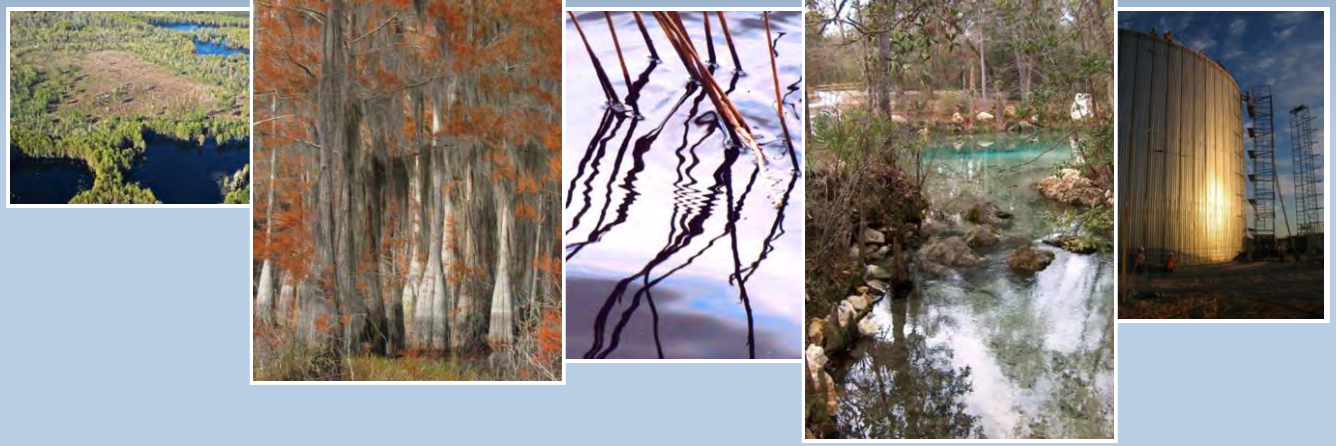
Northwest Florida Water Management District



Consolidated Annual Report

March 1, 2012

Annual Report 2012-02

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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ANNUAL REPORT 2012-02

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Executive Summary

Pursuant to Section 373.036(7), Florida Statutes (F.S.), a consolidated annual report on the management of water resources is submitted by March 1st of each year to the Governor, the President of the Senate, the Speaker of the House of Representatives, and the Department of Environmental Protection (DEP). Copies of the report are provided to the chairs of all legislative committees having substantive or fiscal jurisdiction over water management districts, as well as to the governing boards of counties having jurisdiction or deriving any funds for operations of the appropriate district. The report is also made readily available to the public.

The March 1, 2012, Northwest Florida Water Management District (NWFWMD or "District") Consolidated Annual Report includes seven required reports as specified in Section 373.036(7)(b), F.S.:

- An annual work plan report on strategic plan implementation (s. 373.036(2)(e), F.S.);
- The DEP approved Minimum Flows and Levels annual priority list (s. 373.042(2), F.S.);
- The annual Five-year Capital Improvements Plan (s. 373.536(6)(a)3, F.S.);
- The Alternative Water Supplies Annual Report (s. 373.707(8)(n), F.S.);
- The final annual Five-Year Water Resource Development Work Program (s. 373.536(6)(a)4, F.S.);
- The Florida Forever Water Management District Work Plan Annual Report (s. 373.199(7), F.S.); and
- The Mitigation Donation Annual Report (s. 373.414(1)(b)2, F.S.).

In addition to the required content, each district may also include additional information on the status or management of water resources as deemed appropriate. This report includes one optional element, a Surface Water Improvement and Management (SWIM) Program Summary Report that describes the District's watershed planning framework. Since the SWIM program encompasses watershed management District-wide, it provides the planning context for identifying, prioritizing, and implementing cooperative watershed protection and restoration projects.

These reports describe the current status and previous fiscal year accomplishments of a number District programs, including land acquisition and management, watershed restoration, water resource development, and alternative water supply development. Among these accomplishments are the following:

- The District awarded over $3,000,000 in grants to assist utilities developing the inland Floridan Aquifer in Walton County as a sustainable alternative water supply for growing coastal populations. During this period, the District also continued to assist financially disadvantaged small local governments.
- The Regulation of Wells Program significantly improved service and efficiency through establishing full online functionality for the well permitting system.
- Over 2,800 acres were restored across northwest Florida, including longleaf pine forests, estuarine salt marsh, forested wetlands, oyster reefs, and spring bank shoreline habitat.
- The Jackson Blue Spring Water Resources Assessment was completed, to include current descriptions of spring flows, springshed conditions, and recommended management practices.
- The Flood Information Portal was established at portal.nwfwmdfloodmaps.com. The portal makes detailed flood information available down to the individual parcel level. This technology brings extensive data sources to the public through an intuitive online interface.

- Several cooperative capital improvement projects were completed by local governments, reflecting implementation of the District's highly successful Florida Forever capital improvement grant program. These efforts included stormwater retrofit, sediment abatement, and hydrologic restoration projects.

Current information relating to these and other District programs may be found through the following:

- Strategic Water Management Plan (SWMP) (s. 373.036, F.S.) – www.nwfwmd.state.fl.us/pubs/swmp/swmp.html.
- Environmental Resource Permitting for northwest Florida (s. 373.4145, F.S.) – www.nwfwmd.state.fl.us/permits/permits-ERP.html.
- Land Acquisition and Management – www.nwfwmd.state.fl.us/lands/lands.htm.
- Resource Regulation – www.nwfwmd.state.fl.us/permits.html.
- Regional Mitigation Plan for wetland impacts incurred by the Florida Department of Transportation (s. 373.4137, F.S) – www.nwfwmdwetlands.com.
- Flood hazard mapping updates for the Federal Emergency Management Agency's Risk Map Program – www.nwfwmdfloodmaps.com.
- SWIM program (s. 373.451-459, F.S.) – www.nwfwmd.state.fl.us/pubs/swmp/swim.html.

This Consolidated Annual Report is available through the District's web site at www.nwfwmd.state.fl.us/pubs/consolidatedAR/consolAR.html.

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Chapter One: Strategic Water Management Plan Annual Work Plan Report

1.1 Introduction

Section 373.036(2)(e), Florida Statutes (F.S.), provides the Governing Board the option of substituting an annual strategic plan for the five-year district water management plan (DWMP) and the DWMP annual report. The statute requires the strategic plan to include separately an annual work plan report on its implementation for the previous fiscal year (FY), addressing success indicators, deliverables, and milestones. In November 2010, the District's Governing Board approved substitution of the Strategic Water Management Plan (SWMP) for the DWMP.

The SWMP is available at www.nwfwmd.state.fl.us/pubs/swmp/swmp.html. The plan defines ten strategic priorities FY 2011-2015:

1) Alternative Water Supply Development (AWSD)
2) Coastal Utilities Interconnections
3) Consumptive Use Permitting
4) Cumulative Impacts Analysis
5) Environmental Resource Permitting (ERP)
6) No Net Loss of Wetland Function
7) Flood Hazard Mapping
8) Reuse of Reclaimed Water
9) Restoration
10) Lands Management

As indicated in the SWMP, elements of the strategic plan to be addressed in this report are:

- Qualitative and quantitative evaluations of success indicators on each of the strategic priority, deliverables, and milestones;
- An evaluation of progress toward accomplishing strategic priorities; and
- A discussion of accomplishments over the past fiscal year, including an evaluation of the accomplishment of milestones and deliverables.

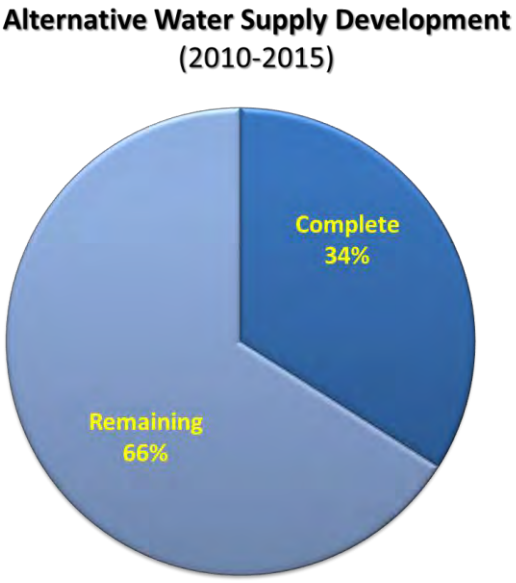
1.2 FY 2011-2015 SWMP Implementation – Strategic Priorities

The following pages describe progress toward accomplishment of the District's strategic priorities, as defined within the FY 2011-2015 SWMP.

Strategic Priority: Alternative Water Supply Development

Complete alternative water supply development projects as outlined in regional water supply plans and the water resource development work program.

Three regional water supply plans (RWSPs) have been developed in northwest Florida for regions where alternative water supplies are needed in addition to traditional water supply sources to ensure sufficient water is available to meet the needs of growing populations while also sustaining water resources and environmental quality. The District's RWSPs identify priority alternative water supply sources as follows:



Region II (Santa Rosa, Okaloosa, and Walton counties):

- Inland Sand and Gravel Wellfield Expansion (Santa Rosa County) – 18 million gallons per day (mgd)
- Inland Floridan Aquifer Wellfield Expansion (Walton County) – 9 mgd
- Surface Water Sources (Okaloosa County) – 25 mgd
- Water Reuse Facilities – 5 mgd

Region III (Bay County):

- Inland Floridan Aquifer Wellfield Development – 5 mgd

Region V (Gulf and Franklin counties):

- Surface Water Supply Development (Gulf County) – 6 mgd
- Inland Groundwater Source Development (Franklin County) – 3 mgd

Figure 1-1. Water Supply Planning Regions

The success indicator is defined as **alternative water supply made available**. The indicator reports on the proportion of the alternative water supply needs identified in approved RWSPs that have been developed. The established target District-wide is 71 mgd. Thus far, approximately 24 mgd of alternative water supply has been developed and permitted, which equates to 34% of the target.

Indicator Evaluation			
Water Supply Planning Region	*AWSD Target (mgd)*	*Complete (mgd)*	*Percent Complete*
Region II	57	18	32%
Region III	5	0	0%
Region V	9	6	67%
NWFWMD Total	71	24	34%

FY 2010-2011 Milestones	
Milestone / Deliverable	*Schedule / Status*
Walton Co. Inland Wellfield Expansion	Completed 2010
Region II RWSP Update	Rescheduled to 2012

Specific Accomplishments – Alternative Water Supply Development

- The District has awarded $2,500,000 in grant funding to WRP, Inc., to construct a major transmission pipeline, including a subaqueous segment under Choctawhatchee Bay. This will increase capacity to deliver inland ground water to the coastal service areas of South Walton Utility Company and Destin Water Users. The project is currently under construction.
- Regional Utilities continued expansion of facilities associated with the inland Floridan Aquifer alternative water supply source. A new transmission main is under construction along U.S. Highway 98 in Walton County, with $550,000 in grant funding assistance provided by the District in 2011.
- The District and Okaloosa County continued to investigate feasible alternatives, which may include acquisition of a 562-acre catchment for a 160-acre pumped storage reservoir to hold direct withdrawals from the Shoal River.
- The District continues to provide educational guidance on water conservation to utilities, local governments, and residents. Public education and awareness information is provided District-wide, with an emphasis on regional water supply planning regions. As of September 2011, 38 hotels are participating in the Conservation Hotel and Motel Program (CHAMP). The program promotes water and energy conservation by asking guests to have towels and linens laundered less frequently than daily. Participating hotels report water use data for documentation and evaluation.
- The District continues to help rural communities develop sustainable water supplies. In 2011, the District awarded a $98,607 grant to help the Calhoun County extend water service from the city of Blountstown to the Pine Island unincorporated community.
- In Gadsden County, the District is helping the City of Gretna extend water service to major economic developments and develop an interconnection with the Town of Greensboro. This assistance includes a $50,000 grant for engineering and a grant of up to $470,000 for construction. It is expected that construction will be complete in 2012.
- A draft Region II RWSP update has been prepared, with completion scheduled to follow a public workshop in February 2012.

Strategic Priority: Coastal Utilities Interconnections

Establish interconnections between coastal utilities in water supply regions II, III, and V, as identified in the District's interconnect plan.

The District is working cooperatively with utilities in the coastal Panhandle to evaluate feasibility and to assist in the planning and design of priority water system interconnections. The underlying objective is to enhance coastal water system resilience and reliability by enabling the transfer of water between utilities if necessary due to future droughts or other contingencies.

Phase I of the project includes planning and design of priority interconnection facilities, and Phase II is implementation through construction of priority interconnections.

The District's success indicator for coastal utilities interconnection is **establishment of priority interconnections in regions II, III, and V**. The target established is defined as miles of pipeline constructed per the Interconnection Plan**.** Thus far, it is estimated that 23 miles of new utility interconnections will need to be constructed. This estimate may be revised as detailed planning and analysis is completed.

It is anticipated that the Phase I Plan, including a Basis of Design Report, will be completed in 2012. To date, hydraulic modeling, water quality blending analysis, and the initial alternatives analysis have been accomplished.

Indicator Evaluation			
Indicator	*Target (miles of pipeline)*	*Complete (miles)*	*Percent Complete*
Pipeline constructed	23	0	0%

FY 2010-2011 Milestones	
Milestone / Deliverable	*Schedule / Status*
Coastal utility interconnection plan documents	Rescheduled to 2012

Specific Accomplishments – Coastal Utilities Interconnection

- During 2011, preliminary designs and probable cost estimates were completed for the Santa Rosa County-Okaloosa County and the Walton County-Bay County interconnects, which had previously been identified as priority projects.
- A 12" watermain extension, interconnecting the City of Freeport's main water system to the North Bay/Choctaw Beach community, is being developed. Permits have been obtained, and an easement has been acquired for the project to cross Eglin AFB property. The District is providing up to 50% of the construction funding for this project, not to exceed $800,000. It is expected that construction will be complete by September 2012.

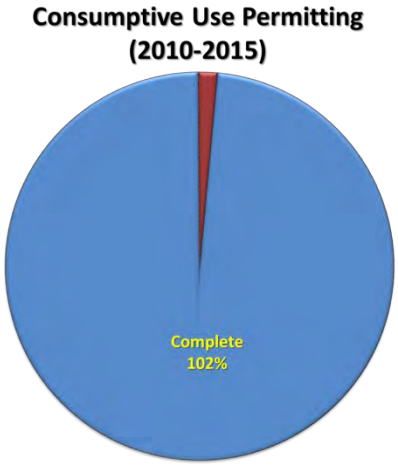
Strategic Priority: Consumptive Use Permitting

Continue to implement a district-wide consumptive use permitting program to accomplish 100% compliance of all major water suppliers and users.

The District regulates water withdrawals to promote the conservation, development, and proper utilization of surface and ground water and to encourage and promote water conservation and the reuse of reclaimed water. Consumptive uses are regulated through Chapter 40A-2, Florida Administrative Code (FAC).

Consumptive uses are regulated district-wide, with differing permitting thresholds based on water source (surface water and ground water) and resource constraints.

The District's success indicator for Consumptive Use Permitting is **consumptive use demand permitted district-wide.** The designated target is 100% of projected demand under permit. This assumes that consumptive uses of water may be authorized resulting in beneficial use without causing harm to existing users or the water resource. Approximately 262 mgd, on average, of withdrawals are authorized under permits issued for public supply. The 2030 demand projection for public supply is approximately 258 mgd.



Indicator Evaluation			
Indicator	*Target (mgd)**	*Permitted (mgd)*	*Percent*
Consumptive use demand permitted	258	262	102%

*Public Supply

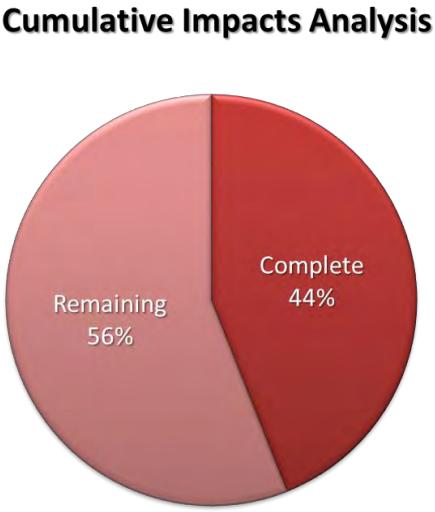
Specific Accomplishments – Consumptive Use Permitting

- The Regulation of Wells Program enhanced service to licensed water well contractors by expanding the Online Well Permit Management Account System to allow online submittal of permit applications and completion reports.
- During FY 2010-2011, 135 well contractor licenses were renewed, 25 became inactive, and three persons became newly licensed well contractors.
- The Regulation of Wells program continues to promote proper plugging and abandonment of wells throughout northwest Florida, with 887 permits issued to plug and abandon wells during this reporting period. This program includes a grant program for plugging wells that are unused or unsuitable for their intended purpose and that pose a threat to ground water resources. Through FY 2010-2011, the District provided grants totaling $32,100.
- To increase efficiency, the Bureau of Ground Water Regulation implemented use of laptop computers in the field for the inspectors that serve both the Wells and Consumptive Use programs. The computers enable direct connectivity to the office, allowing inspectors to be notified immediately of issues so that they can react promptly to serve the public and the contractor community.

Strategic Priority: Cumulative Impacts Analysis

Complete cumulative impacts analysis on identified priority waterbodies and implement appropriate fresh water needs protection strategies for each.

Section 373.016(2), F.S., requires water management districts to manage water resources to ensure their sustainability, taking cumulative impacts to those resources into account. The District approaches this responsibility through several interrelated programs. Watershed resource planning, assessment, and restoration are conducted under the Surface Water Improvement and Management (SWIM) program (sections 373.451-459, F.S.). Associated with SWIM are freshwater needs assessments and activities conducted pursuant to the Florida Springs Initiative. Consumptive use permitting is a regulatory program that requires no harm to occur to water resources. Freshwater needs assessments provide for a determination of the amount of water that may be reserved for natural systems, as well as to meet requirements for the establishment of minimum flows and levels (MFLs).



Indicator Evaluation		
Indicator	*Target**	*Percent Complete*
Completed analysis for priority waterbodies	5	65%
Assessment Status		
SWIM Priority Watershed	Waterbody Assessment	Percent Complete
Apalachicola River and Bay	Jackson Blue Springs	100%
Pensacola Bay System	Inland Sand and Gravel Aquifer	75%
Choctawhatchee River and Bay	Morrison Spring	12%
St. Andrew Bay	Deer Point Lake Reservoir/North Bay	100%
St. Marks River Watershed	Wakulla Springs/St. Marks River	40%

* Waterbodies with completed analysis, 2010-2015

In addition to assessments conducted under SWIM, ground water and surface water resource assessments are conducted within the framework of RWSPs. Potential and cumulative impacts associated with water use permit applications are evaluated through the consumptive use permitting program, and direct, secondary, and cumulative impacts of proposed surface water alterations are assessed through Environmental Resource Permitting (ERP). Additionally, long term cumulative impacts are considered in regional wetland mitigation planning.

The District's success indicators for this priority are **completion of cumulative impacts analysis and implementation of protection strategies for priority waterbodies**. The target established is completion of analysis for five priority waterbodies by 2015. The priorities include freshwater needs analysis requirements listed on the District's current MFL priority List.

Specific Accomplishments – Cumulative Impacts Assessment

- Hydrologic monitoring and analysis continued for priority waterbodies, including the inland Sand and Gravel and coastal Floridan aquifers; the Blackwater and Yellow rivers; Deer Point Lake Reservoir; and Wakulla, Jackson Blue, and Morrison springs.
- The District completed the Jackson Blue Spring Water Resources Assessment (www.nwfwmd.state.fl.us/pubs/wra11-01/WRA11-01.pdf), evaluating and describing spring flows, springshed conditions, and management practices.
- The East Bay, Blackwater Bay, Lower Yellow River preliminary baseline resource characterization was completed, providing a description of watershed resources and a discussion of flow-dependent habitats and species. The characterization is available at www.nwfwmd.state.fl.us/pubs/wrsr2010-02_east_bay/EastBayResourceCharacterization.pdf.
- The District also completed its first Hydrologic Monitoring Plan, detailing operational, data collection, storage, and maintenance procedures and describing how these ensure the consistent implementation of the District's monitoring activities. The plan is available at www.nwfwmd.state.fl.us/pubs/hydrologic_monitoring_plan/hydrologic_monitoring_plan.html.

Strategic Priority: Environmental Resource Permitting

Fully implement Environmental Resource Permitting in Northwest Florida.

Environmental Resource Permitting (ERP) is jointly administered in northwest Florida by the District and the Department of Environmental Protection (DEP). The program has been implemented in two phases. Phase I (effective October 1, 2007) regulates activities previously covered under the Panhandle's stormwater rule for water quality while adding new protective measures for stormwater flow. Implementation of Phase II began November 1, 2010, encompassing wetland resource regulation as well as activities addressed by Phase I. Phase II expands protection to isolated wetland functions, which were previously unprotected in northwest Florida. The program also implements resource-based criteria applicable to sensitive karst areas.

Environmental Resource Permitting streamlines the overall permitting process and is expected to improve water quality and flood protection by addressing stormwater and wetland functions in an integrated manner under a single permit.

The established target for ERP is 100% timely issuance of qualified permits. During FY 2010-2011, 370 permit applications requiring action during the fiscal year were received. Of these, five were transferred to DEP, two were denied for failure to respond, and 23 were withdrawn. The remainder met conditions for issuance and received permits. None fell outside of the 90 day period, signifying the program continues to be implemented in an efficient and effective manner.

Indicator Evaluation

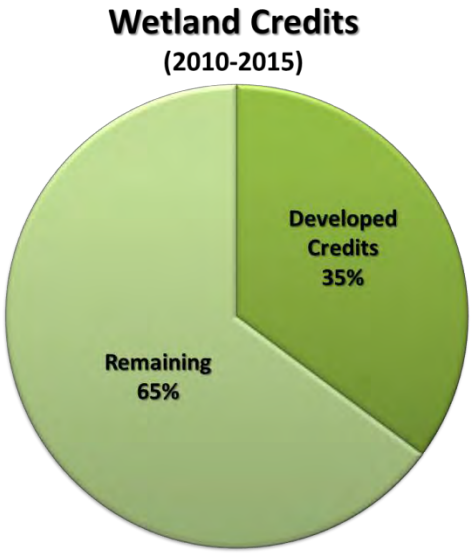
Indicator	*Target*	*Qualified Applications (FY 2011-2012)*	*Percent Complete*
Timely issuance of qualified permits	100%	340*	100%

* Inclusive of all permits required to be issued during FY 2011-2012. Permits still under review at the end of the FY will be included in next year's report.

Strategic Priority: No Net Loss of Wetland Function

Protect wetland functions to ensure long-term water resource sustainability through implementation of ERP and the Umbrella, Watershed-based, Regional Mitigation Plan.

The key measure of this priority is based upon a July 2006 mitigation agreement between the US Army Corps of Engineers and the NWFWMD, as well as Section 373.4137, F.S. The agreement establishes an in-lieu fee mitigation plan for regionally significant, watershed-based mitigation of unavoidable wetland impacts caused by Florida Department of Transportation (DOT) projects, among others. This plan allows the NWFWMD to prepare for and develop new mitigation projects well in advance of when wetland impacts occur and mitigation credit is needed for the DOT projects.



The Umbrella, Watershed-based Regional Mitigation Plan (UWRMP) includes projects such as the Sand Hill Lakes Mitigation Bank and Tate's Hell State Forest hydrologic restoration. The District's success indicator for No Net Loss of Wetland Function is defined as **Credits developed per the UWRMP**. Since the beginning of the District's program to develop credits under the UWRMP, approximately 602 credits have been developed and released. The target established is to develop 520 additional wetland mitigation credits by 2015. To date, approximately 183 credits have been developed. It is anticipated that a substantial number of new credits will be released during 2012, reflecting the significant accomplishments over the past fiscal year.

Indicator Evaluation			
Indicator	*Target*	*Developed Credits*	*Percent Complete*
Credits developed	520	183	35%
FY 2010-2011 Milestones			
Milestone / Deliverable		*Schedule / Status*	
Annual Update		Current	

Specific Accomplishments – No Net Loss of Wetland Function

- Hydrologic restoration was completed at the Dutex mitigation site on Perdido Bay. Drainage that had been disrupted by silviculture and road placement was restored to natural conditions.
- Construction of two oyster shell reefs was completed at Live Oak Point on Choctawhatchee Bay. The reefs will help to protect the largest salt marsh on Choctawhatchee Bay, abating erosion and restoring marsh and shellfish habitat. Five hundred plants, including *Spartina patens*, *Spartina alterniflora*, and *Juncus roemerianus*, were planted between the reefs and the shoreline.
- Extensive restoration of natural wetland vegetation was accomplished at the Ward Creek West, Yellow River Ranch, Womack Creek, Doyle Creek, Lafayette Creek, and Meginniss Arm mitigation sites. Activities included prescribed fire, planting, herbicide

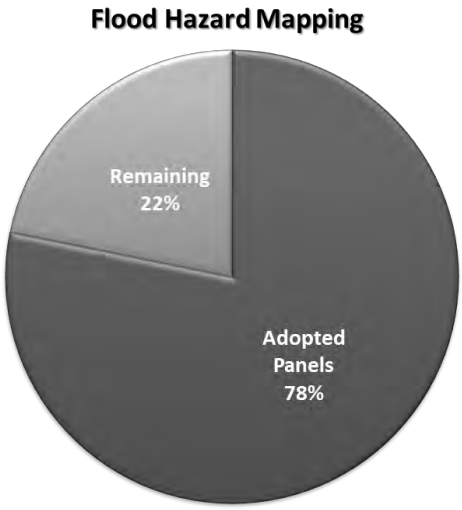
treatment of nuisance species, and ground preparation.

