major tributary of Apalachee Bay.
Reuse of Reclaimed Water	\$1,000,000	Wakulla County	- Water quality improvement - Water conservation - Integrated water resource management	Construction of WWTP treatment process improvements to provide public access quality reclaimed water. Reuse transmission pipeline has already been constructed with state funds. Funds are needed to replace the influent screens, modify the digester tanks, install dosing pumps, install filtration system, modify the effluent wet well, install two new effluent pumps, and associated electrical, survey, design and permitting.
Stormwater Treatment System	\$582,900	City of St. Marks	- Estuarine water quality improvement - Public access and recreation enhancement	Construction of wet detention facility and associated park amenities. Benefits will include water quality improvement and flood relief, as well as public access, aesthetic, and recreational benefits; adjacent to St. Marks Bike Trail.

St. Marks River and Apalachee Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Sewer System Upgrades	\$6,000,000	Wakulla County Community of Panacea	- Estuarine water quality improvement	Funds are needed to design, permit acquire property, and construct sewer service extensions through the Panacea area. This will require plant upgrades, improvements to existing lift stations and manholes, a gravity collection system within the subdivision, duplex services to lot corners, lot acquisition, small lift stations, construction of storm water conveyance and detention areas within the area.
City of Tallahassee Wastewater System Improvements in Woodville area	\$1,800,000	City of Tallahassee	- Water quality improvement within the Woodville Karst Plain - Protection of spring systems and receiving coastal waters	Wastewater system improvements to connect residences currently on septic tanks to central sewer system. Improvements will significantly reduce nutrients leaching into groundwater in the Wakulla Springs protection zone and impacting river and springs in Wakulla County and nutrients to Apalachee Bay. This extension of public central sewer will provide significant benefit to the environment and human health in Leon and Wakulla counties.
Stormwater Improvements	\$20,000,000	Wakulla County Community of Crawfordville	- Water quality improvement within the Woodville Karst Plain - Protection of spring systems and receiving coastal waters	Stormwater retrofit planning and construction are needed for the community of Crawfordville. Multiple stormwater ponds are anticipated to provide for regional treatment and management.

St. Marks River and Apalachee Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Historical Neighborhood Sewer and Storm Water	\$36,900,000	Wakulla County	- Water quality improvement within the Woodville Karst Plain - Protection of spring systems and receiving coastal waters	Three high density subdivisions, established in the 1950s, require construction and retrofit of both sanitary sewer and stormwater systems. These improvements are expected to result in significant protection and restoration of water quality in the Woodville Karst Plain and affected waters in Apalachee Bay.
Monticello Stormwater Treatment	\$327,500	City of Monticello	- Water quality improvement within the Woodville Karst Plain - Improvement of water quality for runoff discharging to the St. Marks River and Apalachee Bay	Installation of compact inline stormwater filters to remove trash and larger particles prior to discharge into the park and ultimately the Gulf of Mexico by way of the St Marks River. The project directly addresses the water quality in the basin and the Gulf of Mexico. Project scope includes engineering, construction and 10-years of maintenance.
Wakulla Springs Watershed Protection	\$1,380,300	Wakulla County	- Water quality improvement within the Woodville Karst Plain - Protection of spring systems and receiving coastal waters	In an effort to further reduce the amount of nitrogen loading and other pollutants that effect the water quality of Wakulla Springs, Wakulla County proposes to inspect individual on-site septic systems within the Wakulla Springs watershed area. Funds are needed for the inspection and the repair and/or replacement of old, damaged and failing systems.

St. Marks River and Apalachee Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Wastewater Transmission	\$8,054,000	Wakulla County City of Tallahassee	- Water quality improvement within the Woodville Karst Plain - Protection of spring systems and receiving coastal waters	This project includes the reversal of the flow from Wakulla Wastewater using existing pump stations throughout Wakulla County and the construction of a master force main that will terminate at the City of Tallahassee's Thomas P. Smith Wastewater Reclamation Facility. The intent is to pump all municipal wastewater from the Wakulla County's public collection system to Tallahassee's treatment plant, which has the capacity to accept the flow and has recently been upgraded to provide Advanced Treatment. The primary environmental benefit of this project is the reduction of nutrient loading in the aquifer recharge areas of Wakulla County. This project is a regional solution to a problem in close proximity to the Gulf of Mexico.

St. Marks River and Apalachee Bay Watershed – Current Priorities (continued)

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Sewer System Testing and Repair	\$800,000	Wakulla County	- Water quality improvement within the Woodville Karst Plain - Protection of spring systems and receiving coastal waters	Heavy rains and storm events are known to be the major source of fresh water entering and overwhelming the wastewater collection system. There is a need to reduce excessive wet-weather peak flows in the southern extension of Wakulla County's wastewater collection system and reduce, if not eliminate, continued storm-related erosion of the collection system. Funds are needed for: 1) repairs and upgrades to the sewer collection system where infiltration has been identified, 2) TV and smoke testing portions of the sewer lines to identify additional sources and locations of inflow and infiltration and 3) repair of cracked or leaking manholes and pipe seals.
Sewer Distribution System	\$81,600,000	Leon County	- Water quality improvement within the Woodville Karst Plain - Protection of spring systems and receiving coastal waters	Wastewater system improvements to connect residences in the Woodville Community and Lake Munson Target Area currently on septic tanks to central sewer system. Improvements will significantly reduce nutrients leaching into groundwater in the Wakulla Springs protection zone and impacting river and springs in Wakulla County and nutrients to Apalachee Bay. This extension of public central sewer will provide significant benefit to the environment and human health in Leon and Wakulla counties.

St. Marks River and Apalachee Bay Watershed – Additional Stakeholder Priorities and Potential Projects Under Evaluation

Project	Estimated Cost	Lead and Participating Organizations	Objectives and Benefits	Description
Stormwater Improvements	To be determined	Wakulla County Community of Panacea	- Water quality protection and improvement for Dickerson Bay and Apalachee Bay	Stormwater retrofit planning and construction are needed for the community of Panacea.
Flint Rock Acquisition	\$33,000,000	TNC	- Landscape scale protection of coastal wetland systems.	The project will transfer 17,273 acres of forested upland and wetland communities into state or federal ownership. These lands are important to conserving the natural habitats, species and watershed of the St. Marks National Wildlife Refuge, Apalachee Bay and the Big Bend Seagrasses Aquatic Preserve. The lands in the project are currently available for acquisition making the project feasible and the likelihood of success high. The lands are within the St. Marks National Wildlife Refuge's approved acquisition Boundary Expansion and support numerous rare and imperiled species.