- Over 950,000 plugs of wiregrass, toothache grass plugs, and mixed wet pine flatwood species were planted on disturbed habitat sites on the Perdido, Yellow, Choctawhatchee, and Econfina WMAs and in the Sand Hill Lakes Mitigation Bank and Ward Creek West mitigation tract.
- The District completed the Pine Log Creek basin restoration project of the Tate's Hell restoration plan, enhancing wetlands, restoring historic drainage, and improving water quality across a 15,300-acre basin. Three miles of dirt logging roads and adjacent ditches were removed; and 11 hardened low water crossings, 30 ditch plugs, and other structures were installed.
- Additional vegetation and hydrologic enhancement were accomplished at the Sand Hill Lakes Mitigation Bank. These activities included thinning of shrubs and eradication of Bahia grass and other species. Wet prairie wiregrass and toothache grass seedlings were planted across several sites, and site preparation was accomplished for planting scheduled during FY 2011-2012.
- Nuisance shrub and exotic grasses were treated at five DOT mitigation sites, including Perdido River, Yellow River Ranch, Lafayette Creek, Sand Hill Lakes Mitigation Bank, and Ward Creek West. Herbicide treatment removed invasive species while preserving native vegetation.
- District staff are updating the mitigation plan to be compliant with mitigation banking and in-lieu fee rules under 40 CFR Part 230.

Strategic Priority: Flood Hazard Mapping

Complete detailed flood hazard mapping for low-lying coastal communities and the populated riverine areas of the District.

In 2003, the NWFWMD accepted delegation and responsibility for modernizing flood hazard maps into a modern, digital format for all of its jurisdictional area through a Cooperating Technical Partner (CTP) agreement with the Federal Emergency Management Agency (FEMA).



As a result of this partnership, all of northwest Florida will have modern digital flood insurance rate maps (DFIRMs). FEMA has also recently initiated a new program called Risk Mapping, Assessment, and Planning (Risk MAP). The current effort includes collaboration with state and local entities to deliver quality data to increase public awareness of and support for actions that reduce risk to life and property. Risk MAP aims to foster informed risk management decisions and actions to mitigate flood risk through a consistent approach to assessing potential vulnerability and losses.

The District's success indicator for Flood Hazard Mapping is the **update of flood hazard maps for low-lying coastal and riverine communities**. The target for accomplishment is the District wide adoption of all new digital map panels. Completion and adoption are planned for 2012-2013 but may continue through 2015 with some updates if FEMA funding continues.

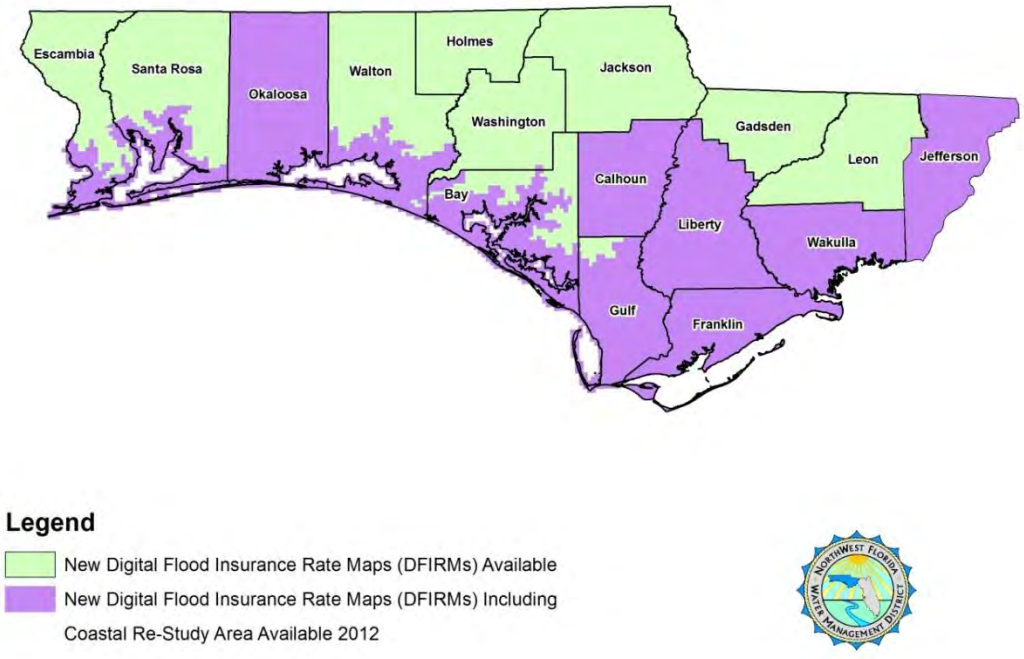


Figure 1-2. Floodplain Mapping Status

Indicator Evaluation			
Indicator	*Target*	*Complete*	*Percent Complete*
All new map panels adopted for low-lying coastal and riverine communities	1,264	998	78%

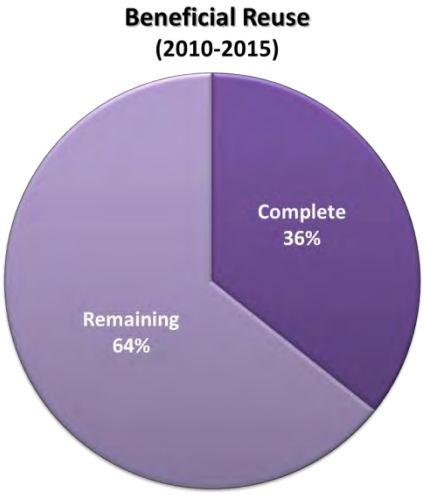
Specific Accomplishments – Flood Hazard Mapping

- The District's Flood Information Portal is live online for most of northwest Florida at portal.nwfwmdfloodmaps.com/. The portal makes detailed flood information available down to the individual parcel level. This technology makes extensive data sources available to the public through an intuitive online interface.
- During FY 2010-2011, final effective DFIRMs were completed for Holmes, Jackson, and Washington counties. Final DFIRMs for Escambia, Santa Rosa, Bay, Gulf, Gadsden, Leon, and Walton counties had previously been completed. Preliminary DFIRMS have been completed in Calhoun and Liberty counties, and preliminary DFIRM maps in Franklin, Jefferson, and Wakulla counties are in final review by FEMA.
- Efforts continue to improve the accuracy of coastal flood hazard maps. The work involves applying previously acquired detailed elevation data to hydrologic and storm surge models to produce more detailed and accurate DFIRMs for local governments. Work on Wakulla, Franklin, and Jefferson counties is in final review by FEMA, and work on Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties is ongoing.
- The District received an additional $1.7 million from FEMA to continue its technical partnership. This funding will be used to update and improve flood hazard maps in the Chipola and New River basins. It will also fund updates and conversions to Risk MAP products in coastal counties from Escambia to Jefferson counties. These products will provide depth of flooding maps, risk of flooding over a 30 year mortgage, and risk of flooding beyond the 100 year flood hazard boundary. The District will match this grant with data, in-kind services of District staff, and local government funding and service.
- An agreement with the City of Tallahassee and Leon County to continue a stormwater flow monitoring program was renewed in September. The program includes operation of 51 surface water and rainfall data collection stations. The initiative also provides for a real-time radio telemetry flood warning network in cooperation with the county and the National Weather Service (NWS). It includes stream and rainfall stations that identify developing flood conditions for emergency management staff. The network will be increased to 40 stations this year.
- To improve the regional ability to respond to dynamic flooding conditions, the District is installing 16 new real-time stage and rainfall monitoring stations and upgrading 17 existing stations to real-time. Twenty of these stations are in Leon County, with the others being within Jefferson, Wakulla, Franklin, and Gulf counties. This work is funded by FEMA through a state hazard mitigation grant.

Strategic Priority: Reuse of Reclaimed Water

Provide for beneficial reuse of available treated wastewater from major wastewater treatment systems across the District, as outlined in the District Reuse Plan.

Reclaimed water can be reused to benefit water resources and enhance environmental sustainability. For the purpose of the SWMP, beneficial reuse is defined as the reuse of reclaimed water to offset potable water demand or to provide direct environmental enhancement. For example, use of reclaimed water can offset potable water demands for activities such as residential, golf course, and institutional irrigation; large industrial and commercial uses; toilet flushing; and pass-through water for power plant cooling. Appropriately treated reclaimed water can also meet environmental aquifer recharge needs.



The District has initiated development of a District-wide reuse plan. The intent of the plan is to identify future projects that will enable beneficial reuse of treated domestic and industrial wastewater. Expanding reuse will improve the sustainability of potable water supplies, promote the stewardship of water resources, and help protect water quality. Implementing beneficial reuse projects will also assist the District in implementing the RWSPs.

The success indicator for Reuse is **beneficial reuse of available treated wastewater from major treatment systems across the District**. The target is 30 mgd of additional beneficial reuse from priority facilities. This is an estimate from a District-wide reuse plan that is currently under development. The 30 mgd target value will be reevaluated upon completion of the reuse plan.

Indicator Evaluation			
Indicator	*Target (mgd)*	*Complete (mgd)*	*Complete*
Additional beneficial reuse from priority facilities, as identified in the District Reuse Plan*	30	11	36%
FY 2010-2011 Milestones			
Milestone / Deliverable		*Schedule / Status*	
Reuse Plan Document		Rescheduled to 2012	

*Under development; to be completed in 2011

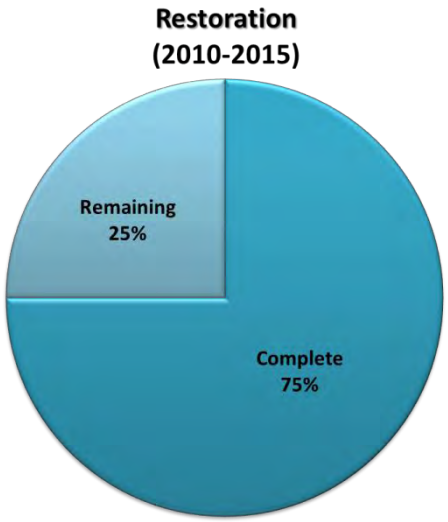
Specific Accomplishments – Reuse of Reclaimed Water

- The District continues work toward development of a District-wide reuse plan. The plan will identify opportunities for future reuse projects that enhance resource sustainability and provide environmental benefits such as improved surface and ground water quality.

Strategic Priority: Restoration

Accomplish watershed-scale restoration initiatives across District lands and for priority waters identified in surface water improvement and management (SWIM) and land management plans.

The NWFWMD accomplishes water resource restoration through several interrelated programs, primarily SWIM, Land Management, and Mitigation.



NWFWMD plans with substantial restoration components include the following:

- *Apalachicola River and Bay Management Plan* (1996)
- *Pensacola Bay System SWIM Plan* (1997)
- *Lake Jackson Management Plan* (1997)
- *Choctawhatchee River and Bay SWIM Plan* (2002)
- *St. Andrew Bay Watershed SWIM Plan* (2000)
- *St. Marks River Watershed SWIM Plan* (2009)
- *Ochlockonee River and Bay SWIM Plan* (draft)
- *Perdido River and Bay SWIM Plan* (draft)
- *Tate's Hell State Forest Hydrologic Restoration Plan* (2010)
- *Florida Forever Capital Improvements Plan*

Figure 1-3. NWFWMD Watersheds

The success indicator for Restoration is to **accomplish watershed-scale restoration initiatives across District lands and for priority waters identified in SWIM and land management plans**. The 2010-2015 restoration target is 30,000 acres.

Indicator Evaluation			
Indicator	*Target (acres)**	*Current (acres)*	*Complete*
Acres Restored	30,000	22,555	75%
FY 2010-2011 Milestones			
Milestone / Deliverable	*Schedule / Status*		
Ochlockonee River and Bay SWIM Plan	Draft complete 2011		
Perdido River and Bay SWIM Plan	Draft complete 2011		

**2010-2015*

The current evaluation represents significant accomplishment since last year's annual work plan report, which indicated 14% completion. The primary action responsible for this increase is completion of the Pine Log Creek restoration project, which included hydrologic restoration and unpaved road and ditch removal, restoring a 15,300-acre basin that drains to the Apalachicola Bay estuary.

Specific Accomplishments – Restoration

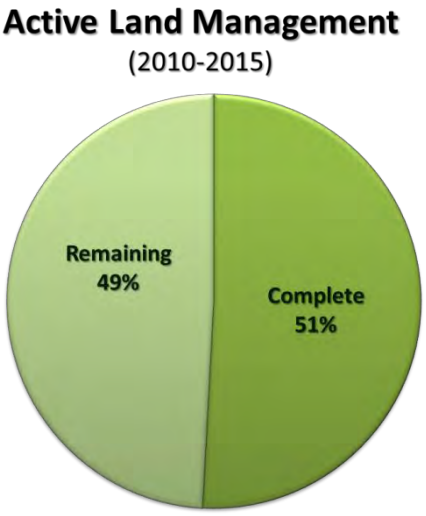
- The District completed its largest overstory and groundcover habitat restoration project in a single year. In an ongoing reforestation and groundcover habitat restoration program, the District completed hand planting of 2,806 acres of disturbed longleaf pine, mixed bottomland hardwood, wet pine flatwoods, and wiregrass habitat. These restoration activities enhance groundwater recharge and improve wetland functions and also offset wetland losses due to Department of Transportation projects.
- Over 1.6 million longleaf pine tubelings were planted in the Perdido River, Choctawhatchee River/Holmes Creek, and Econfina Creek water management areas (WMAs). More than 35,000 mixed hardwood and cypress trees were planted on 87 acres within the Perdido, Yellow, Choctawhatchee, and Econfina WMAs, and for the Womack Creek mitigation project in Tate's Hell State Forest.
- The District also reestablished groundcover habitat, planting over 950,000 plugs of wiregrass, toothache grass plugs, and mixed wet pine flatwood species on disturbed habitat sites on the Perdido, Yellow, Choctawhatchee, and Econfina WMAs and in the Sand Hill Lakes Mitigation Bank and the Ward Creek West mitigation tract.
- Draft SWIM plans were completed for the Ochlockonee and Perdido river and bay watersheds. Strategies encompassed include stormwater retrofit and habitat restoration.
- Construction of two oyster shell reefs was completed at Live Oak Point on Choctawhatchee Bay. The reefs are approximately 130 feet and 180 feet in length respectively, and they will help to abate erosion and restore marsh and shellfish habitat. *Spartina patens*, *Spartina alterniflora*, and *Juncus roemerianus* were planted between the reefs and mean high water.
- Grant recipients have continued progress in completing Florida Forever capital improvement projects with watershed benefits. Three projects were completed in 2011 within Walton, Washington, and Franklin, counties. Together, these activities provided restoration and new water quality treatment for approximately 213 acres.
- With grant funding assistance from the District, University of Florida Institute of

Food and Agricultural Sciences (IFAS) researchers continued work in Jackson County toward development of farming techniques that conserve water and reduce ground water nutrient concentrations while enhancing economic productivity. Through this effort, sod based conservation farming systems have demonstrated reduced water usage and nitrogen applications while achieving improved production yields and reduced costs.

- The Econfina Creek Springs Complex restoration project was completed in 2011. At Pitt Springs, the spring bank was restored to natural habitat and function. The concrete confining wall was removed and replaced with gently sloping natural vegetation and limestone to create a more natural setting. Debris, eroded sediment, and a rock that had blocked spring flow were removed. Other activities completed at Pitt and Sylvan springs include trails, overlooks, other access facilities, sediment removal, and erosion abatement.
- With funding assistance from the District and other partners, Blueprint 2000 and the City of Tallahassee have made substantial progress toward completion of the Cascades Park Watershed Restoration Project. Components under construction include major stormwater ponds, retaining walls, utility relocations, landscaping to support littoral vegetation, and stream reconstruction, all within the St. Marks River watershed.

Strategic Priority: Lands Management

Continue to enhance and manage District lands to protect water resources, and make them available for compatible public uses.



To date, the District has preserved over 224,000 acres, primarily through fee simple acquisition. These lands protect natural systems, wetland and floodplain functions, ground water recharge, surface and ground water quality, and fish and wildlife habitat. District-owned lands are all accessible to the public and are managed to sustain public access and enjoyment, as well as water resource quality. Management and restoration efforts, including prescribed burns, native species planting, and timber harvesting, continue across 212,372 managed acres. In addition, the District maintains and improves public access and recreational amenities, such as boat ramps, primitive campsites, and day use (swimming and picnic) areas.

District lands include the majority of the Escambia and Choctawhatchee river floodplains, as well as extensive lands along the Yellow, Shoal, Blackwater, Chipola, Perdido, and Apalachicola rivers; Holmes and Econfina creeks; and on Garcon Point, Live Oak Point, and Perdido Bay. The District has also acquired the majority of the recharge area for springs that discharge into Econfina Creek and form a crucial component of the water contribution to Deer Point Lake Reservoir. Additionally, the District helped Escambia County preserve Jones Swamp as a conservation and greenway area and has assisted in local government land acquisitions within Leon County.

The District's success indicator for Lands Management is to continue to **manage District lands to protect water resources while making them available for compatible public uses**. The target for active management, including restoration and enhancement, is 50,000 acres from 2010 through 2015.

Indicator Evaluation			
Indicator	*Target (acres)*	*Current (acres)*	*Complete*
Acres active management	50,000	25,430	51%
FY 2010-2011 Milestones			
Milestone / Deliverable		*Schedule / Status*	
Econfina Springs Complex Restoration		Project completed 2011	

Specific Accomplishments – Lands Management

- Several public meetings were held to discuss public recreation on District land along the Chipola and Apalachicola rivers. The District's management strategy is to protect and restore natural areas while providing public access and compatible recreation. Activities planned include hunting, fishing, boating, canoeing/kayaking, hiking, nature appreciation, primitive camping, and other activities that are compatible with water resource protection and restoration.
- Land management activities completed over the past year included over 14,000 acres with active restoration, enhancement, and maintenance activities. These include parcels that were burned, planted, harvested, and treated for land management purposes. Additional detail may be found in Table 5-3 of the Florida Forever Work Plan Annual Report (Chapter 5 of the Consolidated Annual Report).
- The Econfina Creek Springs Complex restoration project was completed in 2011. At Pitt Springs, the spring bank was restored to natural habitat and function. The concrete confining wall was removed and replaced with gently sloping natural vegetation and limestone to create a more natural setting. Debris, eroded sediment, and a rock that had blocked spring flow were removed. Other activities completed at Pitt and Sylvan springs include trails, overlooks, other access facilities, sediment removal, and erosion abatement.
- The District completed road repairs and improvements to the Florida River Island road system within the Apalachicola River Water Management Area. Additionally, the District completed trail development for the Old River Trail, in cooperation with the City of Milton.

Chapter Two: Minimum Flows and Levels Annual Priority List

Requirements for the establishment of minimum flows and levels (MFLs) are specified in Section 373.042, F.S. Minimum flows and levels are defined as the limit at which further withdrawals of ground or surface water would be significantly harmful to the water resources or ecology of the area (s. 373.042(1)(a)-(b), F.S.). A priority list and schedule for the development of MFLs is submitted to DEP for review and approval each November. The final list is incorporated as this chapter within the Consolidated Annual Report.

In accordance with statutory requirements, the priority list and schedule is developed based on the importance of the waters to the state or region and the potential for significant harm to the water resources or ecology of the state or region. The list also includes first magnitude springs and second magnitude springs within state or federally-owned conservation lands. The schedule for establishment of spring minimum flows and levels is planned so as to be commensurate with the existing or potential threat to spring flow from consumptive uses. The Northwest Florida Water Management District Minimum Flows and Levels Priority List may be found in Table 2-1 below and at www.nwfwmd.state.fl.us/rmd/mfl/mfl.htm.

Table 2-1. Northwest Florida Water Management District MFL Priority List (2011)

#	Waterbody	WB Type	County	2010	2011	Date Estab.	Peer Rev.	Reason for Schedule Change	Existence of or Potential for Significant Harm
1	Floridan Aquifer	A	Coastal portions of Santa Rosa, Okaloosa, Walton	2017	2017		N		Potential migration of saline water due to significant drawdown of Floridan Aquifer in coastal portions of these counties.
2	Inland Sand and Gravel Aquifer	A	Santa Rosa, Okaloosa	2015	2015		N		Identified in Regional Water Supply as likely future water supply. Monitoring and Hydrologic modeling is ongoing to consider potential for harm.
3	Deer Point Lake	E/L	Bay	2015	2015		N		Potential increase in withdrawals greater than currently projected that result in reduced discharge to North Bay.
4	Wakulla Spring	S	Wakulla	2012	2012		N		Scheduling of first order magnitude springs is a Requirement of Chapter 373.042, F.S. Monitoring and technical analyses to determine hydrology and aquatic resource needs are ongoing.
5	Jackson Blue Spring	S	Jackson	2012	2012		N		Scheduling of first order magnitude springs is a Requirement of Chapter 373.042, F.S. Monitoring and technical analyses to determine hydrology and aquatic resources needs are ongoing.
6	Yellow River	R	Santa Rosa, Okaloosa	2017	2017		N		Monitoring and Technical analyses to determine consumptive demands, hydrology and aquatic ecosystem needs are ongoing.
7	Morrison Spring	S	Walton	2015	2015		N		Scheduling of 2nd order magnitude springs on state owned land is a Requirement of Chapter 373.042, F.S. Monitoring and technical analyses to determine hydrology and aquatic resource needs are ongoing.

WB Type: A=Aquifer, Fl=Floridan, E=Estuary, L=Lake, R=River, S=Spring, W=Wetland; Peer Rev. = voluntary peer review of MFL; * MFL in rule making; ** MFL rule challenged.

Chapter Three: Annual Five-Year Capital Improvements Plan

3.1 Introduction

The five-year capital improvements plan (CIP) includes projected revenues and expenditures for capital improvements from fiscal years 2011-2012 through 2015-2016. As directed by Section 373.536(6)(a)(3), Florida Statutes, the CIP has been prepared in a manner comparable to the fixed capital outlay format set forth in Section 216.043, Florida Statutes. The format for this plan is drawn from the standard budget reporting format prescribed by the Executive Office of the Governor. Capital improvement projects may be budgeted in either of two standard program categories. Those programs and their activities and sub-activities are represented below:

2.0 Acquisition, Restoration and Public Works

- 2.1 Land Acquisition
- 2.2 Water Source Development
  - 2.2.1 Water Resource Development Projects
  - 2.2.2 Water Supply Development Assistance
  - 2.2.3 Other Water Source Development Activities
- 2.3 Surface Water Projects
- 2.4 Other Cooperative Projects
- 2.5 Facilities Construction & Major Renovations
- 2.6 Other Acquisition and Restoration Activities

3.0 Operation and Maintenance of Lands and Works

- 3.1 Land Management
- 3.2 Works
- 3.3 Facilities
- 3.4 Invasive Plant Control
- 3.5 Other Operation and Maintenance Activities

The only activities and sub-activities under program *2.0 Acquisition, Restoration and Public Works* that may include capital improvement projects are: 2.1 Land Acquisition, 2.2.1 Water Resource Development Projects, 2.2.3 Other Water Source Development Activities, 2.3 Surface Water Projects, and 2.5 Facilities Construction and Major Renovations. The Northwest Florida Water Management District has projects in each of these categories.

The only activities under program *3.0 Operation and Maintenance of Lands and Works* that may include capital improvement projects are: 3.1 Land Management and 3.2 Works. Of these, the Northwest Florida Water Management District only has capital improvement projects in activity 3.1.

The CIP includes expenditures for basic construction costs (permits, inspections, site development, etc.) and other project costs (land, survey, existing facility acquisition, professional services, etc.).

A district's CIP contains only those projects that will be owned and capitalized as fixed assets by the district. The District does not capitalize construction projects having a total project cost of less than $50,000.

3.2 Five-Year Capital Improvements Plan

The purpose of the Five-Year Capital Improvements Plan (CIP) is to project future needs and anticipate future funding requirements to meet those needs. The CIP includes expenditures for basic construction costs (permits, inspections, site development, etc.), other project costs (land, survey, existing facility acquisition, professional services, etc.) and anticipated changes in program costs, changes in maintenance costs and changes in utility costs. The development and construction of all capital projects are budgeted either under program heading *2.0 Acquisition, Restoration and Public Works* or under program heading *3.0 Operation and Maintenance of Lands and Work*s.

The District's capital improvements projects are categorized according to the following activities:

- Land Acquisition;
- Surface Water Projects;
- Facilities Construction and Major Renovations; and
- Land Management.

The District's Florida Forever Work Plan, Land Acquisition Plan, Five-year Water Resource Development Work Plan, Land Management Plan and Northwest Florida Umbrella, Watershed-based, Regional Mitigation Plan may also provide valuable insight to the District's long range capital improvements plan.

Table 3-1. NWFWMD Five Year Capital Improvements Plan, Fiscal Years 2011-2016

2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

2.1 Land Acquisition

Revenues ($)	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
Water Management Lands Trust Fund	202,014	153,500	200,000	250,000	275,000
Florida Forever	0	0	3,250,000	3,250,000	3,250,000
Department of Defense REPI Funds	0	0	0	0	0
District Land Acquisition Reserve	150,000	0	0	0	0
TOTAL	**352,014**	**153,500**	**3,450,000**	**3,500,000**	**3,525,000**

Expenditures ($)	Fiscal Year				
	2011-12	2012-13	2013-14	2014-15	2015-16
Florida Forever - Land Acquisitions	0	0	3,250,000	3,250,000	3,250,000
Land Acquisition	150,000	0	0	0	0
Nokuse Plantation CE (Eglin AFB Buffer)	0	0	0	0	0
Water Management Lands Trust Fund	202,014	153,500	200,000	250,000	275,000
TOTAL	**352,014**	**153,500**	**3,450,000**	**3,500,000**	**3,525,000**

2.2 Water Source Development

Revenues ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
Florida Forever	0	0	500,000	500,000	500,000
TOTAL	**0**	**0**	**500,000**	**500,000**	**500,000**

Expenditures ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
Florida Forever - Land Acquisitions	0	0	500,000	500,000	500,000
TOTAL	**0**	**0**	**500,000**	**500,000**	**500,000**

2.3 Surface Water Projects

Revenues ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
DOT Mitigation Funds	11,000,000	12,000,000	12,000,000	12,000,000	12,000,000
TOTAL	**11,000,000**	**12,000,000**	**12,000,000**	**12,000,000**	**12,000,000**

Expenditures ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
DOT Mitigation	11,000,000	12,000,000	12,000,000	12,000,000	12,000,000
TOTAL	**11,000,000**	**12,000,000**	**12,000,000**	**12,000,000**	**12,000,000**

2.5 Facilities Construction and Major Renovations

Revenues ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
Florida Forever	0	0	0	0	0
Water Management Lands Trust Fund	0	0	50,000	0	50,000
TOTAL	**0**	**0**	**50,000**	**0**	**50,000**

Expenditures ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
Marianna/Econfina F. O. Renovation (add. Office space - Field Staff)	0	0	50,000	0	50,000
TOTAL	**0**	**0**	**50,000**	**0**	**50,000**

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 Land Management

Revenues ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
Water Management Lands Trust Fund	675,000	225,000	875,000	137,500	850,000
Florida Forever	0	0	1,250,000	0	250,000
TOTAL	**675,000**	**225,000**	**2,125,000**	**137,500**	**1,100,000**

Expenditures ($)	Fiscal Year 2011-12	2012-13	2013-14	2014-15	2015-16
Public/Land Management Access Bridges	175,000	175,000	175,000	87,500	150,000
Canoe/Small Boat Launch	0	0	50,000	0	50,000
Spring Restoration - Williford & Blue	0	0	1,250,000	0	250,000
Public Recreation – Coop. with Local Govts.	500,000	0	500,000		500,000
Public Access Road Construction	0	0	150,000	0	150,000
Creek Bank and Solution Hole Stabilization	0	50,000	0	50,000	0
TOTAL	**675,000**	**225,000**	**2,125,000**	**137,500**	**1,100,000**

TOTAL CAPITAL EXPENDITURES ($)	**12,027,014**	**13,038,221**	**15,882,867**	**15,056,103**	**15,883,037**

3.3 Project Descriptions

The following pages provide a brief description of each capital improvements plan activity.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.1 LAND ACQUISITION

Project Title: Save Our Rivers, Preservation 2000 and Florida Forever Land Purchases

Type: Unimproved Land

Physical Location: Undetermined - Within the District's 16-county boundaries

Square Footage/Physical Description: N/A

Expected Completion Date: N/A

Historical Background/Need for Project: To protect and preserve the water resources within the District's 16-county boundaries.

Plan Linkages: Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Purchase price of land is unknown at this time.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Land acquisition ancillary costs are unknown at this time.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): N/A

Anticipated Additional Operating Costs/Continuing: Varied. Maintenance costs to be determined based on the locations and types of lands ultimately acquired.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.2 WATER SOURCE DEVELOPMENT

Project Title: Save Our Rivers and Florida Forever Land Purchases

Type: Unimproved Land

Physical Location: Undetermined - Within the District's 16-county boundaries

Square Footage/Physical Description: N/A

Expected Completion Date: N/A

Historical Background/Need for Project: To protect and preserve the water resources within the District's 16-county boundaries.

Plan Linkages: Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Purchase price of land is unknown at this time.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Land acquisition ancillary costs are unknown at this time.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): N/A

Anticipated Additional Operating Costs/Continuing: Varied. Maintenance costs to be determined based on the locations and types of lands ultimately acquired.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.3 SURFACE WATER PROJECTS

Project Title: Regional Mitigation for DOT Wetlands Impacts

Type: Wetlands that qualify as mitigation for DOT wetland impacts

Physical Location: Undetermined - Watersheds within the District

Square Footage/Physical Description: Land purchases and/or construction of various capital restoration structures (e.g. bridges, low water crossings, water control structures, etc.).

Expected Completion Date: Program is ongoing, year-to-year.

Historical Background/Need for Project: S. 373.4137, Florida Statutes provides that the Districts mitigate for DOT wetland impacts to the extent that funding is available from the Department.

Plan Linkages: Northwest Florida Umbrella, Watershed-based, Regional Mitigation Plan, Florida Forever Work Plan, SWIM plans.

Area(s) of Responsibility: Water Quality, Flood Protection and Natural Systems.

Alternative(s): Upon agreement of all parties (District and DOT) specific mitigation projects may be deferred to the DOT.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Unknown at this time. Multiple projects. Costs are determined by project type (land acquisition, bridge construction, low water crossing, etc.).

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): An amount equal to 15 percent of the total construction and land acquisition costs are estimated for engineering design work, surveying, land appraisals, environmental audits, etc.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None.

Anticipated Additional Operating Costs/Continuing: Undetermined.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.5 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

Project Title: No facilities construction or major renovations are anticipated in FY 2011-2012

Type:

Physical Location:

Square Footage/Physical Description:

Expected Completion Date:

Historical Background/Need for Project:

Plan Linkages: Florida Forever Work Plan, District Water Management Plan, District Budget

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s):

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other):

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other):

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses):

Anticipated Additional Operating Costs/Continuing:

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Public/Land Management Access Bridges

Type: Single Lane Steel Bailey Bridges (50-year life)

Physical Location: Whirlpool Road Public Access – Escambia River Water Management Area

Square Footage/Physical Description: Two proposed single-lane steel bridges utilizing refurbished Bailey bridge sections (12.5 x 45 feet) across two sloughs associated with the floodplain of the Escambia River, subject to engineering design.

Expected Completion Date: September 30, 2012, but may be delayed due to lack of WMLTF appropriations.

Historical Background/Need for Project: To provide public/land management access to approximately 750 acres of District property in the Escambia River Water Management Area.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): The current bridges were used for logging purposes, have deteriorated and are unsafe. None of the bridges have a DOT load rating. In addition, road fill was placed across these sloughs adversely impacting hydrology. The District intends to restore natural hydrologic function to the Escambia River floodplain by removing logging road fill and installing two bridges, subject to site conditions. NWFWMD could delay the project, which would prevent vehicular access by the public for recreational use of the property, prevent land management/maintenance access to District property for habitat restoration, erosion control, prescribed burning, etc. activities. Lack of access prevents law enforcement/emergency vehicles from the property. Division of Forestry (DOF) or District equipment cannot access the property to suppress wildfire. FWC cannot adequately enforce fish and wildlife rules and regulations. Lack of adequate access adversely impacts public safety. Bridge engineering designs are being revised and bid documents are being prepared. Project scheduled for completion by September 30, 2012, but may be deferred to FY 12/13 or beyond due to lack of WMLTF appropriations.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at $175,000 for two bridges.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Actual engineering design services to date are $69,308 (rd).

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: $1,500 annually

PROGRAM: 3.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 3.1 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

Project Title: No spring restoration and protection facilities construction or major renovations are anticipated in FY 2011-2012 due to lack of Florida Forever or WMLTF appropriations. Engineering designs are almost complete (90%) on ESC – Phase II, Williford Spring, but will be deferred to FY 12/13 or beyond until funding is resumed

Type: Spring Restoration and Protection Project

Physical Location: Econfina Creek Water Management Area

Square Footage/Physical Description: Proposed restoration and protection of Williford Spring. The District intends to work with DEP's Spring Restoration Committee (SRC) to develop a comprehensive spring restoration/protection plan for the Econfina Creek Springs Complex located at the junction of Econfina Creek and Hwy. 20. Project will consist of a three step process, i.e. drafting and evaluating a "conceptual design," review/approval by the Spring Restoration Committee and by the Public and Board approval of a final design and restoration and protection (construction) measures. Construction of Phase I – Pitt/Sylvan Springs is complete and the site is expected to open in early May 2012. Ninety-percent designs are almost complete for Phase II – Williford Spring. Final designs/permitting for Phase II are anticipated to be complete by September 30, 2012. Construction of Phase II is on hold indefinitely, subject to funding. Restricted access measures for canoeists may be proposed for Phase II - Williford Spring (2nd Magnitude), subject to Board of Trustees (BOT) sovereign land exemption. Design concepts and design sketches for both Phases were completed as of March, 2007. Site surveying has been completed. Review/approval of concepts/sketches by the SRC/Public/Governing Board for Phase II – Williford Spring was completed in late 2007.

Expected Completion Date: Phase II – Indefinite, subject to available funds

Historical Background/Need for Project: Project will prevent erosion/sedimentation/water quality impacts due to recreation/stormwater issues to one significant 2nd Magnitude spring.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): NWFWMD could delay the project, which would adversely impact the water quality of Econfina Creek (a Class I Waterbody).

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Phase II – Williford Spring: $1,250,000 (estimated), subject to final architecture/engineering design/permitting and bidding.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Phase II - $182,560 for final architectural/engineering designs. Cost of construction oversight, bidding, etc. is to be determined.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: Weekly site clean-up, law enforcement, misc. maintenance/services- $25,000+ annually

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: No Public/Land Management Access Road Construction (Materials Only)
Project(s) are anticipated in FY 2011-2012 due to lack of WMLTF appropriations in FY 11/12.

Type: Single or Double Lane Paved Public Access Road (Approx. 30-foot wide)

Physical Location(s): St. Andrew's tract - Section 9 (Hwy. 167, SW Jackson Co.), Altha tract - Johnny Boy Landing Road and Look And Tremble Road (Calhoun County)

Square Footage/Physical Description: – approx. _____ square feet

Expected Completion Date: N/A

Historical Background/Need for Project: _____ Road(s) is (are) currently sand or clay that experience(s) considerable erosion during heavy rainfall events. Paving the road(s) will lessen erosion and provide enhanced public/land management access to a portion of the _____WMA(s).

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): NWFWMD could delay the project, which would allow the road to continue to erode and impact adjacent water resources, hinder vehicular access by the public to District lands, etc.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Cooperative project(s) [Local Govt. Agreements] with Calhoun and/or Jackson Counties - $0 for asphalt only. Counties will provide all labor and equipment.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): N/A.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: County responsibility.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Devil's Hole Spring, Devil's Hole and Sea Shell Campsite Areas

Type: No Erosion Control Stabilization/Structures Project(s) are anticipated in FY 2011-2012 due to lack of WMLTF appropriations in FY 11/12.

Physical Location: Devil's Hole Spring, Devil's Hole, Sea Shell and Longleaf Campsite Areas - Econfina Creek Water Management Area

Square Footage/Physical Description: Erosion Control Stabilization/Structures, etc., subject to engineering design.

Expected Completion Date: Indefinite due to lack of funding

Historical Background/Need for Project: Devil's Hole, Devil's Hole Spring, Sea Shell and Longleaf campsite areas are experiencing erosion due to adverse impacts caused by unregulated public use on sensitive slope areas and adjacent to and within the creek and spring banks. The project will stabilize highly erodible slopes and creek/spring banks while providing for public/recreational access to these four campsite areas on the Econfina Creek WMA.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay the project, which may lead to further degradation of one swallet hole (Devil's Hole) and further degrade the spring bank at Devil's Hole Spring and the creek bank at Sea Shell campsite areas which may cause these areas to be closed to public use.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at $0.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): Estimated at $0 for engineering design services.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $0

Anticipated Additional Operating Costs/Continuing: $1,000 + annually for site cleanup and maintenance

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Public Recreation Site Development/Improvement – Dead River Landing Boat Launch and Campsite Areas (Local Government Cooperative Agreement - Walton County)

Type: Public Recreation Site Development/Improvement

Physical Location: Dead River Landing Boat Launch and Campsite Areas – Walton County, Choctawhatchee River Water Management Area

Square Footage/Physical Description: Public Recreation Site Development/Improvement, subject to engineering design.

Expected Completion Date: Construction is underway – anticipated completion on or before September 30, 2012.

Historical Background/Need for Project: Dead River Landing/campsites are experiencing heavy use and abuse by the recreational public. In addition, it needs additional site development and improvements to regulate parking, stormwater and camping. Boats launch improvements, parking lot stabilization, erosion control and weather pavilions/kiosks may also be constructed, subject to engineering design. Bank fishing piers and/or boardwalks may also be considered.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay the project, which may lead to further degradation of this popular public access and recreation site.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): 1) Estimated at $175,000 – Walton County sites (County will furnish engineering designs, labor and equipment, subject to approved agreements.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): 1) $15,000 – rail fencing and other District provided materials per agreement.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $0

Anticipated Additional Operating Costs/Continuing: Estimated at $7,500 annually

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Chipola River (Altha tract) – Johnny Boy Landing and Look–N-Tremble Recreation Sites

Type: No Boat Launch Repair/Improvement, Access Ramps/Boardwalks, Stormwater, Erosion Control Stabilization/Structures are anticipated in FY 11/12 due to lack of WMLTF appropriation.

Physical Location: Johnny Boy Landing and Look–N-Tremble Recreation Sites – Chipola River Water Management Area

Square Footage/Physical Description: Boat Launch Repair/Improvement, Access Ramps/Boardwalks, Stormwater, Streambank Erosion Control Stabilization/Structures, etc., subject to engineering design.

Expected Completion Date: Indefinite due to lack of funding

Historical Background/Need for Project: The Johnny Boy Landing and Look–N-Tremble recreation sites are experiencing sedimentation, erosion and creek bank degradation, etc. due to adverse impacts caused by unregulated public use on sensitive slope areas. The project will repair/improve a very popular boat launch and the Look-N-Tremble rapids area while providing for public/recreational access to these areas on the Chipola River WMA.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay the project, which may lead to further degradation of the water resources of the Chipola River, which may cause these areas to be closed to public use.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at $0.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): Estimated at $0 for engineering design services – Phase I Johnny Boy Landing.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $0

Anticipated Additional Operating Costs/Continuing: Estimated at $7,500 annually for site cleanup and maintenance

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Public Access/Boat Launch Improvement – Harry Donar Road/Boat Launch (Local Government Cooperative Agreement - Liberty County)

Type: Public Access/Recreation Site Development/Improvement

Physical Location: Harry Donar Road/Boat Launch – Liberty County, Apalachicola River Water Management Area, Beaverdam Creek tract

Square Footage/Physical Description: Public Access/Recreation Site Development/Improvement, subject to engineering design.

Expected Completion Date: Indefinite due to lack of funding

Historical Background/Need for Project: Harry Donar Road is a county-maintained dirt road that experiences significant erosion due to excessive slope. The road drops down from an elevation of approximately 200 feet to 45 feet in about one-eighth of a mile. The road needs to be paved and stormwater structures need to be built to control erosion/sedimentation. The road leads to an unimproved, dirt boat ramp located on the Apalachicola River. Proposed boat launch improvements, parking lot stabilization, erosion control and weather pavilions/kiosks may also be constructed, subject to engineering design. Harry Donar Road is the only public access into the District's Beaverdam Creek Tract (1,317 acres).

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay the project, which may lead to further degradation of the Apalachicola River floodplain and this popular public access and recreation site.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): 1) Estimated at $200,000 – Liberty County will furnish engineering designs, labor and equipment, subject to an approved local government agreement.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): $7,500 – rail fencing and other District provided materials per agreement.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $0

Anticipated Additional Operating Costs/Continuing: Estimated at $2,500 annually

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Public Access/Boat Launch/Recreation Improvements – Various Sites (Local Government Cooperative Agreement – Holmes County)

Type: Public Access/Recreation Site Development/Improvement

Physical Location: Various Public Access/Boat Launch Sites (Hwy. 2, Warehouse Landing, Izagora, Blackfish Lake) – Holmes County, Choctawhatchee River Water Management Area

Square Footage/Physical Description: Public Access/Boat Launch/Recreation Improvements, subject to engineering design.

Expected Completion Date: Indefinite due to lack of funding

Historical Background/Need for Project: All of the sites mentioned above are experiencing varying degrees of streambank erosion. They also require public access and boat launch stabilization and improvement activities and associated recreation improvements. Public access roads need to be improved with limerock or paved and stormwater structures need to be built to control erosion/sedimentation. Unimproved/improved boat launches need to be constructed or repaired. Proposed boat launch/recreation improvements may consist of parking lot construction or stabilization, stormwater conveyance/sedimentation structures, streambank structures, etc. Weather pavilions, primitive and group campsites and kiosks may also be constructed, subject to engineering design.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay the projects, which may lead to further degradation of the Choctawhatchee River floodplain and these popular public access, boat launch and recreation sites.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Multi-year project estimated at $100,000 annually – Holmes County will furnish engineering designs, labor and equipment, subject to an approved local government agreement.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): 1) $10,00 – rail fencing, weather pavilion materials, kiosks and other District provided materials per agreement.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $0

Anticipated Additional Operating Costs/Continuing: Estimated at $7,500 annually

3.4 Appendix

Water Management District Standard Format Program Definitions for Programs and Activities Found in the Northwest Florida Water Management District's Capital Improvements Plan

2.0 Acquisition, Restoration and Public Works

This program includes the development and construction of all capital projects (except for those contained in Program 3.0), including water resource development projects/water supply development assistance, water control projects, and support and administrative facilities construction; cooperative projects; land acquisition (including Save Our Rivers/Preservation 2000/Florida Forever) and the restoration of lands and water bodies.

2.1 Land Acquisition: The acquisition of land and facilities for the protection and management of water resources. This activity category does not include land acquisition components of "water resource development projects," "surface water projects," or "other cooperative projects."

2.2 Water Source Development: The acquisition of land and facilities for the protection and management of water resources. This activity category includes land acquisition components of "water resource development projects," "water supply development assistance projects," or "other water source development activities."

2.3 Surface Water Projects: Those projects that restore or protect surface water quality, flood protection, or surface-water related resources through the acquisition and improvement of land, construction of public works, and other activities.

2.5 Facilities Construction and Major Renovations: Design, construction, and significant renovation of all district support and administrative facilities.

3.0 Operation and Maintenance of Lands and Works

This program includes all operation and maintenance of facilities, flood control and water supply structures, lands, and other works authorized by Chapter 373, Florida Statutes.

3.1 Land Management (P2000/Save Our Rivers/Florida Forever): Maintenance, custodial, public use improvements, and restoration efforts for lands acquired through Save Our Rivers, Preservation 2000, Florida Forever or other land acquisition programs.

Chapter Four: Water Supply

4.1 Five-Year Water Resource Development Work Program: FY 2011-2012 Update

Introduction

In 1997, the Florida Legislature amended the Florida Water Resources Act (Chapter 373, F.S.) to provide direction to the state's five water management districts on regional water supply planning. This amendment provided a two-step process that involves: (1) dividing the jurisdictions of each water management district into water supply planning regions and assessing the water supply needs and sources of each region; and (2) developing regional water supply plans for those regions identified as either having, or being likely to develop, future water supply constraints.

Each water management district is required by Section 373.536(6)(a)4, Florida Statutes (F.S.), to prepare a Five-Year Water Resource Development Work Program to describe strategies for implementing the water resource development components of each approved regional water supply plan (RWSP) developed or revised under section 373.709 (formerly section 373.0361), F.S. In accordance with the statute, the Work Program is submitted to the Governor, the President of the Senate, the Speaker of the House of Representatives, the Secretary of the Department of Environmental Protection, the chairs of legislative committees with substantive or fiscal jurisdiction over the districts, and the counties constituting each of the five districts. The Department of Environmental Protection (DEP) then conducts a review of the Work Program, to include a "written evaluation of the program's consistency with the furtherance of the district's approved regional water supply plans, and the adequacy of proposed expenditures."

Regional Water Supply Planning in Northwest Florida

The Northwest Florida Water Management District (NWFWMD or District) established seven water supply planning regions in 1998 (Figure 4-1). The initial District Water Supply Assessment (WSA) (NWFWMD 1998) evaluated whether supplies would be sufficient to meet demands through 2020, and it was determined that only Region II (Santa Rosa, Okaloosa, and Walton counties) required a RWSP. The primary resource concern in Region II is in the coastal area, where long-term pumping has caused a pronounced drawdown in the coastal Floridan Aquifer that could lead to significant saltwater intrusion and damage to public water supply wells. In 2003, water demand projections were updated through 2025.

In 2006, the NWFWMD Governing Board determined that the need for planning alternative surface water development in Gulf County and Franklin County (Region V) warranted development of a RWSP. Similarly, in 2008, the Governing Board determined that the need for additional source redundancy and sustainability warranted development of a RWSP for Region III (Bay County).

A District-wide Water Supply Assessment update was completed in 2008 (approved May 2009), extending water demand projections and evaluation of sources through 2030. The 2008 WSA confirmed that no additional RWSPs were required and that water supply planning and implementation efforts should continue in regions II, III, and V (NWFWMD 2008a).

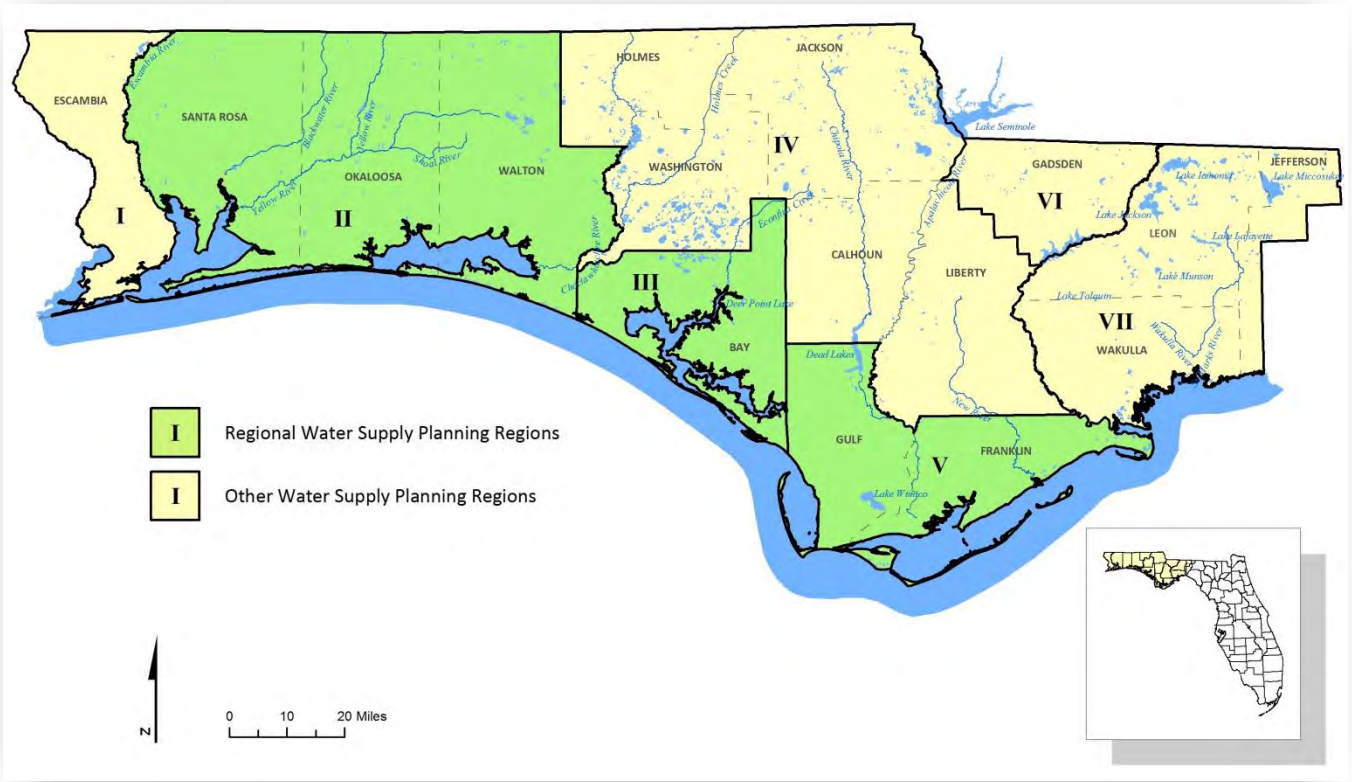


Figure 4-1. Water Supply Planning Regions

As required by Section 373.709(2)(a)1, F.S., the level of certainty planning goal for identifying water supply needs of existing and future reasonable-beneficial uses in the RWSPs was based on meeting such needs for a 1-in-10 year drought event. Water demand can be expected to increase during drought conditions for certain water uses, such as agricultural irrigation and outdoor water use. A more thorough discussion of the quantification of these demands may be found in the 2008 Water Supply Assessment Update (NWFWMD 2008a). A focus of many of the District's water resource development (WRD) activities is to help drought-proof northwest Florida communities through development and interconnection of alternative water supplies.

Implementation of the strategies detailed in the Water Resource Development Work Program (WRDWP) has resulted in identification of additional water that will be available for reasonable-beneficial uses through the planning period. Sources of water include the inland Floridan Aquifer, Sand-and-Gravel Aquifer, reclaimed water, and surface water sources. Water conservation is also emphasized as a means of improving water use efficiency and further ensuring long-term water resource sustainability. It should be noted that future water demands, including considering 1-in-10 year drought and seasonal water demand fluctuations, are also addressed through the consumptive use permitting program.

Public supply continues to be largest use category for the District, representing 47 percent of the demand in 2005 and projected to grow to 52 percent by 2030 (NWFWMD 2008a). This increasing trend is generally true for Regions II, III, and V and has been a focus of the projects developed through the regional water supply planning process, as discussed in more detail below.

Region II

As noted previously, long-term pumping of the coastal Floridan Aquifer to serve public supply demands in southern Santa Rosa, Okaloosa, and Walton counties has caused formation of a substantial cone of depression. Public supply water use in the region is currently projected to increase 57 percent from 44.91 million gallons per day (MGD) in 2005, to 70.60 MGD in 2030, with a large portion of this increase anticipated to serve demand in the coastal region. Water supply planning and resource management activities have focused on reducing coastal demand during the past two decades, and the District has developed a close working relationship with local governments and utilities to monitor water resources and develop solutions to meet future needs.

The first regional water supply plan developed in northwest Florida was approved for Santa Rosa, Okaloosa, and Walton counties in February 2001 (NWFWMD 2001). The RWSP described the region's water supply needs, identified existing and alternative water sources, and analyzed the ability of these sources to meet future demands to 2020. An update to the Region II RWSP was approved by the Governing Board in October 2006 (NWFWMD 2006). The plan incorporates updated and revised water resource development and water supply development components, specific alternative water supply development projects, and other elements as described in the statute. The next plan update is anticipated during late 2011, updating projects and extending the planning timeframe to 2030.

Region III

The coastal area in the vicinity of Panama City Beach is an Area of Special Concern due to historic saltwater intrusion in the upper portion of the Floridan Aquifer. While coastal ground water withdrawals have largely been replaced by surface water from Deer Point Lake Reservoir, there remain concerns about the long-term sustainability of water supply resources within the region. Public supply water use in Region III is currently projected to nearly double from 28.92 MGD in 2005 to 56.94 MGD in 2030. Public supply represents approximately 56 percent of the total 2030 projected demand within the region.

In February 2008, the Governing Board directed staff to develop a RWSP for Region III that would diversify long-term public supply, drought-proof the region, and minimize vulnerability of public water supplies to a major hurricane storm surge. The Governing Board approved the Region III RWSP in August 2008 (NWFWMD 2008b).

Region V

The primary concern identified in the Region V RWSP is saltwater intrusion into the Floridan Aquifer within the coastal Area of Special Concern, which has implications for the long-term sustainability of coastal ground water supplies within both Franklin and Gulf counties. Although public supply uses are relatively small, they represent two-thirds of the total projected demand for 2030. To meet projected demands associated with permanent and seasonal population growth, a surface water source has been developed for the City of Port St. Joe and vicinity (Gulf County) and the inland Floridan Aquifer has been evaluated as a long-term source for coastal Franklin County.

The Region V RWSP was approved by the Governing Board in January 2007 (NWFWMD 2007). It is anticipated that an update to the Region V RWSP will be initiated during the 2011-2012 fiscal year.

All Regions

A major District priority is the coastal water systems interconnection initiative. Significant investments in alternative water supplies have resulted in a diverse base of water supply sources from Gulf to Escambia counties. To build upon this effort, the District is working in cooperation with utilities to explore and develop possibilities for strategic interconnections between coastal water supply systems. The interconnection of these systems is expected to significantly enhance the resilience of coastal water supplies by enabling transfer of water between utilities if necessary due to future droughts or other contingencies.

An initial study was completed in January 2009 to evaluate the feasibility and benefits of interconnecting coastal water supply utilities. A basis of design report will be completed in 2011. The report will provide a detailed analysis of interconnect alternatives and design parameters. Candidate interconnection projects will be described, as will key issues and challenges, including utility emergency capacities and water blending analysis. Work is proceeding on conceptual designs for a western interconnection between Santa Rosa and Okaloosa counties and an eastern interconnection between Walton and Bay counties.

The District has also initiated development of a District-wide reuse plan. The plan will identify opportunities for future reuse projects that enhance resource sustainability and provide environmental benefits, such as improving surface water quality by reducing effluent disposal, offsetting ground or surface water withdrawals from potable supplies, recharging regionally significant aquifers, and sustaining natural systems. The plan will summarize potentially feasible reuse projects for a 20-year timeframe that can be used to support RWSPs, SWIM plan updates, prioritization of grant funding, and other District objectives. Development of this plan will entail creating a GIS mapping application that can be used to view existing and proposed reuse systems including the locations and attributes of wastewater treatment plants; potential reuse customers or reuse demand sites; and reuse pumping, transmission, and storage facilities.

Work Program Implementation

Region II

The Region II WRDWP, as incorporated within the 2006 RWSP update, includes nine projects that build upon the accomplishments of the original RWSP:

1. Floridan Aquifer Sustainability Model Applications and Support;
2. Inland Sand-and-Gravel Aquifer Sustainability Model;
3. Development of Feasible Surface Water Sources;
4. Aquifer Storage and Recovery Feasibility;
5. Water Reuse Coordination;
6. Water Conservation Coordination;
7. Regional Water Supply Planning Strategies;
8. Hydrologic Data Collection and Analysis; and
9. Abandoned Well Plugging.

Model development and calibration have been completed for both the Floridan Aquifer Sustainability Model and the Inland Sand and Gravel Aquifer Model. Work continues to update and refine the aquifer models and further evaluate potential future withdrawals and alternative water sources. A major analysis and feasibility assessment was also completed to evaluate surface water sources in Okaloosa County. Work is proceeding toward development of an optimal surface water source for the county. Additionally, implementation is proceeding for other strategies, including Water Reuse Coordination, Water Conservation, and Hydrologic Data Collection and Analysis.

Region III

Three water resource development (WRD) projects support long-term sustainability and development of alternative water supplies for Bay County:

1. Hydrologic and Water Quality Data Collection, Monitoring, and Analysis;
2. Water Reuse and Conservation Assistance; and
3. Regional Water Supply Coordination and Technical Assistance.

As described below, work is proceeding toward development of an inland ground water source as an alternative water supply.

Region V

The WRD component of the Region V RWSP consists of four projects that support development of sustainable alternative water supplies for Franklin and Gulf counties:

1. Hydrologic and Water Quality Data Collection and Analysis;
2. Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance;
3. Water Reuse and Conservation Coordination Assistance; and
4. Regional Water Supply Plan Implementation.

Project descriptions and anticipated funding requirements are provided by region below.

Funding for Water Resource Development

The state constitution limits the NWFWMD to only 1/20th of the *ad valorem* taxing authority afforded the other four districts. Legislative mandates for water supply planning and WRD have required the NWFWMD to use other sources of revenue and to seek grant funds for addressing water supply issues. In the past, the District has identified or secured funding for these activities from numerous sources, including the following:

- Water Management Lands Trust Fund;
- District General Fund;
- Legislative special appropriations;
- Florida Forever (limited water reuse construction only);
- Federal grants;
- Local government and water supply utility cost-sharing; and
- Water Protection and Sustainability Program Trust Fund.

The Water Protection and Sustainability Program Trust Fund (WPSPTF) was established by the 2005 Florida Legislature to provide a dedicated source of revenue for alternative water supply (AWS) development and WRD projects. When funded, the WPSPTF has allowed the District to provide cost-share assistance for construction of AWS development projects that may have otherwise been delayed or placed in competition with other projects for limited funds. Additionally, priority WRD and springs protection activities may be funded given sufficient annual appropriations. Projects funded under the WPSPTF are listed in Appendix A and are described in the March 1 Consolidated Annual Report as required by section 373.036(7), F.S. No new funding has been appropriated by the Legislature for the WPSPTF for FY 2010-2011 or FY 2011-2012.

Implementation of water resource development activities and support functions have depended primarily on funding from the Water Management Lands Trust Fund (WMLTF), augmented by grant funds and other sources as available. These funds have been substantially eliminated for FY 2011-2012. The District will pursue priority water resource development projects to the extent possible, using previously encumbered funding and reserves. Major District expenditures for land acquisition and protection of important recharge lands should also be recognized. Future acquisitions are constrained by the availability of Florida Forever funding. Assistance to Okaloosa County to support land acquisition for surface water source development, however, is anticipated during FY 2011-2012.

The District assists with WRD activities outside of regional water supply planning areas when those efforts help to prevent or address emerging water supply and water resource problems. Current projects include reclaimed water development in Wakulla County and assistance in the extension of water systems in Gadsden and Calhoun counties.

Funding budgeted for WRD is listed within the project descriptions below and in summary tables for regions II, III, and V (Tables 10, 14, and 19, respectively). The total proposed FY 2011-2012 WRDWP budget is $822,590. Additional budgeted funds have been reserved to provide financial assistance for WRD or water supply development projects in other regions and for future projects as needed.

Water Supply Development Assistance

While this report is focused on the WRD component of the approved regional water supply plans, a brief description of the District's technical and financial assistance for water supply development helps illustrate how the combined components of the RWSP work together to ensure sustainable long-term water supplies. A primary purpose of WRD is to support and facilitate future alternative water supply development. The District is, by statutory definition, primarily responsible for WRD projects, while water supply development is primarily the responsibility of local governments, water supply authorities, and utilities. However, the District also provides technical and financial assistance to local governments for water supply development. A basic distinction that can be drawn between the two levels of projects is that WRD projects are typically regional and broad in scope, while water supply development projects are more localized and deal with treatment, storage, and delivery to end users.

Significant AWS development projects constructed to date in Region II have included development of inland water sources for coastal utilities in Santa Rosa (inland Sand and Gravel Aquifer project), Okaloosa (inland Floridan Aquifer wells and transmission facilities), and Walton (Rock Hill inland wellfield development and transmission facilities) counties. Active projects include additional development of the Rock Hill inland wellfield in Walton County, transmission and interconnection support to the City of Freeport, and work in cooperation with Okaloosa County to develop a surface water supply in the central portion of the county.

In Region III, funding has been awarded to Bay County for development of an inland ground water source. The project is currently in the permitting process. In Region V, the District provided substantial assistance to the City of Port St. Joe for the construction of the City's new surface water treatment facility. Assistance was provided over the past year to the City of Port St. Joe for water distribution system repairs and to the City of Carrabelle for evaluation of the feasibility of developing a water system interconnection with the Alligator Point Water Resources District.

Alternative water supply development assistance and water resource development projects funded through the WPSPTF and other sources are listed in Appendix A. All of these efforts complement dedicated regulatory efforts to ensure the long-term sustainability of water resources. Within the coastal Water Resource Caution Area (WRCA) in particular, stringent conservation and reporting requirements are applied, and new allocations of potable Floridan Aquifer water for non-potable uses are prohibited.

Water Resource Development Projects – Region II: Santa Rosa, Okaloosa, Walton Counties

Figure 4-2. Water Supply Planning Region II

Strategy 1.0 Floridan Aquifer Sustainability Model Applications and Support

Ground water flow and solute transport models were developed to analyze Floridan Aquifer withdrawals in Santa Rosa, Okaloosa, and Walton counties. These models are used to evaluate the cumulative effects of Floridan Aquifer withdrawals, to examine water supply alternatives, and to assess the threat of saltwater intrusion to coastal Floridan Aquifer wells.

The regional ground water flow model was completed in May 2000 (HydroGeoLogic, Inc., 2000). The solute transport model required for analyzing saltwater intrusion into the Region II Floridan Aquifer was developed with two domains, western and eastern, to more accurately portray hydrogeologic characteristics and to make the complex data sets manageable. The western model domain is applicable to the major coastal utilities in Santa Rosa and western Okaloosa counties. This includes the City of Fort Walton Beach, Eglin Air Force Base, and water utilities to the west. Results from the western domain sub-region model are summarized in the report "Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Western Domain Model Final Report" (HydroGeoLogic, Inc. 2005). The eastern model domain is applicable to major coastal utilities in Walton and eastern Okaloosa counties including Destin Water Users, South Walton Utility Company, the City of Freeport, and Regional Utilities of Walton County. Results are summarized in the report "Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Eastern Domain Model Final Report" (HydroGeoLogic, Inc. 2007a). These reports are available on the District's website.

Model simulations were run to predict the extent of saltwater intrusion through the year 2100 for both the eastern and the western model domains. The simulations incorporated historical withdrawals as well as proposed future pumping rates. Model results indicate that saltwater intrusion into potable portions of the Floridan Aquifer is occurring at a very slow and manageable rate (HydroGeoLogic, Inc., 2007b; HydroGeoLogic, Inc., and Hazlett-Kincaid, Inc., 2007). Principal pathways of saline water intrusion identified include lateral intrusion within the upper Floridan Aquifer from beneath the Gulf of Mexico, lateral intrusion from the lower to the upper Floridan Aquifer around the edge of the Bucatunna Clay confining unit, intrusion of saline waters of the lower portion of the Floridan Aquifer where the Bucatunna Clay confining unit is not present (easternmost Choctawhatchee Bay area), and downward vertical leakage through the intermediate system.

The flow model has been updated using the water level observations applied to the initial model development (HydroGeoLogic, Inc., 2000), and recently compiled water level observations representative of non-pumping conditions (mostly from the 1930s and early 1940s). Annual pumping files were also updated through 2009 and transient simulations were run to verify model response.

Based on evaluation of the data and models cited above, the estimated sustainable amount of water withdrawal from the coastal Floridan Aquifer identified is approximately 30 MGD. Future work accomplished through this project will be directed to analysis of drawdown effects of increased pumping of the Floridan Aquifer in inland areas and alternative withdrawal scenario development, and investigation of water reservations to protect existing users as an alternative approach to establishing minimum aquifer levels. Current funding expectations are listed in Table 4-1.

Table 4-1. Floridan Aquifer Sustainability Model Applications and Support

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 30,430
Estimated 5-Year Cost (FY 12-16):	$150,430
Potential Funding Sources:	WMLTF; District General Fund
Quantity of Water Made Available:	30 MGD
Project Status:	Ongoing

Strategy 2.0 Inland Sand-and-Gravel Aquifer Sustainability Model

Due to its high recharge rate, the Inland Sand-and-Gravel Aquifer in Region II is capable of providing regionally-significant quantities of water. Through this project, a ground water flow model was developed to assess and identify the volume of water available from the aquifer. The study area for this effort is that portion of Santa Rosa and Okaloosa counties lying between the Blackwater and Yellow rivers. In previous years, significant data were gathered, which involved constructing project-specific monitoring wells, determining aquifer hydraulic properties, mapping aquifer unit thicknesses, and measuring ground-water levels and stream discharge. An aquifer model was then developed and calibrated.

A pipeline from the inland Sand-and-Gravel Aquifer wellfield to the coastal area was completed in late 2003. Since then, potable water withdrawals from the wellfield have increased to over four MGD. This water is being conveyed south to alleviate pumping demand from the Floridan Aquifer along the coast.

The ground water model is currently being updated to include the transient response of the aquifer to drought and climatic variability. However, more data and analysis of surface water systems is needed to determine if or where the connectivity of the water in the production zone of this aquifer to surficial wetland systems is a significant factor. Future work will include identifying areas for additional well development where potential wetland impacts will not occur or be minimized.

Based on this work and continuing development of the inland wellfield, it is anticipated that the regional and county utilities will continue to increase withdrawals from the Sand-and-Gravel Aquifer, thereby limiting coastal Floridan Aquifer withdrawals.

Table 4-2. Inland Sand-and-Gravel Aquifer Sustainability Model

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$64,780
Estimated 5-Year Cost (FY 12-16):	$204,780
Potential Funding Sources:	WMLTF, Utilities
Quantity of Water Made Available:	18 MGD
Project Status:	Ongoing

Project funding for District activities has been provided by the WMLTF. Additionally, local utility contributions and approximately $3 million in federal grant funding have been previously applied to development of the inland wellfield.

Strategy 3.0 Development of Feasible Surface Water Sources

Surface water has been identified as a source of AWS to meet future demands beyond 2020, particularly within Okaloosa County. Initial efforts conducted under this water resource development project included collection of hydrologic and water quality data needed to analyze the viability of potential surface water sources. In 2006, the District and its water supply consultants prepared an analysis of potential surface water supply sources in Okaloosa County, presented in the report "Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates" (PBS&J 2006). This report laid the groundwork for several potential technically and economically feasible AWS development projects, which included direct river withdrawal (with and without offline tributary surface impoundments for storage) and riverbank filtration. The District also concurrently reviewed an evaluation of a proposed Yellow River Reservoir and determined that the proposal is not economically feasible and that its implementation would result in significant environmental impacts and mitigation requirements.

District and Okaloosa County staff have continued to investigate withdrawal methods and alternative surface water supply sources on the Shoal River to narrow down the list of identified feasible alternatives and focus on the most preferred alternatives. Technical assistance to Okaloosa County will continue, such as detailed field assessments of environmental and technical characteristics of preferred surface water project sites. Associated with these activities, the District is evaluating needs and opportunities for watershed resource protection, including land acquisition and restoration.

Table 4-3. Development of Feasible Surface Water Sources

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$198,500
Estimated 5-Year Cost (FY 12-16):	$758,500
Potential Funding Sources:	WMLTF, District General fund, Local Governments, Utilities
Quantity of Water Made Available:	25 MGD
Project Status:	Ongoing

Significant funding for the next fiscal year and beyond has been allocated to assist Okaloosa County in project development, once a preferred alternative is selected. Assistance may include additional land acquisition funding and the feasibility analysis and preliminary design of a surface water pumped storage facility utilizing the Shoal River as the source. Project funding is provided by the WMLTF and the District's General Fund.

Strategy 4.0 Aquifer Storage and Recovery Feasibility

Large-scale District-funded aquifer storage and recovery (ASR) operations for storing freshwater supplies have not been implemented due to economic feasibility, water quality, and other technical constraints. There is potential for this option in the future and, as discussed below, it is being explored by utilities within the region. The District will work cooperatively with interested parties wherever viable ASR

opportunities exist and may provide technical, financial, and educational assistance. Associated activities may also be coordinated closely with ongoing aquifer sustainability efforts and surface water source alternatives analyses. Aquifer storage, when available or where feasible, could be used to store large quantities of water more effectively and at less cost than above ground storage. Possible funding sources for ASR testing and development as a water resource development project include the WPSPTF, WMLTF, federal funds, and coastal public utilities interested in pursuing this alternative.

The District coordinates with DEP and utilities regarding ASR permitting activities. In 2009, Destin Water Users received a permit that provides for a 2.125 annual average daily flow capacity ASR facility. The system consists of seven wells for storage of reclaimed water in the Sand and Gravel Aquifer. The reclaimed water will be available to offset irrigation demands. In coordination with evaluations of surface water supply alternatives and the reuse plan, the District may conduct preliminary ground water model analyses of the feasibility of additional ASR activities within Region II in the future.

Table 4-4. Aquifer Storage and Recovery (ASR) Feasibility

Implementing Agency:	Local governments, Utilities
Proposed FY Expense (FY 11-12):	$0
Estimated 5-Year Cost (FY 12-16):	$0
Potential Funding Sources:	Utilities, local governments
Quantity of Water Made Available:	2.125 MGD
Project Status:	Ongoing

Strategy 5.0 Water Reuse Coordination

As of 2010, 22 facilities in region II are permitted for public access reuse water, producing an estimated 9.06 MGD of reclaimed water for public access reuse (FDEP 2010). This includes irrigation of an estimated 1,890 residences, 19 golf courses, nine parks, and four schools, and one cemetery.

In response to regulatory and cooperative planning efforts, significant investments in reuse have been made in coastal areas of the region, particularly irrigation of golf courses. Most of the utilities serving coastal Santa Rosa, Okaloosa, and Walton counties provide some type of public access reuse water that offsets potable-quality demand. Additionally, the District has provided technical assistance and funding to reclaimed water projects within Region II. The City of Freeport constructed a wastewater reuse system that will provide approximately 0.47 MGD public access reuse water to irrigate a future residential subdivision and golf course. Construction to expand Okaloosa County's Bob Sikes Water Reclamation Facility has been completed. Approximately 1.0 MGD of reuse water is available from this facility for public access irrigation in the vicinity of Crestview.

The Region II RWSP has identified approximately 5 MGD of new beneficial reuse to be available to offset demands on the coastal Floridan aquifer. As noted previously, work continues on the development of a District-wide reuse plan. The reuse plan will identify future projects to support RWSP implementation and to enhance the sustainability of water resources throughout northwest Florida. The plan will include estimates of ground water offsets and reduction to surface water discharges. Initial data collection stages have been completed and a working inventory has been created. The reuse plan is scheduled to be complete in 2012.

Table 4-5. Water Reuse Coordination

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$31,230
Estimated 5-Year Cost (FY 12-16):	$151,230
Potential Funding Sources:	WMLTF, Local Governments, Utilities
Quantity of Water Made Available:	5 MGD to date; More TBD
Project Status:	Ongoing

Planning, coordination, and assessment funding may be provided through the WMLTF, and additional construction funding assistance has been made available through other funding sources (Appendix A).

Strategy 6.0 Water Conservation Coordination

A significant effort at water conservation has been taking place in Region II for some time, substantially due to regulatory requirements and incentives established within the coastal WRCA. As a result, additional potential for conservation to offset current potable water use is relatively low (estimated previously at 2.5 MGD) (PBS&J 2000a). Water conservation remains a priority within Region II, both to sustain and build upon gains made in water efficiency and to ensure that future growth is established in such a way as to maximize long-term water use efficiency and resource sustainability.

District staff therefore continue to emphasize conservation education and awareness. In 2004, a concerted effort began to distribute water conservation brochures to Region II utilities, with 43,150 brochures distributed to date. Other District-wide support activities are ongoing through the water resource education program.

Beginning in FY 2004-2005 and in coordination with the Florida Department of Environmental Protection, the District initiated the Water Conservation Hotel and Motel Program (Water CHAMP) in northwest Florida, with a focus on Region II. This is a towel and linen reuse program through which hotel guests are asked to forego having linens changed daily and to hang up towels that do not need washing. As of September 2011, 38 hotels were participating in the program, including 16 in Region II. Newsletters are regularly distributed to recognize participants and encourage new participation. Participating hotels have reported notable water and cost savings.

In cooperation with other water management districts statewide, the District participated in the statewide study of the effects of water rate pricing structures on public supply water demand (Whitcomb 2005). To act on the findings of this study, the NWFWMD coordinates distribution of the associated water rates model in cooperation with the author. Since October 2005, requests for the model have been sent on to Dr. Whitcomb for 33 utilities.

As with water reuse, District staff emphasize water conservation measures in both resource regulation and in past reviews of comprehensive plan amendments and DRIs. In response to consistent emphasis by the District and other state and regional agencies, most large comprehensive plan amendments and DRIs, particularly within Region II, incorporate water conservation requirements. These typically include drought-tolerant vegetation in landscaping and installation of high efficiency, low volume plumbing fixtures. District staff also encourage local governments to require connection to reclaimed water systems for uses not requiring potable quality water.

Under the District's regulation of consumptive uses of water (Chapter 40A-2, FAC), new uses of the Floridan Aquifer for non-potable uses are not permitted within the coastal WRCA. Additionally, in response to resource limitations, cooperative planning, and regulatory requirements and incentives, numerous utilities implement water conservation measures that include inclining block rates, conservation plans, and enhanced use of reclaimed water. Examples include Regional Utilities, South Walton Utility Company, the City of Fort Walton Beach, and Okaloosa County Water and Sewer, among many others.

Table 4-6. Water Conservation Coordination

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$8,690
Estimated 5-Year Cost (FY 12-16):	$48,690
Potential Funding Sources:	Local Governments, Utilities, WMLTF
Quantity of Water Made Available:	2.5 MGD
Project Status:	Ongoing

Funding for water conservation efforts is provided through the WMLTF, as well as local sources. Ongoing conservation efforts will continue and additional staff time and outreach activities may be conducted during the Regional Water Supply Plan Update. As other projects are determined to be viable and cost-effective, increased funding may be made available for implementation.

Strategy 7.0 Regional Water Supply Planning Strategies

Development and refinement of regional strategies, project development, and RWSP update are essential components of the WRDWP. Related activities include coordination with and technical support for local governments and utilities to ensure a regional focus in the planning and development of AWS projects. This may include assistance with hydrogeology and related engineering work for development of new and alternative water sources, including the inland Floridan Aquifer, Sand-and-Gravel Aquifer, reclaimed water, and the Shoal River. Associated administrative activities include project and funding management, coordination with FDEP and other agencies, and progress reporting.

As noted previously, a major District priority is the coastal water systems interconnection initiative. In cooperation with local utilities, the goal of the project is to explore and develop possibilities for the interconnection of water supply systems that will significantly enhance the resilience of the coastal water systems by enabling transfer of water between utilities if necessary due to future droughts or other contingencies. An initial study developed a conceptual implementation plan and schedule, identified key issues and challenges, and selected applicable utilities. Ten utilities (with a total of 14 water systems) were evaluated within Santa Rosa, Okaloosa, and Walton counties. Phase 1 of the project is nearing completion, and alternatives for one project within Region II are being considered for connection of two major utilities to ensure sufficient water supply during emergency situations. Completion of this work will complement the reuse plan discussed in Strategy 5.0 in providing a foundation for future RWSP updates.

Also, as discussed in the reuse and conservation sections, District staff work with local governments and state and regional agencies to enhance coordination of land use and water supply planning. District staff distributed guidelines and provided technical assistance to local governments for preparing water supply comprehensive plan amendments and water supply facilities work plans.

During the past year, the District also continued RWSP and WPSPTF implementation tracking and coordination of program funding sources and contracts. The 2010-2011 WRDWP Annual Report was completed and incorporated into the March 1st Consolidated Annual Report (March 2011).

Table 4-7. Regional Water Supply Planning Strategies

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$86,280
Estimated 5-Year Cost (FY 12-16):	$236,280
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

Strategy 8.0 Hydrologic Data Collection and Analysis

The NWFWMD has a hydrologic data collection network consisting of rainfall gauges, stream gauges, and monitoring wells in Region II. As part of the regional water supply planning process and implementation of the RWSP, the District has enhanced its ground and surface water monitoring capabilities. This includes continuing monitoring operations in cooperation with the U.S. Geological Survey surface water gauging network.

Details of monitoring conducted as part of the Water Resource Development Work Program and, as well as other work programs, may be found in the Hydrologic Monitoring Plan (Barrios et al., 2011), available at: www.nwfwmd.state.fl.us/pubs/hydrologic_monitoring_plan/hydrologic_monitoring_plan.html.

Table 4-8. Hydrologic Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$93,230
Estimated 5-Year Cost (FY 12-16):	$493,230
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

The District anticipates that this will be an ongoing project, both up to and beyond the RWSP's 20-year planning horizon. Funding is primarily reliant upon the WMLTF.

Strategy 9.0 Abandoned Well Plugging

To date, the District has facilitated the plugging of 4,303 abandoned wells within Region II. The overall goal of this program is to protect available ground water resources from aging, uncontrolled, or improperly constructed wells that are no longer in use. During FY 2010-2011, the District permitted the proper plugging of 321 wells in Santa Rosa, Okaloosa, and Walton counties. The District achieves proper abandonment of such wells through two methods: requiring contractors to plug abandoned wells found on site during new well construction or initiating a well abandonment contract with a well owner or local government.

District staff also provide technical assistance and funding to utilities in the plugging of abandoned wells identified as having the potential to adversely affect ground water quality. Well abandonment is an ongoing project, and it is likely that more wells will be identified for plugging in the future. The District will continue to implement this project through regulatory programs, where feasible.

Table 4-9. Abandoned Well Plugging

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 75,000
Estimated 5-Year Cost (FY 12-16):	$175,000
Potential Funding Sources:	District General Fund, WMLTF, Local Governments, Utilities
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

This project supports District efforts to sustain coastal water supply sources. Technical assistance may be funded using the District's General Fund or the WMLTF. Additional sources for funding abandoned well plugging include federal or state grant funding, individual well owners, and local governments. When possible, the District anticipates continued use of these sources to fund well plugging that is not associated with regulatory requirements.

Table 4-10. 2011-2016 Region II WRDWP Project Funding

Region II Water Resource Development Projects		RWSP Page #	FY 10-11 Expenditures	Plan Implementation Costs					Estimated Five-Year Cost
				FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	(FY 11/12 – FY 15/16)
1	Floridan Aquifer Sustainability	21	$112,736	$30,430	$30,000	$30,000	$30,000	$30,000	$150,430
2	Inland Sand-and-Gravel Aquifer Sustainability	21	$107,583	$64,780	$50,000	$30,000	$30,000	$30,000	$204,780
3	Development of Feasible Surface Water Sources	22	$139,900	$198,500	$180,000	$180,000	$100,000	$100,000	$758,500
4	Aquifer Storage and Recovery Feasibility	23	$0	$0	$0	$0	$0	$0	$0
5	Water Reuse Coordination	24	$26,626	$31,230	$30,000	$30,000	$30,000	$30,000	$151,230
6	Water Conservation Coordination	24	$10,762	$8,690	$10,000	$10,000	$10,000	$10,000	$48,690
7	Regional Water Supply Planning Strategies (incl. Coastal Interconnect Project)	25	$75,417	$86,280	$50,000	$40,000	$30,000	$30,000	$236,280
8	Hydrologic Data Collection and Analysis	26	$154,815	$93,230	$100,000	$100,000	$100,000	$100,000	$493,230
9	Abandoned Well Plugging	27	$32,099	$75,000	25,000	25,000	25,000	25,000	$175,000
TOTAL			$659,938	$588,140	$475,000	$445,000	$355,000	$355,000	$2,218,140

Water Resource Development Projects – Region III: Bay County

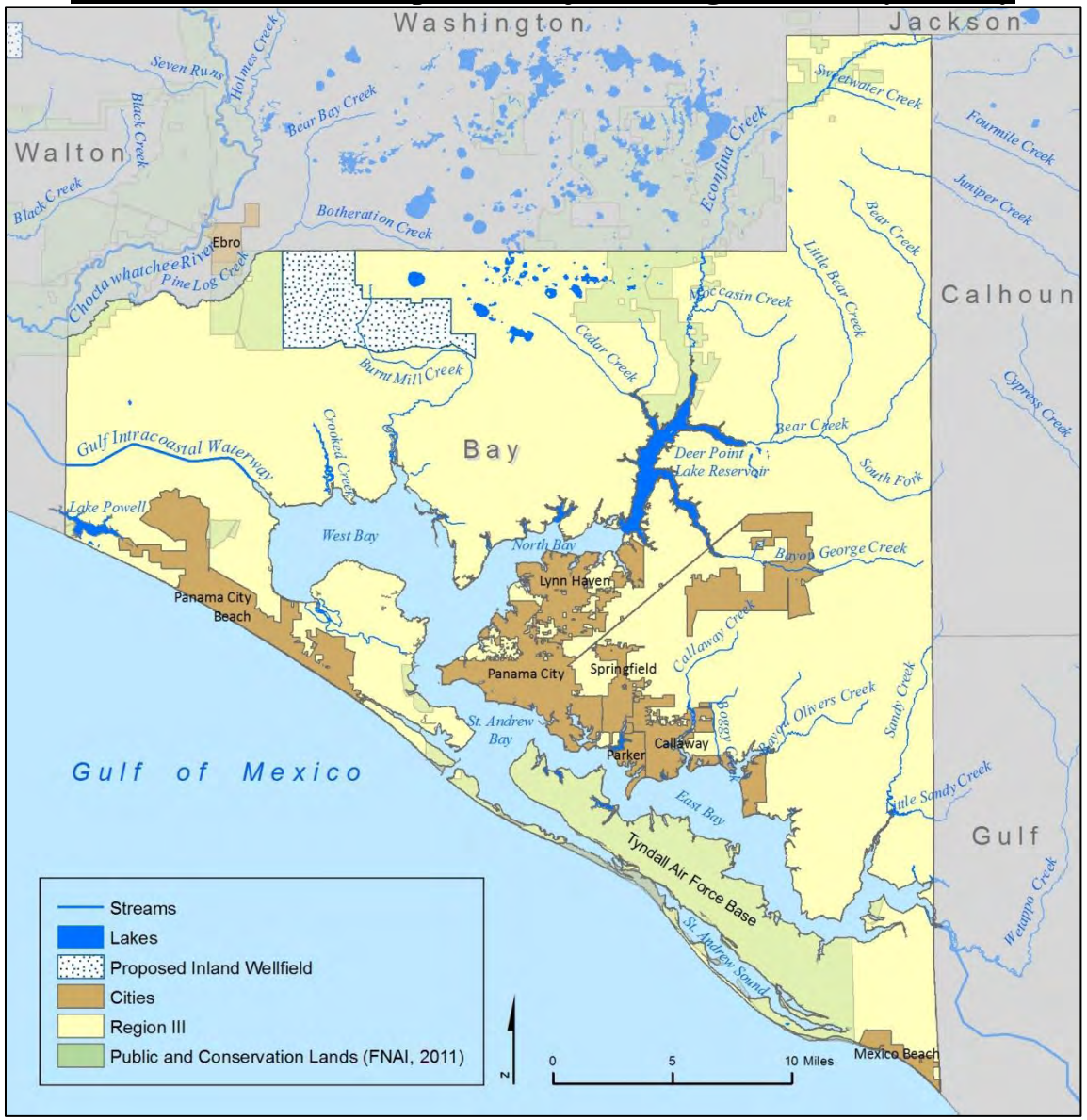


Figure 4-3. Water Supply Planning Region III

Strategy 1.0 Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

This project supports development of an inland ground water supply source in cooperation with Bay County Utilities to serve all Region III communities. Implementation of this project provides water resource data, analysis, and modeling for determining the location, distribution, and physical characteristics of potential future inland production wells and other alternative water supply sources. The project also provides the monitoring necessary to ensure impacts related to new production wells and other withdrawals are managed to protect the water resource and associated natural systems.

In cooperation with the District, Bay County has been conducting hydrologic and water quality data collection and analysis since 2006. Inland test wells at three locations have been installed. Multi-well aquifer testing and analysis at these sites has been completed. The evaluation of the hydraulic properties of the Floridan Aquifer in northwest Bay County is being applied to the design, distribution, and operation of production wells so as to provide an alternative water supply while sustaining the water resource and protecting wetlands and other natural systems.

Details of monitoring conducted as part of the Water Resource Development Work Program, as well as other work programs, may be found in the Hydrologic Monitoring Plan (Barrios et al., 2011), available at: www.nwfwmd.state.fl.us/pubs/hydrologic_monitoring_plan/hydrologic_monitoring_plan.html.

Table 4-11. Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

Implementing Agency:	Bay County, NWFWMD
Proposed FY Expense (FY 11-12):	$ 50,610
Estimated 5-Year Cost (FY 12-16):	$250,610
Potential Funding Sources:	WMLTF, WPSPTF, Bay County
Quantity of Water Made Available:	10 MGD
Project Status:	Ongoing

Other potential sources of funding include local governments and utilities, District general revenue funds, legislative grants and appropriations, and other state and federal grant programs.

Strategy 2.0 Water Reuse and Conservation Assistance

Reuse is an important component of the regional water supply strategy to reduce demand for potable water, improve water use efficiency, and otherwise sustainably manage water resources. District staff coordinate with DEP as that agency carries out its reuse regulation responsibilities. As of 2010, an estimated 2.62 MGD of reclaimed water was used for public access reuse in Region III (FDEP 2011). This includes irrigation of an estimated 1,013 residences, three golf courses, four parks and two schools.

As described previously, work continues on the development of a District-wide reuse plan that will identify future projects to support RWSP implementation and help enhance the sustainability of water resources throughout northwest Florida. The plan will provide a detailed inventory of reclaimed water systems, projected wastewater flows for utilities in Region III through 2030, an evaluation of current and future growth patterns and geographic information systems (GIS) data. Initial data collection stages have

been completed and a working inventory has been created. It is anticipated that the reuse plan will be completed in 2012.

Water conservation opportunities exist that may reduce current water use and limit long-term demand. Application of conservation rate structures, conservation measures in local building codes and ordinances, consumptive use permitting conditions, and outreach and education associated with nontraditional source development projects will help constrain future growth in demand. As one example, there is opportunity within the rental lodging sector serving tourists and seasonal residents to increase water use efficiency. The District has expanded the Water CHAMP program to Region III and has 11 participating hotels in Bay County. Since 2004, the District has distributed approximately 5,900 water conservation brochures to utilities and local governments in the county.

Table 4-12. Water Reuse and Conservation Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 10,310
Estimated 5-Year Cost (FY 12-16):	$ 42,310
Potential Funding Sources:	WMLTF, District General Fund
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Strategy 3.0 Regional Water Supply Coordination and Technical Assistance

Through this strategy, the District provides technical assistance to local governments and water suppliers. Local governments in regions covered by a RWSP must abide by state requirements to more directly link land use and water planning. Such local governments are required to amend their comprehensive plans to ensure that water supply will be planned and developed to meet future growth in a manner that is consistent with the RWSP.

The coastal water systems interconnection initiative described in other sections of this report also incorporates Region III. In cooperation with local governments and utilities, the District will explore and develop potential projects to interconnect water supply systems. These interconnections, in concert with continued development of alternative water supply sources, will enhance the resilience of water supplies within the coastal regions in the face of future droughts, major storms, and other possible events. The reconnaissance study completed in 2009 included three utilities from Bay County. Continuing work is expected to result in a conceptual implementation plan and schedule, evaluation of key issues and challenges to be addressed, and development of alternative preliminary designs and cost estimates. This work will complement the reuse assessment discussed in Strategy 2.0 and alternative water supply development in providing a foundation for future RWSP updates.

Table 4-13. Regional Water Supply Coordination and Technical Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 18,080
Estimated 5-Year Cost (FY 12-16):	$ 90,080
Potential Funding Sources:	WMLTF, District General Fund
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Table 4-14. 2011-2016 Region III WRDWP Project Funding

Region III Water Resource Development Projects		RWSP Page #	FY 10-11 Expenditures	Plan Implementation Costs					Estimated Five-Year Cost
				FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	(FY 11/12 – FY 15/16)
1	Hydrologic and Water Quality Data Collection, Monitoring, and Analysis	10	$33,762	$50,610	$50,000	$50,000	$50,000	$50,000	$250,610
2	Water Reuse and Conservation Assistance	10	$12,040	$10,310	$8,000	$8,000	$8,000	$8,000	$42,310
3	Regional Water Supply Coordination and Technical Assistance (incl. Coastal Interconnect Project)	10	$27,010	$18,080	$18,000	$18,000	$18,000	$18,000	$90,080
TOTAL			$72,812	$79,000	$76,000	$76,000	$76,000	$76,000	$383,000

Water Resource Development Projects – Region V: Gulf and Franklin Counties

Figure 4-4. Water Supply Planning Region V

Strategy 1.0 Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

This activity provides for essential water resource data collection, analysis, and modeling to determine the location and distribution of potential future production wells and other water supply sources to serve Region V communities. Tasks include ground water modeling, water quality sampling and analysis, hydrologic monitoring and analysis, and preliminary well and facility design for regional AWS development. Longer-term monitoring tasks over the next five years may also include water quality and hydrologic monitoring to manage and protect water resources.

The District conducted significant data collection and analysis to evaluate the feasibility of an inland ground water source for Franklin County. The work included test well development, water quality analysis, and aquifer testing. A District consultant has developed a ground water model to support the project. The initial data collection and analysis effort has been completed.

The District has also assisted the Eastpoint Water and Sewer District in test well development and aquifer testing. This effort led to the development of a new water supply production well, located further inland from the immediate coastal area. Expected outcomes include reduced withdrawals from the coastal area and a resulting reduced threat to water supply wells from salt water intrusion. Also pursuant to these efforts, the EPWSD and the District have initiated enhanced monitoring to better assess the long-term sustainability of the ground water resource.

Table 4-15. Hydrologic and Water Quality Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 61,290
Estimated 5-Year Cost (FY 12-16):	$301,290
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	3 MGD
Project Status:	Ongoing

It is estimated that up to three MGD of sustainable water supply may be identified and supported through inland ground water source development for Franklin County. Funding is provided from the WMLTF. Additional water resource development funding has previously been provided through the WPSPTF (Appendix A). District general funds could also be used for this purpose.

Strategy 2.0 Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance

This project provides technical assistance to help local governments and utilities meet water supply-related source protection, project design, and engineering requirements. The District will help support regional coordination and planning on the part of regional water supply entities and local governments. Assistance includes activities related to protection of ground and surface water sources, water resource engineering, coordination with other resource protection and management agencies, and other technical assistance.

The District's coastal water systems interconnection initiative extends to Gulf County. The District will explore and develop potential projects to interconnect water supply systems. These interconnections, in concert with continued development of alternative water supply sources, will enhance the resilience of water supplies within the coastal regions in the face of future droughts, major storms, and other possible events.

With funding assistance and cooperation from the District, the City of Port St. Joe completed a 6 MGD surface water treatment plant as an alternative water source to reduce reliance on the coastal Floridan Aquifer. The Floridan Aquifer can be utilized as a backup emergency supply should the need arise.

As noted above, assistance provided to the Eastpoint Water and Sewer District has led to development of a water supply production well located further inland from previously existing water supply wells. Withdrawals in the immediate coastal area are being reduced, lessening the threat of salt water intrusion.

Additionally, with District assistance, the City of Carrabelle has completed an engineering analysis of a potential interconnection with the Alligator Point Water Resources District. Completion of this interconnection would assist in regional drought-proofing and in ensuring system reliability through summer and holiday heavy use periods. The City of Carrabelle has enacted a conservation-oriented rate structure as part of this initiative, thereby improving water use efficiency, particularly for new development. Technical and financial assistance has previously been provided to the City of Wewahitchka for test well development.

Table 4-16. Coordination, Source Protection, and Engineering and Technical Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 58,220
Estimated 5-Year Cost (FY 12-16):	$298,220
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

These efforts support long-term development and protection of AWS sources, including the approximately nine MGD estimated to be provided across the region through development of alternative surface water and inland ground water sources. These include up to three MGD from the Franklin County inland ground water source described previously and up to six MGD from the Port St. Joe alternative surface water facility constructed with assistance from the WPSPTF (Appendix A).

Strategy 3.0 Water Reuse and Conservation Coordination Assistance

Water reuse is an important component of the long-term regional water supply strategy and is included wherever feasible in Region V as a way to reduce current demand and limit long-term growth in demand for potable water. The District's role in developing public access beneficial reuse includes coordination among utilities, inventorying existing and potential beneficial reuse sources and uses, and providing technical and financial assistance for specific reuse projects. As of 2010, an estimated 0.10 MGD of reclaimed water was used for public access reuse in Region V (FDEP 2011). This includes irrigation for one golf course and a greywater system at the Franklin County Correctional Institution.

As described previously, work continues on the development of a District-wide reuse plan that will identify future projects to support RWSP implementation and that help enhance the sustainability of water resources throughout northwest Florida. The plan will provide a detailed inventory of reclaimed water systems, projected wastewater flows for selected utilities in Region V through 2030, an evaluation of current and future growth patterns and GIS data. Initial data collection stages have been completed and a working inventory has been created. It is anticipated that the reuse plan will be completed in 2012.

Other conservation assistance provided by the District to Region V has been distribution of the water rates model (Whitcomb 2005) to two utilities in the region. The Water CHAMPS initiative has been extended to Region V, with two hotels in Port St. Joe participating as of September 2011.

Table 4-17. Water Reuse and Conservation Coordination and Assistance

Implementing Agency:	NWFWMD, Local governments, Utilities
Proposed FY Expense (FY 11-12):	$ 9,890
Estimated 5-Year Cost (FY 12-16):	$ 39,890
Potential Funding Sources:	WMLTF, WPSPTF
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Funding for this project is largely related to the reuse plan development. Funding will be primarily provided from the WMLTF.

Strategy 4.0 Regional Water Supply Plan Implementation

Implementing the RWSP for Region V encompasses coordinating, managing and tracking projects, completing administrative tasks, fulfilling statutory reporting requirements, and related activities. This strategy also allows for technical assistance to local governments and water suppliers. Working cooperatively with utilities and local governments, District coordination indirectly helps to attain the up to nine MGD of AWS estimated as being available during the planning period.

During the past year, the District continued RWSP implementation tracking, project planning and coordination of program funding sources and contracts. The WRDWP Annual Report and March 1 Consolidated Annual Report were completed. It is anticipated that an update to the Region V RWSP may be initiated during FY 2011-2012, depending on the availability of staff resources.

Table 4-18. Regional Water Supply Plan Implementation

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 26,050
Estimated 5-Year Cost (FY 12-16):	$ 60,050
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

While this project does not directly provide water, the efforts encompassed do support the long-term development of AWS sources, including the approximately nine MGD estimated to be provided across the region through development of alternative surface water and inland ground water sources. It is anticipated that funding for this project will continue to be provided primarily through the WMLTF.

Table 4-19. 2011-2016 Region V WRDWP Project Funding

Region V Water Resource Development Projects		RWSP Page #	FY 10-11 Expenditures	Plan Implementation Costs					Estimated Five-Year Cost
				FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	(FY 11/12 – FY 15/16)
1	Hydrologic and Water Quality Data Collection, Monitoring and Analysis	10	$43,534	$61,290	$60,000	$60,000	$60,000	$60,000	$301,290
2	Coordination, Source Protection, and Engineering and Technical Assistance (incl. Coastal Interconnect project)	11	$41,358	$58,220	$60,000	$60,000	$60,000	$60,000	$298,220
3	Water Reuse and Conservation Coordination Assistance	11	$8,086	$9,890	$7,500	$7,500	$7,500	$7,500	$39,890
4	Regional Water Supply Plan Implementation	11	$18,502	$26,050	$10,000	$8,000	$8,000	$8,000	$60,050
TOTAL			$111,480	$155,450	$137,500	$135,500	$135,500	$135,500	$699,450

4.2 Alternative Water Supplies Annual Report

Each water management district is required under Section 373.707(8)(n), F.S., to submit as part of the Consolidated Annual Report a chapter or section that:

- Accounts for the disbursal of all budgeted amounts pursuant to Section 373.707, F.S.;
- Describes all alternative water supply projects funded;
- Describes the quantity of new water to be created as a result of such projects;
- Accounts separately for any other funding provided through grants, matching grants, revolving loans, and the use of district land or facilities to implement regional water supply plans.

Beginning in 2006, the District began funding a series of alternative water supply development projects and water resource development projects through the Water Protection and Sustainability Program Trust Fund (WPSPTF). These projects help to implement the strategies of the District and local utilities to identify and develop alternative water supplies to meet long-term needs in a sustainable manner. Efforts during the year were focused on continued implementation of approved alternative water supply and water resource development projects pursuant to the Water Protection and Sustainability Program and the Region II, III, and V RWSPs. Table 4-20 provides summary information on these projects.

It should also be noted that substantial water supply development assistance has been provided to local governments and utilities using funding sources other than the WPSPTF (Table 4-21). Recently, the District has provided over $5 million in additional District grant funding for development of infrastructure for the inland Floridan Aquifer wellfield in Walton County, as well as over $500,000 in assistance for development of an interconnection between the cities of Gretna and Greensboro in Gadsden County. Additionally, $800,000 in assistance has been awarded to the City of Freeport for development of an interconnection with the North Bay water system. This follows $3 million in grant funding several years ago for construction of a water reuse system and. Over $98,000 in assistance has also been granted to Calhoun County to extend water service to an unincorporated community, and a $50,000 grant was provided to the city of Port St. Joe to assist in water distribution system repairs.

Earlier grants awarded include $350,000 provided to Port St. Joe for acquisition of the St. Joe Fresh Water Canal, a $750,000 grant to the City of Crestview for development and repairs to inland public supply wells, and facilitation of a $3.1 million federal grant for development of the Fairpoint Regional Utility System inland Sand and Gravel Aquifer wellfield. .

Table 4-20. AWSD and WRD Projects Funded under the Water Protection and Sustainability Program

Project	Local Sponsor	Activity	Status	WPSPTF Fiscal Year Appropriation	Anticipated Water (MGD)	WPSPTF Contribution	Local Contribution	Total	Local %
Area-wide Alternative Water Supply Source Expansion	Regional Utilities; South Walton Utility Co.	Inland wellfield expansion	Complete	FY 2006	15.12	$6,500,000	$9,991,891	$16,491,891	61%
Tram Road Public Access Reuse Facility	City of Tallahassee	Water reuse and spring protection	Complete	FY 2006; FY 2007	1.2	$1,350,000	$5,250,000	$6,600,000	80%
Bob Sikes Reuse Project	Okaloosa County	Water reuse	Complete	FY 2006	0.7	$2,000,000	$4,000,000	$6,000,000	67%
Inland Floridan Aquifer Source - WRD	NWFWMD; Franklin County Utilities	Inland source evaluation	Complete	FY 2006	3.0	$300,000	$0	$300,000	0%
Ground Water Modeling & Aquifer Testing - WRD	Bay County	Inland source evaluation	Complete	FY 2006; FY 2007	0.0*	$350,000	$800,000	$1,150,000	70%
Surface Water Treatment Plant	Port St. Joe	Surface water	Complete	FY 2007	6.0	$4,000,000	$12,736,700	$16,736,700	76%
City of Chipley Reuse Project	Chipley	Water reuse	Complete	FY 2007	1.20	$500,000	$4,500,000	$5,000,000	90%
Wakulla County Reuse Project	Wakulla County	Water reuse	Construction	FY 2007	0.35	$500,000	$750,000	$1,250,000	60%
Advanced Wastewater Treatment & Water Reuse Facilities	City of Tallahassee	Water resource development/ springs protection	Complete	FY 2007	4.5	$500,000	$5,800,000	$6,300,000	92%
Inland Ground Water Source Development	Bay County	Inland source development	In progress	FY 2008	5.0	$5,470,000	$9,570,000	$15,140,000	63%
			Total		**37.07**	**$21,470,000**	**$53,398,591**	**$74,968,591**	**71%**

*Ground Water Modeling and Aquifer Testing was used to determine that about 10.0 mgd of water may be available for the Inland Ground Water Source Development project.
Local construction costs for the Chipley and Wakulla County facilities are inclusive of anticipated State Revolving Fund and federal grant contributions.

Table 4-21. Additional Water Supply Development Assistance Projects

Project	Local Sponsor	Activity	Status	Estimated Completion	NWFWMD Contribution	Funding Source
Port St. Joe Fresh Water Canal	Port St. Joe	Acquisition of freshwater canal as alternative water supply source	Complete	FY 2002	$350,000	District General Fund
Inland Ground Water Supply Development	Fairpoint Regional Utility System, Inc.	Construction of inland Sand-and-Gravel aquifer wellfield and transmission facilities	Complete	FY 2006	$3,178,700	U.S. EPA
City of Freeport Reuse Project	Freeport	Water reuse	Complete	FY 2010	$3,000,000	SWIM, Florida Forever
Allanton Peninsula Water and Wastewater Extension Project	Callaway	Water supply transmission and distribution system	Complete	FY 2010	$100,000	WMLTF
East Okaloosa County Water and Sewer Extension	Okaloosa County	Water supply transmission and interconnection	Complete	FY 2010	$750,000	District General Fund
Walton County Phase II Regional Water Supply	Florida Community Services Corporation	Alternative water supply development costs associated with inland ground water source	Complete	FY 2011	$2,000,000	State legislative appropriation; District General Fund
Wewahitchka Water Supply System Improvements	Wewahitchka	Water supply development	Complete	FY 2012	$400,000	District General Fund
Water Transmission Line Construction and Interconnection	Freeport	Water supply development	In progress	FY 2012	$800,000	District General Fund
Port St. Joe Water Distribution System Improvements	Port St. Joe	Water supply improvements	In progress	FY 2011	$50,000	District General Fund
Inland Ground Water Source Development	Bay County	Alternative water supply construction expenses for inland ground water source development	In progress	FY 2013	$2,100,000	District General Fund
Pine Island Water System	Calhoun County	Engineering and design for water system interconnection	In progress	FY 2012	$98,607	District General Fund
Water Main Construction	WRP, Inc.	Water transmission pipeline from inland wellfield to coastal Walton and Okaloosa counties	In progress	FY 2013	$2,500,000	District General Fund
U.S. Highway 98 Water Line Extension	Florida Community Services Corporation	Water main extension along U.S. Highway 98 in Walton County	In progress	FY 2012	$550,000	District General Fund
Test Well Development	Panacea Area Water System	Test well development	In progress	FY 2013	$30,500	District General Fund

Project	Local Sponsor	Activity	Status	Estimated Completion	NWFWMD Contribution	Funding Source
Okaloosa County AWS - Surface Water	Okaloosa County	Land acquisition for surface water reservoir site	Planned	FY 2016	$1,500,000	District General Fund
Gretna to Greensboro Watermain Development	Gretna	Water supply transmission and interconnection	In progress	FY 2012	$569,888	District General Fund
				Total	**$17,977,695**	

Chapter Five: Florida Forever Work Plan Annual Report

5.1 Land Acquisition Work Plan

Introduction

Section 373.199(7), F.S. requires the Northwest Florida Water Management District (District) to update annually the Florida Forever Work Plan. To date, this is the tenth annual update of the 2001 Florida Forever Work Plan. Since 2006 this plan has been presented as a separate chapter in the Consolidated Annual Report as required by Section 373.036(7), F.S. This plan contains information on projects eligible to receive funding under the Florida Forever Act and also reports on land management activities, lands surplused and the progress of funding, staffing and resource management of projects for which the District is responsible.

Florida Forever Program

In 1999, the Florida Legislature passed the Florida Forever Act (Section 259.105, F.S.) which has continued the state's long-term commitment to environmental land acquisition, restoration of degraded natural areas, and high-quality outdoor recreation opportunities. The Florida Forever Program authorized issuance of up to $300 million annually in bonds over a ten-year period to several state agencies and the five water management districts (WMDs). In 2008, the Florida Legislature reauthorized the Florida Forever Act for an additional ten years, to 2018. As part of the reauthorization, the water management districts allocation was reduced from $105 million annually to $90 million annually (see table below). The Legislature has not fully funded Florida Forever since 2009.

Annual WMD Funding Distribution of Florida Forever Funds

Water Management District	Percent to Each WMD	Allocation
South Florida	**35.0%**	**$31,500,000**
Southwest Florida	**25.0%**	**$22,500,000**
St. Johns River	**25.0%**	**$22,500,000**
Suwannee River	**7.5%**	**$6,750,000**
Northwest Florida	**7.5%**	**$6,750,000**

While previous programs focused almost exclusively on the acquisition of environmentally sensitive lands, the Florida Forever program is somewhat different in that it authorizes the use of up to half of the program funding for certain types of capital improvement projects. Eligible uses of these funds include water resource development, stormwater management projects, water body restoration, recreation facilities, public access improvements, and removing invasive plants, among others. The remaining fifty percent must be spent on land acquisition.

Since the inception of the District's land acquisition program, the goal has been to bring as much floodplain as possible of our major rivers and creeks under public ownership and protection. The Florida Forever Land Acquisition Program continues to increase the acres of wetland, floodplain and aquifer recharge areas acquired by the District. To date, over 224,775 acres have been protected for water resource purposes through the land acquisition efforts of the District either in fee simple or through conservation easements. A summary of the acquisitions and surplus completed by the District in 2011 is provided below.

Table 5-1. Summary of Acquisitions and Surplusing Completed in 2011

Property	Date Purchased	Acres	Cost	Funding Source(s)	Water Management Area
Fee Simple Acquisitions					
Neal	05/19/11	1,316.70	$3,565,426.09	Florida Forever and General Fund	Apalachicola River
Panhandle	07/15/11	61.46	$121,644.09	District Reserves	Econfina Creek
	SUB-TOTAL	**1,378.16**	**$3,687,070.18**		
Less-Than-Fee Acquisitions					
M.C. Davis	03/17/11	1,095.3	$1,642,950.00	DOD Funds	Choctawhatchee River
	SUB-TOTAL	**1,095.3**	**$1,642,950.00**		
	GRAND TOTAL	**2,475.46**	**$5,330,020.18**		

Acquisition Planning

The District employs a watershed approach to select and prioritize the important water resource and natural systems within the major river basins of northwest Florida. Primary among the considerations in this process are how specific floodplain or buffer areas help satisfy the District's water resources and natural system protection objectives, the availability of funds, the seller's willingness, how different areas fit into the District's land management scheme, as well as the size, accessibility and overall condition of each property. Recommendations from interest groups, landowners, local governments, agency representatives and other interested parties are always welcome and are given full consideration in the acquisition process.

Subject to receiving funding for Florida Forever, the District's acquisition efforts this year will focus on the purchase of inholdings and additions to the existing water management areas (WMAs) as well as Conservation Easements in each of the existing WMA's. Existing WMAs include the Perdido River, Escambia River, Blackwater River, Yellow River, Garcon Point, Choctawhatchee River/Holmes Creek, Econfina Creek, Chipola River, and Apalachicola River. All of these WMAs will be high priority areas for the acquisition of additions and inholdings. Acquisition efforts will be directed toward acquiring those properties which the District adjoins on one, two or three sides (additions) or those parcels which the District surrounds on all sides (inholdings).

In developing the annual update to the District's Florida Forever Five Year Land Acquisition Work Plan, District staff shall review Florida Forever projects proposed by DEP, Division of State Lands, to minimize redundancy and to facilitate an efficient and mutually supportive joint land acquisition effort. District staff shall continue to coordinate the Land Acquisition Five Year Plan with the District's FDOT regional mitigation plan developed under section 373.4137 F.S. to ensure the greatest possible cumulative benefit for water resources, wetland functions, and public benefits.

Approved Acquisition Areas

The approved acquisition areas listed below are not presented on a priority basis. For each of these water bodies, it is desirable to acquire both the floodplain and a natural buffer zone to provide further water resource protection.

Table 5-2. Approved Acquisition Areas by Waterbody Type

Rivers & Creeks Originating In Florida	Rivers and Creeks Originating Outside Florida	Springs	Lakes & Ponds	Other Ecosystems, Basins and Buffers
Wakulla River	Apalachicola River	St. Marks River near Natural Bridge	Lake Jackson	Southwest Escambia County Ecosystem
St. Marks River	Lower Apalachicola River Wetland	Spring Lake/ Spring Group Area	Sand Hill Lakes	Garcon Point Ecosystem
Econfina Creek and oth Tributaries of Deer Point	Chipola River	Waddell Springs		West Bay Buffer
Lafayette Creek	Choctawhatchee River including Holmes Creek	Bosel Springs		Sandy Creek Basin
	Escambia River	Hays Springs		Apalachicola Bay/ St. Vincent Sound Buffer
	Blackwater River including Juniper, Big Coldwater and Coldwater creeks	Gainer Springs		
	Ochlockonee River and its major tributaries			
	Yellow and Shoal Rivers			
	Perdido River and Bay			

Groundwater Recharge Areas	Donated Lands
Such lands may be designated by the District as Recharge Areas for the Floridan, Sand-and-Gravel and other important aquifers.	The District will accept donations of lands within its major acquisition areas if those lands are necessary for water management, water supply and the conservation and protection of land and water resources.

Exchange Lands
The District may exchange lands it has acquired under the Florida Forever program for other lands that qualify for acquisition under the program. In an exchange, the District's Governing Board establishes the terms and conditions it considers necessary to equalize values of the exchange properties. In all such exchanges, the District's goal will be to ensure that is no net loss of wetland protection and that there is a net positive environmental benefit.

Mitigation Acquisitions
Under Florida law, unavoidable losses of natural wetlands or wetland functions require "mitigation" either through the acquisition or the restoration of other nearby wetlands. The District is often the recipient of such lands in the form of donations, and also serves as the mitigation agent for the Florida Department of Transportation. Whenever possible, the District attempts to acquire mitigation lands contiguous to its existing ownership, but since proximity to the original wetland impact is often paramount, the District at times must acquire or manage isolated tracts.

Note to Landowners

It is important to note that the District's land acquisition process only involves willing sellers and is usually opportunity driven in that landowners initiate the process by offering parcels for sale.

This plan includes a number of areas the District has identified for purchase, subject to available funding and especially the presence of willing sellers. If your property is included in any of our acquisition areas or maps and you do not desire to sell your land to the District, Florida Statutes require the District to remove your property from the acquisition plan at the earliest opportunity. Please contact the Division of Land Management and Acquisition at (850) 539-5999 at any time if you wish to remove your property from possible purchase consideration. The District will maintain a list of such requests and annually adjust its acquisition plan accordingly.

Note on Less-Than-Fee Methods of Land Protection

Florida's commitment to acquire the lands needed to permanently protect local water and environmental resources has resulted in the most successful program in the United States. However, there is not, and probably never will be, sufficient public funding available to acquire outright all the important water resource lands that need protection. Accordingly, the Florida Legislature has directed the state's water management districts to expend part of their land acquisition funding to purchase eligible properties using alternatives to "fee simple" acquisition. Under this scenario, the District buys a significant portion of the property rights the seller owns. In "less-than-fee" purchases, the District would attempt to acquire only those rights in property, i.e. development and land use conversion rights, that are needed to accomplish specific water resource and environmental protection goals.

Such less-than-fee methods can clearly provide a number of public benefits. One is that acquisition funding can be conserved, thereby enabling the protection of more land with limited funds. The property also continues in private ownership and thus remains on local property tax rolls. Moreover, the District does not incur the long-term costs of land management since the property's management and maintenance remains the landowner's responsibility. Not all properties are suitable nor are all landowners agreeable to less-than-fee acquisition, but the benefits make these kinds of transactions an attractive supplement to the District' usual fee simple land purchases.

DEP Florida Forever Priority List

The DEP Florida Forever Priority List is contained in the Appendix. This list was approved by the Acquisition and Restoration Council in December 2011.

Florida Forever Goals and Numeric Performance Measures

As outlined in Chapter 18-24, F.A.C., the District is required to report on the goals and measures for lands to be acquired under the Florida Forever program. The following page summarizes the goals and measures applicable to Northwest Florida Water Management District.

Florida Forever Goals and Numeric Performance Measures

Reported as of October 1, 2011

Rule No.

(2)(d)1. For proposed acquisitions, see Section 5.1, (Florida Forever) Land Acquisition Five-Year Work Plan in the Consolidated Annual Report.

Acquisitions of lakes, wetlands, and floodplain areas to date =	187,112	Total acres
	14,887	Florida Forever acres
	368	Acres acquired FY 2010/2011

(2)(d)2.Acquisitions for water resource development to date = 41,606 Total acres (incl. fee and l-t-f)
3,663 Florida Forever acres (incl. fee and l-t-f)

(3)(a)2. Refer to Section 5.2, (Florida Forever) Capital Improvement Work Plan of the Consolidated Annual Report for funded capital improvements identified in SWIM, stormwater, or restoration plans.

(3)(a)3. NWFWMD lands to be treated for upland invasive, exotic plants = <100 acres
Due to funding limitations, the District has not conducted surveys to identify the spatial distribution of invasive exotic plant infestation on District lands. It is known that invasive plant problems exist at varying levels on some District lands, and staff treat with herbicide as needed.

(3)(b) New water to be made available through Florida Forever funding for water resource development -
Major water resource development accomplishment provided by additions to Econfina Creek Water Management Area. Additionally, Florida Forever funding contributed to the construction of a 750,000 gallon reuse storage facility for the City of Freeport to serve a 0.6 MGD reuse water service area. Funding for water supply development, including construction of water reuse facilities, is primarily provided through the Water Protection and Sustainability Program Trust Fund, NWFWMD General Fund, and local funding. See the NWFWMD Water Resource Development Work Program report and Chapter 4, Water Supply, of the Consolidated Annual Report.

(4)(a)1. All NWFWMD lands are in need of and are undergoing management by the District.

In need of restoration =	17,755 acres
Undergoing restoration =	873 acres
Restoration completed =	16,999 acres
Restoration maintenance =	16,999 acres

(4)(a)3. Refer to Section 5.2, (Florida Forever) Capital Improvement Work Plan of the Consolidated Annual Report for capital improvements identified in SWIM, stormwater, or restoration plans.

(4)(a)6. NWFWMD lands under upland invasive, exotic plant maintenance control = <1,000 acres

(4)(b) Refer to Section 4.1, Five-Year Water Resource Development Work Program: FY 2011-2012 of the Consolidated Annual Report for quantity of new water made available through regional water supply plans.

(4)(c) See Section 5.1, (Florida Forever) Land Acquisition Work Plan (Table 5-4) of the Consolidated Annual Report for resource-based recreation facilities by type.

Land Acquisition Projects

The Florida Forever Act, in particular Section 373.199(s) F.S., identifies information that must be included for each Florida Forever Project. Some of the required information is relatively general and applicable to all projects. To reduce the redundancies of this plan, general information is provided separately as part of the District's Five Year Plan for the Florida Forever Program. Specific land acquisition projects are individually identified and detailed information specific to the project is provided in the following pages.

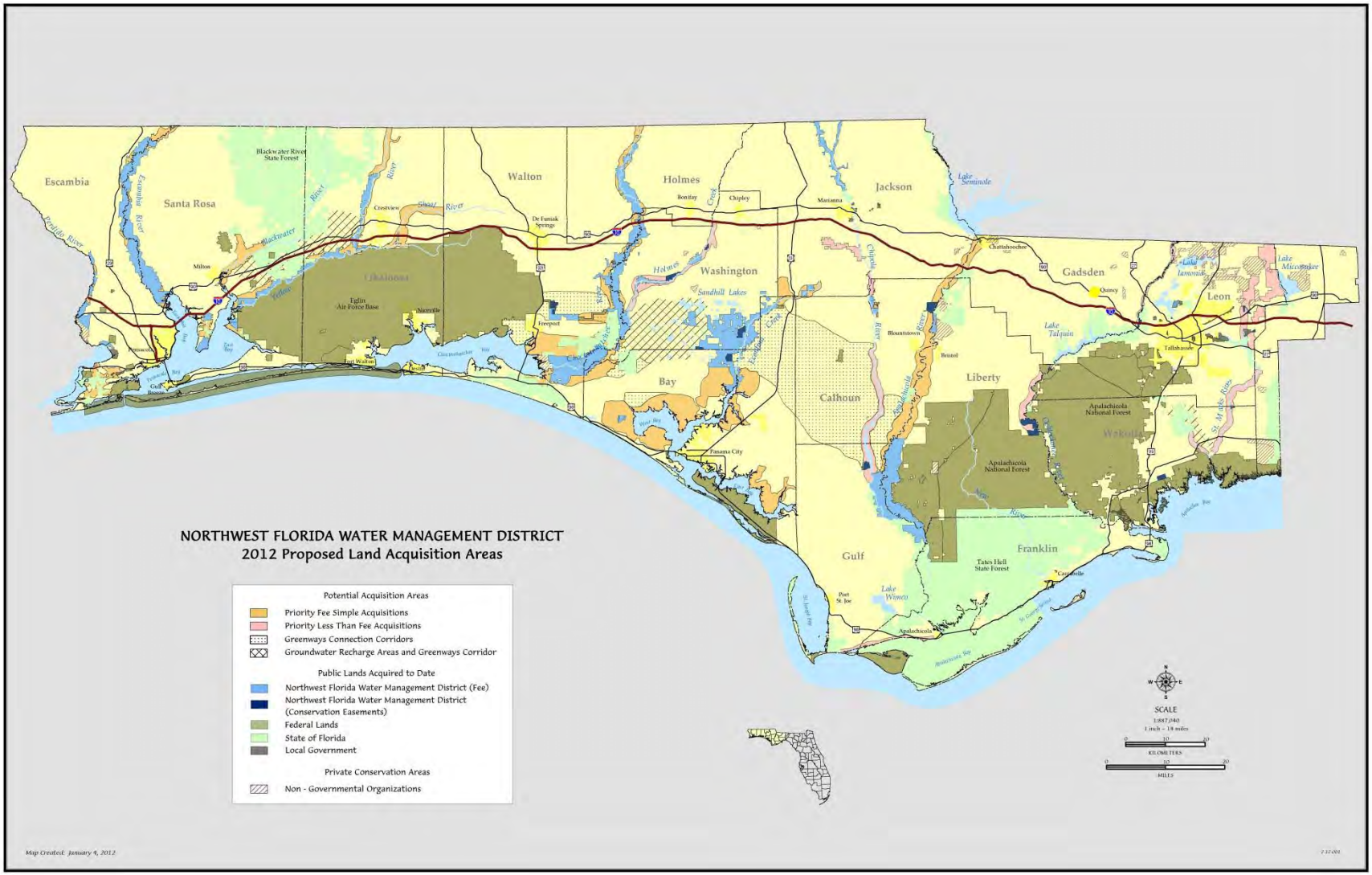


Figure 5-1. Proposed Land Acquisition Areas

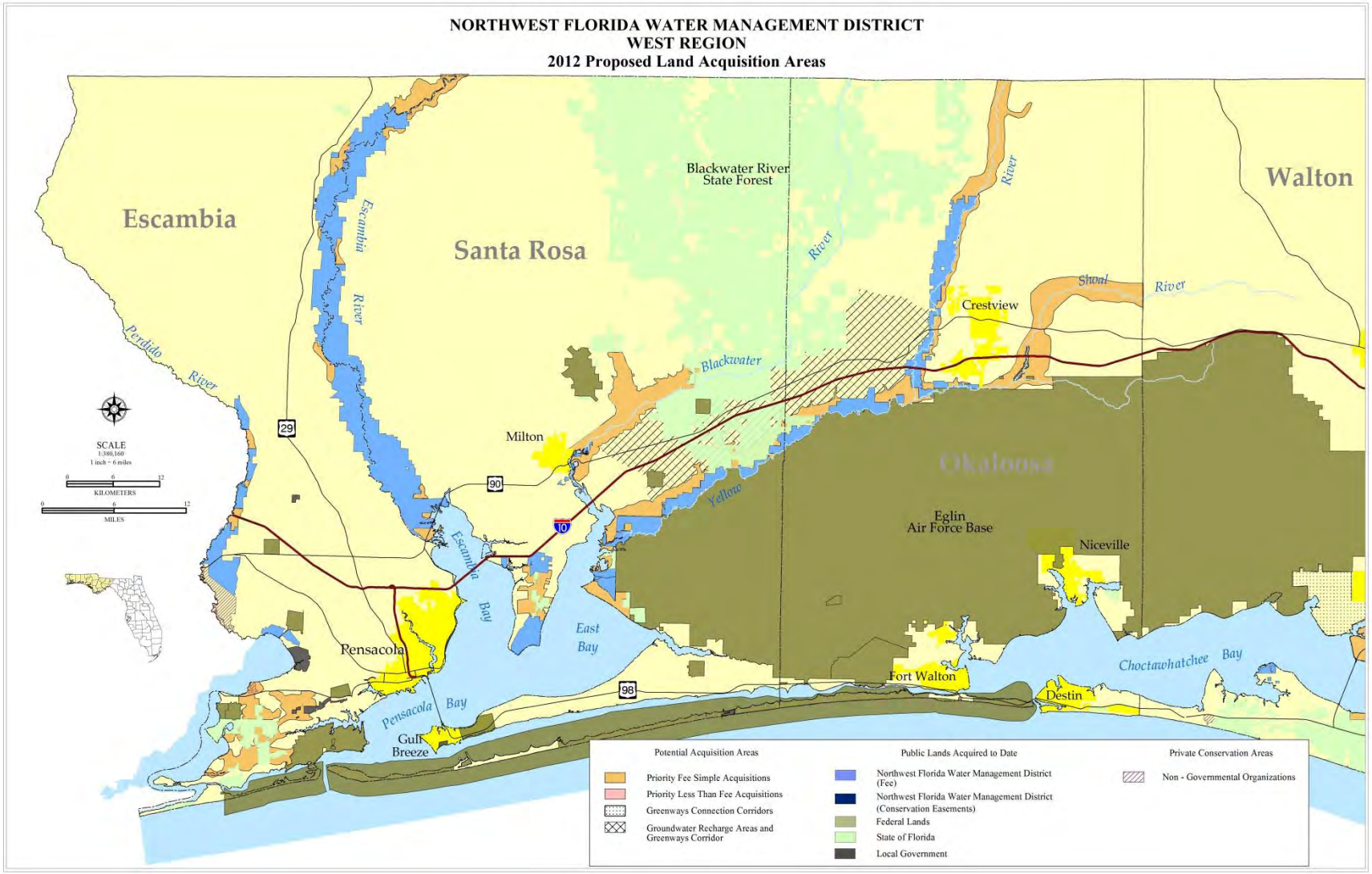


Figure 5-2. Proposed Land Acquisition Areas (West Region)

FLORIDA FOREVER LAND ACQUISITION PROJECT

Perdido River and Bay Basin

The Perdido River serves as the state line, separating Florida from Alabama. The Perdido has been designated an Outstanding Florida Water and Special Water system, a canoe trail, and a recreation area. The upper part of the river is a shifting sand river system, which are unique to portions of Northwest Florida, south Alabama, southern Mississippi and extreme eastern Louisiana, while the lower end of the river is characteristic of a black water stream. Currently the District owns 6,257 acres in fee and 4 acres in less-than-fee between the Perdido River and Bay.

The project area is mostly undeveloped and contains a diverse list of species. Acquisition of any floodplain area along the Perdido River, whether in fee or less than fee, will significantly protect the water resources of the area as well as enhance water quality protection efforts for the Perdido Bay system.

Priority purchases will be concentrated on parcels adjacent to existing District lands along the river, around the river mouth and designated tributaries.

The Perdido Bay is an estuarine system which receives fresh water from the Perdido River. Subsidiary embayments within the Perdido Bay estuary include Tarkiln Bay, Arnica Bay, Wolf Bay, Bayou La Launch and Bayou St. John. Perdido Key separates Perdido, Tarkiln, and Arnica bays, Bayou La Launch and Bayou St. John from the Gulf of Mexico. Big Lagoon adjoins Perdido Bay to the east, separating it from Pensacola Bay. Currently, the District owns 810.19 acres along Perdido Bay.

Priority purchases will be concentrated on parcels adjacent to the bay which can enhance water quality protection and mitigate for wetland impacts associated with DOT highway construction in southern Escambia County.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 1,447 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Southwest Escambia County Ecosystem

Several major estuarine drainages, including Jones Swamp, Bayou Grande, Big Lagoon, and Tarkiln Bay, intersect in southwest Escambia County. These, in turn, comprise portions of the Pensacola and Perdido bay watersheds. The proposed acquisition borders a major urban area and is experiencing encroachment from residential and commercial development. The project area is characterized by an undulating topography where remnants of ancient dune lines alternate with lower intervening swales that drain east or west, parallel to the Gulf coast. The wet prairies in the area are some of the last examples of what may be one of the most diverse plant communities in the southeast, supporting large stands of white-topped pitcher plants and almost 100 other plant species.

Protecting the ecological integrity of this area is very important to the quality of water resources in the Pensacola and Perdido bay systems. Acquisition will preclude new nonpoint pollution sources and will limit stormwater runoff by preventing channelization and placement of new impervious surfaces. Wetlands and upland buffers will be preserved, and riparian buffer zones will be maintained. Additionally, public access and use will be improved and fish, wildlife, and estuarine productivity will be protected.

This acquisition is consistent with a number of major initiatives designed to protect environmental and other public resources in the region. These include water quality treatment systems, acquisition programs for the Jones Swamp Wetland Preserve and the Perdido Pitcher Plant Prairie, and efforts to prevent encroachment on NAS Pensacola. Together with nearby state parks, these acquisitions will provide for a major environmental reserve and greenway system within a rapidly urbanizing area.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition

Approximately 11,000 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Groundwater Recharge Area

Designated area has groundwater recharge potential.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Escambia River Basin

Beginning at the confluence of the Conecuh River and Escambia Creek above the Florida-Alabama border and discharging into Escambia Bay, the Escambia River corridor contains a rich diversity of plant and animal species, as well as many rare fish and waterfowl. The Escambia River basin is broad and well drained in the upper reaches, and swampy below Molino, Florida. While the overall water quality is considered good, many point and non-point pollution sources empty into the river. Currently the District owns 35,413 acres along the river.

Priority purchases will be concentrated on parcels adjacent to existing District lands around the river mouth and designated tributaries.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 6,644 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Garcon Point Ecosystem

This proposed land acquisition project contains most of the Garcon Point Peninsula, which borders Pensacola, Escambia, East and Blackwater bays. The project area is largely undeveloped and includes a variety of natural communities that are in good to excellent condition. The entire tract provides considerable protection to the water quality of the surrounding estuary, as well as harboring a number of rare and endangered species. Priority purchases will be concentrated on parcels adjacent to existing District lands. Currently the District owns 3,245 acres.

The emergent estuarine marsh that borders several miles of shoreline within the project is an important source of organic detritus and nutrients, and serves as a nursery for many of the species found in Pensacola Bay. These wetlands function as both stormwater filtration and a storm buffer area, as well as providing erosion controls to the neighboring uplands. A minimum of 13 endangered or threatened species are known to live in the region including the recently listed federally endangered reticulated flatwoods salamander. The northern wet prairie portion is known to be an outstanding pitcher plant habitat.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 3,200 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Blackwater River Basin

Originating in the Conecuh National Forest in Alabama, the Blackwater River has a large portion of its Florida watershed further protected by the Blackwater River State Forest. In all, nearly 50 miles of the river corridor is remote and undeveloped. As a result, the Blackwater is considered one of Florida's best preserved waterways. Acquisition by the Florida Division of Forestry will bring into public ownership much of the lower, least protected portion of river floodplain and estuary. The District will assist in these acquisitions as needed. Currently the District owns 382 acres along the river.

The acquisition area includes a large area of mature longleaf pine forest, considerable bottomland forest and marsh acreage, upland mixed forest, blackwater stream and seepage slope communities. Priority purchases will be concentrated on parcels adjacent to existing District lands. Some 380 acres have been acquired along the Blackwater immediately south of Milton.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 11,449 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Yellow/Shoal River Basin

The Yellow River has its headwaters in Conecuh National Forest in Alabama and forms the northern border of Eglin Air Force Base (AFB) across much of eastern Santa Rosa and western Okaloosa counties. The proposed acquisitions would bring much of the remainder of the Yellow River floodplain in Florida under public ownership. Included in the project is a segment of the lower Shoal River, the largest tributary to the Yellow. Large private landowners own a majority of the floodplain in this project, but considerable areas of the bordering and buffer lands must also be acquired to ensure effective management and the protection of water resources. To accomplish these objectives, acquisition of the bordering land within the 100-year floodplain, along with an additional buffer of at least 50-feet, will be required. Highest priority will be given to tracts in the western portion of the project. Priority purchases will be concentrated on parcels adjacent to existing District lands. Currently the District owns 17,742 acres along the river.

Although the Yellow and Shoal rivers exhibit good overall water quality, both are fed largely by rainwater runoff and thus are highly susceptible to pollution from land use activities. The proposed purchase area would provide water quality protection from the Alabama border and encompass roughly 39,000 acres. Purchase of lands northwest of Eglin AFB, along the I-10 corridor, would provide approximately 52,000 acres of land that has excellent potential for future water resource development to supplement the strained potable water sources in southern Santa Rosa and Okaloosa counties. Acquisitions in this area are recommended by the District Regional Water Supply Plan for Okaloosa, Santa Rosa and Walton counties to protect future supply sources.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 40,682 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Groundwater Recharge Areas

In Escambia and Santa Rosa counties, the Sand-and-Gravel Aquifer is the principal source of potable water for public supply. The Sand-and-Gravel Aquifer is unconfined or poorly confined, making it particularly susceptible to contamination by land uses. Land acquisition along the I-10 corridor between the Yellow and Blackwater rivers in Santa Rosa County would protect recharge areas that are particularly important for future water supply sources.

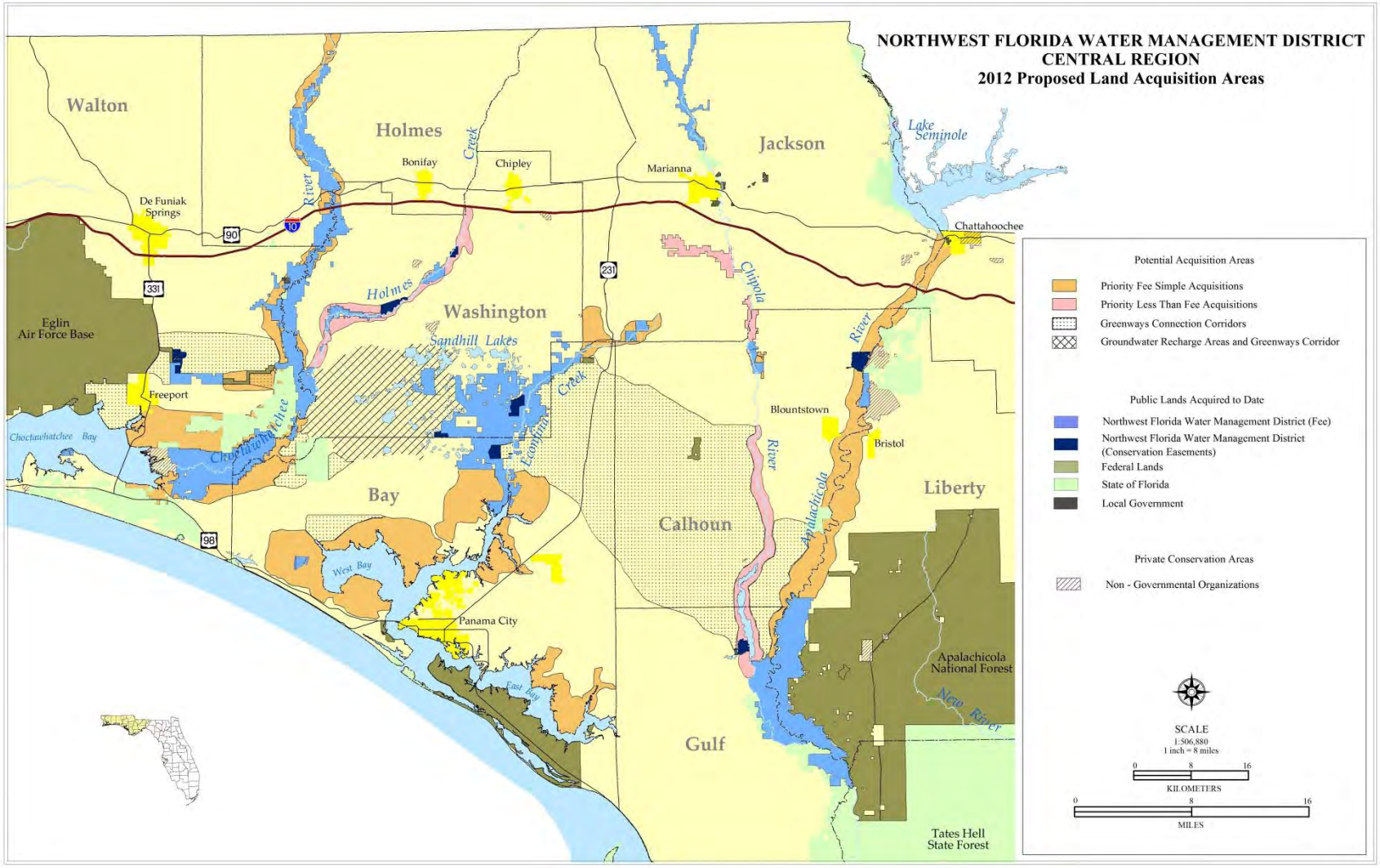


Figure 5-3. 2012 Proposed Land Acquisition Areas (Central Region)

FLORIDA FOREVER LAND ACQUISITION PROJECT

Lafayette Creek

Originating in south central Walton County, the Lafayette Creek drainage basin is located due east and north of Freeport, Florida. The main stem of the creek begins about seven miles east of Freeport and runs due west for about six miles before it turns south and empties into LaGrange Bayou/Choctawhatchee Bay. Additional purchases along the creek will protect many diverse natural communities and habitat types. In addition, any proposed acquisitions will also protect a portion of the water resources of Magnolia and Wolf creeks, both of which are significant tributaries to Lafayette Creek. Currently, the District owns 3,160 acres along the creek, including 420 acres for DOT mitigation purposes.

The area between the Choctawhatchee River and Eglin Air Force Base is part of the Northwest Florida Greenway Corridor which serves to protect open space stretching from the Apalachicola National Forest to Eglin Air Force Base. It is intended to preserve environmentally sensitive areas, sustain existing military lands and airspace, maintain the economic viability of forest lands and provide recreation. The District, in cooperation with Eglin Air Force Base, acquired a 1,095.3-acre conservation easement from Nokuse Plantation utilizing Department of Defense Readiness and Environment Initiative (REPI) funds. Acquisition of this Conservation Easement will ensure the protection of seepage streams within the Magnolia and Lafayette Creeks and buffer Eglin Air Force Base lands to the west.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 5,800 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Choctawhatchee River/Holmes Creek Basin

Originating in Alabama and flowing into Choctawhatchee Bay, the Choctawhatchee River/Holmes Creek basin drains roughly 3,300 square miles of northwest Florida, encompassing the second largest floodplain in the state. Although the river basin exhibits more localized water quality problems than most in northwest Florida, the overall water quality is considered good. The river basin encompasses several springs and a variety of habitats including bottomland hardwood forests, marshes and Tupelo-Cypress swamps.

Due to the river corridor's undeveloped nature, the basin provides habitat for a variety of native wildlife, including several endangered plant and animal species. The river also serves as a breeding and migratory area for both the Alligator Gar and the Gulf Sturgeon. The District currently owns 63,3880 acres along the river and/or creek in fee and less-than-fee. Priority purchases will be concentrated on parcels adjacent to existing District lands, around the river's mouth and designated tributaries such as Holmes Creek and such other projects that can mitigate for wetland impacts associated with DOT highway construction.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 55,064 acres have been identified for fee simple acquisition on the Choctawhatchee River and Holmes Creek, and 7,000 acres have been identified for possible less-than-fee acquisition on Holmes Creek. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

West Bay Buffer

West Bay is the westernmost embayment of the St. Andrew Bay estuary. The bay supports notable shellfish and seagrass communities, important fisheries, and other environmental and economic resources. The West Bay watershed is characterized by extensive pine flatwoods, as well as hardwood forests, cypress wetlands, mixed-forested wetlands, freshwater marshes, wet prairie and other wetlands. Salt marshes, inland forested wetlands, and associated upland communities are especially prominent in several areas, including the Breakfast Point peninsula and adjacent to the Burnt Mill and Crooked Creek tributaries.

Like other estuaries, the bay is vulnerable to impacts associated with intensive residential and commercial development. Such potential impacts include the long-term effects of nonpoint source pollution and habitat loss and fragmentation. The proposed acquisition would help prevent such degradation by preserving intact an extensive ecosystem of forests, scrub, salt marshes, and freshwater wetlands. The acquisition would preclude new sources of pollution, prevent habitat loss and fragmentation, and protect the stability and integrity of littoral vegetation. Preserving intact the associated wetland and upland communities in the vicinity of the bay would also protect water quality by providing a substantial riparian buffer and maintaining the natural hydrology in the vicinity of the bay. The District currently owns 719 acres in the West Bay Buffer.

In addition to providing for water resource protection and public use, this acquisition will be consistent with several ongoing initiatives, including the West Bay Sector Plan. These initiatives also include efforts to restore seagrass communities in the bay and to improve the treatment and management of domestic wastewater.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 47,281 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Econfina Creek

Econfina Creek is the major contributor to Deer Point Lake, which serves as the public water supply for Bay County, including Panama City, Panama City Beach and neighboring communities. The proposed purchases along the creek contain several spring-run streams, which are imperiled biological communities. The slope forest communities that border considerable lengths of the creek contain some of the highest species diversities encountered in Florida. The sand hills portion of the project features high rolling pinelands, steephead ravines and numerous sandhill upland lakes. Much of the sand hills area is of excellent quality, with nearly intact ground cover of wiregrass and dropseed. At least 18 species of rare or endangered plants inhabit the sand hills area. Because of the upland nature of the sand hills sites, the region is being developed with little regulatory restriction. The District currently owns over 43,762 acres in fee and less-than-fee, including the 2,155-acre Sand Hill Lakes Mitigation Bank. Priority purchases will be concentrated on parcels adjacent to existing District lands and parcels with significant recharge.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 39,679 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Groundwater Recharge Areas

The upper portion of the acquisition project is a significant recharge area of the Floridan Aquifer. The majority of the acreage purchased by the District and targeted for future purchase is one of the most important recharge areas for the Floridan Aquifer in northwest Florida. Recharge rates in the area have been estimated at 25 to 40 inches per year, and this recharge drives the spring flows along Econfina Creek, the largest tributary of the Deer Point Lake Reservoir. The reservoir currently provides approximately 50 million gallons per day for public supply and industrial water uses in Bay County.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Sandy Creek Basin

Sandy Creek is a major tributary of East Bay, the easternmost embayment of the St. Andrew Bay estuary. The creek's basin is characterized by extensive pine flatwoods, as well as hardwood forests, saltmarshes, cypress wetlands, mixed forested wetlands, freshwater marshes, wet prairie and other wetlands. Salt and freshwater marshes, inland forested wetlands, and associated upland communities are especially prominent along the creek and its tributaries.

Preservation of the Sandy Creek basin will protect a major tributary basin of East Bay. In so doing, it would preserve water quality and a mosaic of interconnected upland, wetland, stream, and estuarine habitats. The acquisition would also protect water quality by providing a substantial riparian buffer and maintaining natural hydrology.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 15,000 acres have been identified for acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

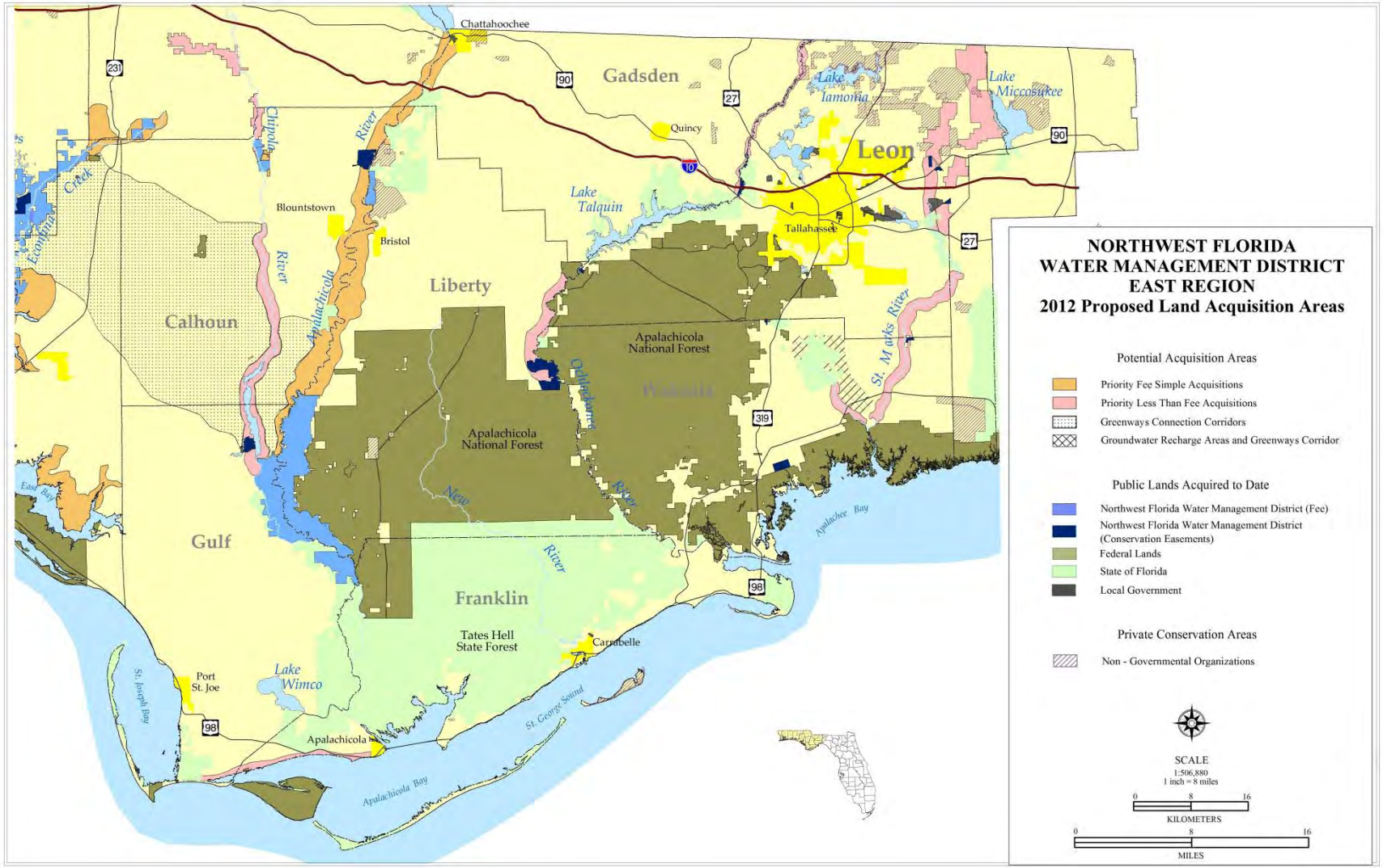


Figure 5-4. 2012 Proposed Land Acquisition Areas (East Region)

FLORIDA FOREVER LAND ACQUISITION PROJECT

Chipola River Basin

A new area along the Middle Chipola River has been identified for less-than-fee acquisition. The area is comprised of approximately 2,400 acres in northern Calhoun and southern Jackson counties. Acquisition of this tract will protect over 3.4 miles of the west bank and 4.25 miles of the east bank of the Chipola, River. In 2009, the District acquired 1,377.76 acres in fee along the Middle Chipola River, including the "Look-N-Tremble" rapids. The District now owns a total of 9,094 acres in fee simple and holds a conservation easement on 810 acres in the Chipola River Basin.

Two additional areas have been identified for less-than-fee acquisition along the Chipola River. The first is comprised of approximately 6,000 acres in the Spring Lake/Spring Group area located in central Jackson County. Acquisition of the Spring Lake/Spring Group area and its numerous springs, which ultimately flow into Dry Creek, a significant tributary stream to the Chipola, will provide enhanced water resource protection to the area.

The second proposed less-than-fee acquisition contains a core tract of roughly 20,000 acres in the river basin in Calhoun and Gulf counties. The Chipola River is the largest tributary to the Apalachicola River and its mostly spring-fed waters make an important and consistent contribution of sediment-free water to the Apalachicola. The degree of biological diversity of the Chipola appears to be nearly as high as that of the Apalachicola. Priority purchases will be focused along the middle reaches of the Chipola River.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 1,025 acres has been identified for possible fee acquisition and 28,400 acres have been identified for possible less-than-fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Apalachicola Bay/St. Vincent Sound Buffer

Apalachicola Bay has been recognized as a resource of state, federal, and international significance. The bay has extensive fish and shellfish resources, and it supports noteworthy commercial and recreational fisheries and other recreational and economic activities. It has been designated an Outstanding Florida Water, a State Aquatic Preserve, and an International Biosphere Reserve. It includes the Apalachicola Bay National Estuarine Research Reserve and the St. Vincent National Wildlife Refuge. State and federal agencies, as well as the NWFWMD, have made extensive investments in acquiring and protecting lands throughout the basin. This project would provide an important addition to these efforts.

Like other northwest Florida estuaries, Apalachicola Bay is vulnerable to impacts associated with development. Such potential impacts include the long-term effects of non-point source pollution and habitat loss and fragmentation. The proposed acquisition would help prevent such degradation by preserving intact the integrated forest and wetland community bordering St. Vincent Sound and Apalachicola Bay. The acquisition would preclude new sources of pollution, prevent habitat loss and fragmentation, and protect the stability and integrity of littoral vegetation. The acquisition would also protect water quality by providing a substantial riparian buffer and precluding new impervious surfaces and channelization.

The land targeted through this project is immediately adjacent to some of the most productive oyster harvesting areas of the Apalachicola Bay system, including the Indian Lagoon, Scorpion and Paradise bars.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 5,200 acres have been identified for less-than-fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Upper Apalachicola River Basin

The Apalachicola River begins below Lake Seminole at the confluence of Chattahoochee and Flint rivers. It has the largest floodplain in the state and is widely regarded as one of the state's most important natural resources. The Apalachicola River supports the highly productive fishery in Apalachicola Bay, and more endangered plant species can be found along the river's upper stretches than in any comparably-sized river in the state. The District owns 36,823 acres of river floodplain and holds a conservation easement on 1,544 acres.

Major habitat types along the Apalachicola River include coastal marshes, freshwater marshes, flatwoods and bottomland hardwood swamp. Water tupelo, Ogeechee tupelo, Bald cypress, Carolina ash and Swamp tupelo have been identified in the floodplain, as well as numerous species of rare fish. Substantial additional acreage of the Apalachicola system is owned by other public agencies and private conservation organizations. Priority purchases will be concentrated on parcels adjacent to existing District lands, other conservation lands and designated tributaries.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 50,132 acres have been identified for possible fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Ochlockonee River Basin

The Ochlockonee River originates in the coastal plain of Georgia and traverses parts of five Florida counties. Water quality in the river is lowest when it enters Florida and generally improves as it moves to the Gulf of Mexico. The Ochlockonee is primarily fed by rainwater runoff, hence highly susceptible to pollution of land use activities. Large parts of the watershed are publicly owned, including Joe Budd Wildlife Management Area, Lake Talquin State Forest and Apalachicola National Forest. The District's primary focus is to acquire less-than-fee rights on privately owned floodplain land separating existing federal/state properties. Public ownership of the erosion-prone lands bordering this usually fast flowing river will reduce the likelihood of water quality degradation. The District presently has 3,675 acres in less-than-fee (conservation easement) in the area.

Public Access

All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition

Approximately 11,767 acres have been identified for less-than-fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

FLORIDA FOREVER LAND ACQUISITION PROJECT

St. Marks/Wakulla Rivers

The Wakulla River originates at Wakulla Springs and flows south approximately 10 miles to join the St. Marks River at the town of St. Marks. The St. Marks River starts east of Tallahassee as a tiny stream, widens considerably below Horn Spring, and then disappears underground at Natural Bridge. Reemerging as a much stronger river at St. Marks Spring, it flows 11 miles to its confluence with the Wakulla River. While the lower reach of the river below the town of St. Marks is protected and preserved as part of the St. Marks National Wildlife Refuge, much of the remainder of the two river watersheds is threatened by active riverfront development and in the adjacent highlands. The St. Marks supports one of the most heavily used inshore saltwater fisheries in north Florida, the viability of which is largely dependent on the quality of freshwater flowing into the estuarine system. Both the Wakulla Springs State Park and the St. Marks National Wildlife Refuge are major refuges for numerous biological species. Much of the remaining privately owned land is timberland that is under intense development pressure. The District presently has 1,376 acres under less-than-fee acquisition in the area.

BluePrint 2000

In December 2003, the Northwest Florida Water Management District and the City of Tallahassee-Leon County BluePrint 2000 Intergovernmental Agency entered into a five-year Memorandum of Agreement (MOA) to work cooperatively to acquire conservation easements to protect and preserve the water resources of the St. Marks River basin in Leon County. Although this MOA has now expired, the District and BluePrint 2000 successfully purchased conservation easements on a 132.62-acre tract and 194.5-acre tract, both located in Leon County.

Land Acquisition

Approximately 45,456 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Implementation of the 2010-2011 Work Plan

During the 2010-2011 fiscal year, the District completed 1,380.16 acres of fee simple land acquisitions and 1,095.3 acres of less-than-fee acquisitions. A summary of the acquisition projects are listed below.

A purchase in 2011 will provide an additional three miles of protection along the east side of the Apalachicola River. The District purchased 1,316.7 acres on Apalachicola River in Liberty County. The parcel is adjacent to The Nature Conservancy's Apalachicola Bluffs and Ravines. This property was acquired with Florida Forever Funds and General Fund.

An addition containing 61.46 acres in the upper Econfina Creek basin was purchased by the District in July 2011. The tract is a slash pine plantation planted on xeric sandhill upland habitat. The southern one-quarter of the property consists of a seepage stream system associated with the upper basin of Econfina Creek while an old borrow pit occupies the northeast corner of the tract. The parcel is located west of County Road 167 and is adjacent to existing District land to the west. The purchase was made with District Land Acquisition funds.

The Governing Board approved the purchase of a conservation easement on 1,095.3 acres in Walton County in the Choctawhatchee River/Holmes Creek basin in August 2010. The District received the development and land use conversion rights through this easement. The majority of the property consists of former agricultural land interspersed with seepage streams associated with the watersheds of Magnolia and Lafayette Creeks. Purchase of this conservation easement enhanced the water resource protection/preservation efforts of Magnolia and Lafayette Creeks and enhanced base buffering for Eglin Air Force Base. The District utilized Department of Defense Readiness and Environment Initiative (REPI) funds to acquire this conservation easement.

Land Management

The District also completed numerous land management activities during fiscal year 2010-2011. Management and restoration efforts, including prescribed burns, native species planting and timber harvesting, continue across the District's 212,372 managed acres. In addition, the District maintains and improves public access and recreational amenities, such as boat ramps, primitive campsites, and day use (swimming and picnic) areas**.** In the pages that follow, **Table 5-3** and **Table 5-4** provide additional information on specific land restoration activities completed during the year. The projected 2011-2012 staffing and management budget by water management area can be found in **Table 5-5**.

To date, the District has conserved and protected 224,775 acres primarily through fee simple acquisition. These lands protect natural systems, wetland and floodplain functions, groundwater recharge, surface and groundwater quality, and fish and wildlife habitat. District-owned lands are all accessible to the public and are managed to protect water resources while allowing public access and resource-based recreation. Management and restoration efforts, including prescribed burns, native species planting, and timber harvesting, continue across 212,372 managed acres. In addition, the District maintains and improves public access and recreational amenities, such as boat ramps, primitive campsites, and day use (swimming and picnic) areas.

District lands include the majority of the Escambia and Choctawhatchee river floodplains, as well as extensive lands along the Yellow, Shoal, Blackwater, Chipola, Perdido, and Apalachicola rivers; Econfina, Holmes and Lafayette creeks; and on Garcon Point, Live Oak Point, and Perdido Bay. In addition, the District manages and conducts habitat restoration/maintenance on Live Oak Point, Sand Hill Lakes Mitigation Bank (SHLMB) and Ward Creek West. The District has also acquired the majority of the recharge area for springs that discharge into Econfina Creek and form a crucial component of the

water contribution to Deer Point Lake Reservoir. Also, the District helped Escambia County preserve Jones Swamp as a conservation and greenway area and has assisted in local government land acquisitions within Leon County.

Land Management Accomplishments (FY 2010-2011)

- Public meetings were held to discuss public recreation on District lands along the Chipola and Apalachicola rivers. The District's management strategy is to protect and restore natural areas while providing public access and compatible recreation. Activities planned include hunting, fishing, boating, canoeing/kayaking, hiking, nature appreciation, primitive camping, and other activities that are compatible with water resource protection and restoration.

- The District, in cooperation with Liberty County, completed road repairs and improvements to the Florida River Island road system within the Apalachicola River Water Management Area. Additionally, the District completed trail development for the Old River Trail in cooperation with the City of Milton.

Restoration

The NWFWMD accomplishes water resource restoration through several interrelated programs, primarily SWIM, Land Management, and Mitigation.

Approved NWFWMD plans with substantial restoration components include the following:
- *Apalachicola River and Bay Management Plan* (1996)
- *Pensacola Bay System SWIM Plan* (1997)
- *Lake Jackson Management Plan* (1997)
- *Choctawhatchee River and Bay SWIM Plan* (2002)
- *St. Andrew Bay Watershed SWIM Plan* (2000)
- *St. Marks River Watershed SWIM Plan* (2009)
- *Ochlockonee River and Bay SWIM Plan* (draft)
- *Perdido River and Bay SWIM Plan* (draft)
- *Tate's Hell State Forest Hydrologic Restoration Plan* (2010)
- *Florida Forever Capital Improvements Plan*

Restoration Accomplishments (FY 2010-2011)

- In January 2011, the District completed its largest over story and groundcover habitat restoration project in a single year. In our ongoing reforestation and groundcover habitat restoration program, the District completed hand planting of 2,806 acres of disturbed longleaf pine, mixed bottomland hardwood, wet pine flatwoods, and wiregrass habitat across northwest Florida. These habitat restoration activities enhance groundwater recharge and improve wetland functions and also offset wetland losses due to Department of Transportation projects.

- Over 1.6 million longleaf pine tubelings were planted on the Perdido River, Choctawhatchee River/Holmes Creek, and Econfina Creek water management areas (WMAs). More than 35,000 mixed bottomland hardwood and cypress trees were planted on 87 acres within the Perdido, Yellow, Choctawhatchee, and Econfina WMAs, and for the Womack Creek mitigation project in Tate's Hell State Forest.

- The District also reestablished groundcover habitat, planting over 950,000 plugs of upland/wetland wiregrass, toothache grass, and mixed wet pine flatwood species on disturbed habitat sites on the

Perdido, Yellow, Choctawhatchee, and Econfina WMAs and in the Sand Hill Lakes Mitigation Bank and the Ward Creek West mitigation tract.

- Seeds for most District groundcover projects were collected from District land on Garcon Point and the Econfina Creek WMA. The District continues to research, refine and establish new habitat restoration techniques that increase species diversity and ecosystem health.
- Construction of two oyster shell reefs was completed at Live Oak Point on Choctawhatchee Bay. The reefs are approximately 130 feet and 180 feet in length respectively, and they will help to abate erosion and restore marsh and shellfish habitat. Five hundred plants, including *Spartina patens*, *Spartina alterniflora*, and *Juncus roemerianus*, were planted between the reefs and mean high water.
- The District completed the Pine Log Creek basin restoration project of the Tate's Hell restoration plan, enhancing wetlands, restoring historic drainage, and improving water quality across a 15,300-acre basin. Three miles of dirt logging roads and adjacent ditches were removed; and 11 hardened low water crossings, 30 ditch plugs, and other structures were installed.
- SWIM plans have been drafted for the Ochlockonee River and Bay and Perdido River and Bay watersheds. Encompassed strategies are expected to include stormwater treatment and habitat restoration.
- Grant recipients have continued progress in completing Florida Forever capital improvement projects with watershed benefits. Three projects were completed in 2011 within Walton, Washington, and Franklin, counties. Together, these activities provided restoration and new water quality treatment for approximately 213 acres.
- With grant funding assistance from the District, University of Florida Institute of Food and Agricultural Sciences (IFAS) researchers continued work in Jackson County toward development of farming techniques that protect water resources while enhancing economic productivity. Through this effort, sod based conservation farming systems have demonstrated reduced water usage and nitrogen applications while achieving improved production yields and reduced costs.
- The Econfina Creek Springs Complex restoration project was completed in 2011. At Pitt Spring, the spring bank was restored to natural habitat and function. The concrete retaining wall was removed and replaced with gently sloping natural vegetation and limestone rocks to create a more natural setting. Debris, eroded sediment, and a rock that had blocked spring flow were removed. Other activities completed at Pitt and Sylvan springs include trails, overlooks, other access/recreation facilities, sediment removal, and erosion abatement.
- With funding assistance from the District and other partners, Blueprint 2000 and the City of Tallahassee have made substantial progress toward completion of the Cascades Park Watershed Restoration Project. Components under construction include major stormwater ponds, retaining walls, utility relocations, landscaping to support littoral vegetation, and stream reconstruction, all within the St. Marks River watershed.

Table 5-3. Restoration, Enhancement and Maintenance (2011)

	Acres Burned					Acres Planted					Acres Harvested				Acres Treated
Water Management Area	**Total**	Fuel Reduction	Site Preparation	Growing Season	Wiregrass Propagation	**Total**	Wiregrass	Longleaf Pine	Slash Pine	Replanted	**Total**	Restoration	Thinning	Habitat Restoration	For Invasive, Non-native or Off-site Species
Escambia River	**132**	132													
Garcon Point	**202**	202													89
Blackwater River															1
Yellow River	**444**	429		15											3
Perdido River	**477**	178	299								**199**			199	10
Choctawhatchee River	**2,316**	2,316				**87**	16	71			**214**	37	177		46
Econfina Creek	**5,926**	4,064	101	539	1,222	**1,307**		1,307			**308**	101	207		6
St. Andrews	**125**	103		22											
Carter Restoration	**719**	425		294		**15**	15								
Ward Creek West	**189**	189				**17**	17								
Devils Swamp Restoration	**1,427**	1,427													
Chipola River	**369**	292		77											
Apalachicola River															
Lake Jackson															
Totals	**12,326**	**9,757**	**400**	**947**	**1,222**	**1,426**	**48**	**1,378**			**721**	**138**	**384**	**199**	**155**

Table 5-4. Access and Recreation Management (2011)

Water Management Area	Primitive Campsites	Picnic Grounds	Public Parks	Parking Areas	Reserved Group Sites	Boat Landings	Portolet Stations	Horse Trail	Canoe Trail	Hiking Trail	Nature Trail	Bike Trail	Access Road	Group Use Permits	Birding	Nature Trail	General Purpose	Information Signs	Weather Pavilions
	Number Maintained							Miles Maintained						Issued	Maps/Brochures Printed				Installed
Escambia River	13	9	8	9	1	8	11			1	2		27	26				20	2
Garcon Point				3						3			3			3,450		10	
Blackwater River		1				1					1							2	1
Yellow River	9	2	7	6		4	4		50				47					10	
Perdido River		3	3	4	1	3	4	3	9				32	12				80	1
Choctawhatchee River	8	9	12	12		10	8		15				43					80	4
Econfina Creek	10	14	8	18	5	4	14	56	22	18	2		24	201				279	8
Chipola River	3	1	3	3		3	2	5	14	4	1	2	6						1
Apalachicola River	2	1	1	3		3	1				4		5						2
Lake Jackson			1	2				9		5	1	9	4						1
Totals	**45**	**40**	**43**	**60**	**7**	**36**	**44**	**73**	**110**	**31**	**11**	**11**	**191**	**239**		**3,450**		**481**	**20**

Table 5-5. Projected Funding, Staffing and Resource Management for FY 2011-2012

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	35,413		$488,278	$422,300
	Escambia Conservation Easements	19		$1,396	$500
	Garcon Point	3,245		$205,506	$149,400
	Yellow/Escribano	17,742		$294,316	$246,889
	Blackwater	382		$81,382	$58,750
	Perdido	6,261		$408,131	$339,100
	Perdido Conservation Easements	4		$1,152	$500
	Western Region Total	**63,066**	**3**	**$1,480,161**	**$1,217,439**
Central	Choctawhatchee	60,848		$1,055,290	$894,100
	Choctawhatchee/Holmes Conservation Easements	2,537		$3,741	$500
	Econfina	39,174		$1,479,316	$1,248,150
	St. Andrew/Econfina Conservation Easements	2,433		$4,762	$500
	Ward Creek West	719		$20,686	$13,500
	Carter Restoration	2,155		$203,100	$191,250
	Central Region Total	**107,866**	**5**	**$2,766,895**	**$2,348,000**
Eastern	Chipola	9,094		$375,484	$270,500
	Apalachicola	36,823		$454,076	$361,050
	Apalachicola/Chipola Conservation Easements	2,360		$4,581	$500
	Lake Jackson	516		$52,173	$2,295
	St. Marks Conservation Easements	1,376		$4,783	$750
	Ochlockonee Conservation Easements	3,675		$5,848	$750
	Eastern Region Total	**53,844**	**2**	**$896,945**	**$635,845**
	Regional Totals	**224,776**	**10**	**$5,144,001**	**$4,201,284**
	Management Administration		4	$896,053	$433,600
	Grand Total	**224,776**	**14**	**$6,040,054**	**$4,634,884**

APPENDIX: DEP Florida Forever Priority List

Rank	Substantially Complete Projects	County [1]	Remaining Acres	Cumulative Acres [2]	Work Plan Priority [3]
1	Estero Bay	Lee	2,359	2,359	High
2	Charlotte Harbor Estuary	Charlotte/ Lee/ Sarasota	6,874	9,233	High/Med
3	Spruce Creek	Volusia	449	9,682	Medium
4	South Walton County Ecosystem	Walton	3,243	12,925	Med/Low
5	Save Our Everglades	Collier	371	13,296	Low
6	Lochloosa Wildlife	Alachua	4,828	18,124	Low
	Subtotal: 6 Projects	***1% of acreage on***	18,124		
Rank	**Critical Historical Resources Projects**	**County [1]**	**Rem. Acres**	**Cum. Acres [2]**	**WP Priority [3]**
1	Windover Archaeological Site	Brevard	8	8	High
2	Pierce Mound Complex	Franklin	561	569	High
3	Three Chimneys	Volusia	56	625	High/Med
4	Okeechobee Battlefield	Okeechobee	89	714	Medium
5	Battle of Wahoo Swamp	Sumter	853	1,568	Med/Low
6	Pineland Site Complex	Lee	148	1,716	Low
	Subtotal: 6 Projects	***0.1% of acreage on***	1,716		
Rank	**Climate Change Lands Projects**	**County [1]**	**Rem. Acres**	**Cum. Acres [2]**	**WP Priority [3]**
1	Florida Keys Ecosystem	Monroe	8,571	8,571	High
2	Caber Coastal Connector	Levy	7,804	16,375	High
3	North Key Largo Hammocks	Monroe	864	17,239	High
4	Northeast Florida Blueway	Duval/ St. Johns/ Flagler	13,118	30,356	High
5	St. Joe Timberland	Bay/ Franklin/ Gadsden/ Gulf/ Jefferson/ Leon/ Liberty/ Taylor/Wakulla/ Walton/ Washington	89,976	120,333	High/Med
6	Coupon Bight / Key Deer	Monroe	1,641	121,973	Low
7	St. Johns River Blueway [BA]	St. Johns	26,212	148,186	Low
8	Florida Springs Coastal Greenway	Citrus	9,930	158,116	Low
9	Terra Ceia	Manatee	2,474	160,590	Low
10	Archie Carr Sea Turtle Refuge	Brevard/ Indian River	245	160,835	Low
11	Dickerson Bay / Bald Point	Wakulla/ Franklin	2,972	163,806	Low
12	West Bay Preservation Area [NP]	Bay	4,494	168,300	Low
13	Garcon Ecosystem	Santa Rosa	3,835	172,135	Low
14	Peaceful Horse Ranch	Desoto	4,177	176,312	Low
15	Tiger / Little Tiger Island	Nassau	1,141	177,453	Low
	Subtotal: 15 Projects	***9% of acreage on list***	177,453		

Rank	Partnerships & Regional Incentives Projects	County [1]	Rem. Acres	Cum. Acres [2]	WP Priority [3]
1	Florida's First Magnitude Springs	Washington/ Bay/ Jackson/ Wakulla/ Leon/ Hamilton/ Madison/ Lafayette/ Levy/ Marion/	5,771	5,771	High
2	Northeast Fla Timberlands & Watershed Reserve	Duval/ Nassua/ Clay	87,481	93,252	High
3	Brevard Coastal Scrub Ecosystem	Brevard	23,160	116,413	High
4	Indian River Lagoon Blueway	Volusia/ Brevard/ Indian River/ St. Lucie/ Martin	19,847	136,259	High
5	Escribano Point	Santa Rosa	1,798	138,058	High
6	Corkscrew Regional Ecosystem Watershed	Lee/ Collier	38,532	176,589	High/Med
7	Clear Creek / Whiting Field	Santa Rosa	3,416	180,005	Medium
8	Annutteliga Hammock [BA]	Citrus/ Hernando	12,540	192,545	Medium
9	Wakulla Springs Protection Zone	Wakulla/ Leon	3,969	196,514	Medium
10	Volusia Conservation Corridor	Volusia/ Flagler	22,418	218,932	Medium
11	Green Swamp - Hilochee Corridor [RP]	Lake/ Polk	55,894	274,826	Medium
12	Heather Island / Oklawaha River	Marion	19,549	294,375	Medium
13	Flagler County Blueway [BA]	Flagler/ Volusia	4,082	298,458	Medium
14	Dade County Archipelago	Miami-Dade	311	298,768	Medium
15	Watermelon	Levy/ Alachua	5,933	304,701	Medium
16	Charlotte Harbor Flatwoods	Charlotte/ Lee	3,906	308,607	Medium
17	Middle Chipola River	Jackson/ Calhoun	11,877	320,484	Med/Low
18	Catfish Creek	Polk	9,162	329,646	Low
19	Green Swamp - Withlacoochee River Headwaters [RP]	Lake/ Pasco/ Polk	52,115	381,761	Low

Rank	Partnerships & Regional Incentives Projects	County[1]	Rem. Acres	Cum. Acres[2]	WP Priority[3]
20	Atlantic Ridge Ecosystem	Martin	8,043	389,804	Low
21	Lake Santa Fe	Alachua/ Bradford	9,785	399,589	Low
22	Pal - Mar	Palm Beach/ Martin	9,954	409,543	Low
23	Rainbow River Corridor	Marion/ Citrus	1,138	410,680	Low
24	Crossbar / Al Bar Ranch	Pasco	12,371	423,051	Low
25	Sand Mountain	Washington/ Bay	14,495	437,546	Low
26	Pumpkin Hill Creek	Duval	10,850	448,396	Low
27	Baldwin Bay / St. Marys River	Duval/ Nassau	9,129	457,525	Low
28	Lafayette Forest	Lafayette	10,261	467,787	Low
29	Carr Farm / Price's Scrub	Marion/ Alachua	305	468,091	Low
30	Hall Ranch	Charlotte	8,519	476,610	Low
31	Florida National Scenic Trail	Columbia	7	476,617	Low
	Subtotal: 31 Projects	***24% of acreage on list***	476,617		

Rank	Less-Than-Fee Projects	County[1]	Rem. Acres	Cum. Acres[2]	WP Priority[3]
1	Adams Ranch	Osceola	10,340	10,340	High
2	Fisheating Creek Ecosystem	Glades/ Highlands	108,904	119,244	High
3	Seven Runs Creek	Walton	23,869	143,114	High
4	Ochlockonee River Conservation Area	Gadsden/ Leon	3,269	146,383	High
5	Ayavalla Plantation	Leon	6,081	152,464	High
6	Lower Suwannee River and Gulf Watershed	Dixie	46,461	198,926	High/Med
7	Myakka Ranchlands	Sarasota	11,239	210,165	Medium
8	Big Bend Swamp / Holopaw Ranch	Osceola	50,480	260,645	Medium
9	Tiger Cattle Company Ranch	Okeechobee	2,229	262,874	Medium
10	Clay Ranch	Putnam	2,460	265,333	Medium
11	Ranch Reserve	Osceola	12,592	277,925	Medium
12	Gulf Hammock	Levy	25,611	303,536	Medium
13	Green Swamp - Pine Island Recharge Area [RP]	Lake	30,485	334,021	Med/Low
14	Raiford - Osceola Greenway	Baker/ Union	67,673	401,693	Low
15	Green Swamp - Peace River Headwaters [RP]	Polk	23,719	425,412	Low
16	Hosford Chapman's Rhododendron Protection Zone	Gadsden/ Liberty	6,921	432,334	Low
17	Mill Creek	Marion	12,293	444,626	Low
18	Lower Perdido River Buffer	Escambia	2,356	446,982	Low
19	Peace River Refuge	Desoto	3,846	450,828	Low
20	Maytown Flatwoods	Brevard	7,187	458,014	Low
21	Old Town Creek Watershed	Hardee/ Polk	7,303	465,317	Low
22	Little River Conservation Area	Gadsden	2,057	467,375	Low
23	San Felasco Conservation Corridor	Alachua	376	467,750	Low
24	Horse Creek Ranch	DeSoto/ Hardee	16,316	484,066	Low
25	Suwannee County Preservation	Suwannee	1,254	485,320	Low
26	West Aucilla River Buffer	Jefferson	721	486,041	Low
27	Millstone Plantation	Leon	56	486,097	Low
	Subtotal: 27 Projects	***25% of acreage on list***	486,097		

Rank	Critical Natural Lands Projects	County[1]	Rem. Acres	Cum. Acres[2]	WP Priority[3]
1	Lake Wales Ridge Ecosystem [BA]	Lake/ Osceola/ Highlands/ Polk	24,237	24,237	High
2	Bombing Range Ridge	Polk/ Highlands/ Osceola	32,717	56,953	High
3	Wekiva - Ocala Greenway	Lake/ Orange/ Seminole/ Volusia	25,488	82,441	High
4	Apalachicola River	Jackson/ Gadsden/ Liberty/ Calhoun	11,214	93,655	High
5	Panther Glades	Hendry	40,634	134,289	High
6	Wacissa / Aucilla River Sinks	Jefferson/ Taylor	9,897	144,186	High
7	Triple Diamond	Okeechobee	7,997	152,184	High
8	Upper St. Marks River Corridor	Leon/ Jefferson/ Wakulla	11,025	163,208	High
9	Belle Meade	Collier	7,336	170,545	High
10	Etoniah / Cross Florida Greenway [BA]	Clay/ Putnam/ Marion	66,302	236,847	High
11	Longleaf Pine Ecosystem	Gilchrist/ Volusia/ Marion	9,693	246,540	High
12	Caloosahatchee Ecoscape	Hendry/ Glades	13,515	260,055	High
13	Pine Island Slough Ecosystem	Osceola/ Indian River	48,902	308,957	High/Med
14	Osceola Pine Savannas	Osceola	27,572	336,529	Medium
15	Devil's Garden	Hendry/ Collier	82,994	419,523	Medium
16	Twelvemile Slough [BA]	Hendry	8,170	427,694	Medium

Rank	Critical Natural Lands Projects	County[1]	Rem. Acres	Cum. Acres[2]	WP Priority[3]
17	Perdido Pitcher Plant Prairie	Escambia	2,412	430,105	Medium
18	Camp Blanding - Raiford Greenway	Baker/ Bradford/ Clay/ Union	33,973	464,078	Medium
19	Half Circle L Ranch	Hendry/ Collier	11,176	475,254	Medium
20	Kissimmee - St. Johns River Connector	Okeechobee/ Indian River	34,589	509,843	Medium
21	Bear Creek Forest	Bay/ Calhoun/ Gulf	100,424	610,267	Med/Low
22	Bear Hammock	Marion	4,680	614,947	Low
23	South Goethe	Marion/ Levy	11,651	626,598	Low
24	Lake Hatchineha Watershed	Osceola/ Polk	5,416	632,015	Low
25	Wolfe Creek Forest	Santa Rosa	10,068	642,083	Low
26	Pinhook Swamp	Baker/ Columbia	60,420	702,502	Low
27	San Pedro Bay	Madison/ Taylor	44,998	747,501	Low
28	Southeastern Bat Maternity Caves	Jackson/ Alachua/ Marion/ Citrus/ Sumter	591	748,091	Low
29	Shoal River Buffer	Okaloosa	2,095	750,186	Low
30	Upper Shoal River	Walton	12,027	762,213	Low
31	Hixtown Swamp	Madison	22,429	784,642	Low
32	Ichetucknee Trace	Columbia	1,887	786,529	Low
Subtotal: 32 Projects		***40% of acreage on list***	786,529		
TOTAL ACRES OF ALL PROJECTS			1,946,536		

[1] Counties with no remaining acreage to acquire in a project not listed here – see project summaries for counties in where acquisitions completed.
NP = New Project added to list.

[2] Cumulative acres used to calculate in which Priority Group of the Acquisition Work Plan each project will qualify.
BA = Boundary Amended.
RP = Redesigned Project.

[3] **Work Plan Priority Groups pursuant to Rule 18-24.006(6)**

High Priority Group = top 1/3 acreage within each Category High/Med = Portion of project in High Priority Group & portion in Medium Priority Group.

Medium Priority Group = middle 1/3 acreage within each Category Med/Low = Portion of project in Medium Priority Group & portion in Low Priority Group.

Low Priority Group = bottom 1/3 acreage within each Category.

5.2 Capital Improvement Work Plan

As required by Section 373.199(2), F.S., the five-year work plan includes capital improvement projects that further the goals of the Florida Forever Act (Section 259.105, F.S.). Per Section 373.199(3)(a), the plan incorporates projects addressing priorities identified in approved SWIM plans and other restoration plans, water resource development projects, and other eligible Florida Forever projects and improvements to District lands and facilities approved by the Governing Board.

Priority waterbody and water resource descriptions are as outlined in approved SWIM plans (www.nwfwmd.state.fl.us/pubs/swmp/swim.html) and regional water supply plans (www.nwfwmd.state.fl.us/rmd/water_supply_planning/regional_water_supply_planning.html).

From 2003-2008, the District offered grants to local governments for capital improvements that help implement the District's SWIM and regional water supply plans and stormwater master plans. These included stormwater retrofit, restoration, and reuse projects. Over $23 million for 52 projects has been awarded under the program. These grants have leveraged significant additional funding, with over $52 million in local and other match funding being allocated to the approved projects. Facility ownership, permitting, and long-term maintenance remain the responsibilities of the grantees, as provided through cooperative grant agreements. Due to the lack of new funding, grant cycles have not been offered for the past several years.

Performance measures for restoration projects are incorporated within the Strategic Water Management Plan (www.nwfwmd.state.fl.us/pubs/swmp/swmp.html) and described in Chapter 1 of the Consolidated Annual Report. Cooperative local grant project accomplishment is described in www.nwfwmd.state.fl.us/rmd/swim/fla_forever_grants/fla_forever_grants.htm by SWIM watershed and jurisdiction.

Implementation of the 2010-2011 Five Year Work Plan

Capital improvement projects completed with Florida Forever funding over the past year include:

- Pine Log Creek Hydrologic Restoration (Apalachicola River and Bay Wetland Restoration). To further implementation of the Tate's Hell State Forest Hydrologic Restoration Plan, the District eliminated approximately three miles of unpaved roads and adjacent ditches, reestablished the natural grade, constructed eleven low water crossings, installed 30 ditch plugs and one flashboard riser, and modified 22 culverts. These activities helped restore a 15,300 acre basin in the Apalachicola Bay watershed. Apalachicola Bay is a SWIM priority waterbody, Aquatic Preserve, National Estuarine Research Reserve, and Outstanding Florida Water (OFW). Construction was accomplished at a cost of $190,051.
- 10th Street Stormwater Improvements (City of Carrabelle). The City of Carrabelle constructed a stormwater management facility, stabilized a channel, established a treatment pond, and retrofitted associated stormwater facilities. The project provides water quality treatment and flood protection for an approximately 145 acre watershed that discharges into St. George Sound, within the Apalachicola Bay estuary. $501,686 in construction funding was provided to complete this project, matched by approximately $182,000 of City funds.
- River Road Stabilization (Washington County). The District provided $450,000 in construction funding to Washington County for the stabilization of three miles of unpaved roads, eliminating sedimentation into wetlands associated with the Choctawhatchee River, a SWIM priority waterbody and OFW. The completed improvements abate sedimentation into the Choctawhatchee River. Washington County contributed $150,000 for the project.

- Oyster Lake Restoration (Walton County). Walton County removed fill and constructed three bridges to restore natural hydrologic connectivity and restore wetlands associated with Oyster Lake, a major coastal dune lake basin, incorporated within the Choctawhatchee River and Bay SWIM plan. One causeway was removed, and two bridges to accommodate vehicular traffic and one 200-foot timber pedestrian bridge and viewing platform were constructed. Additional vegetation enhancement was accomplished, and connectivity between the lake and a major wetland system was restored. $487,500 in construction funding was provided to complete this project, matched by $162,000 in county funds.
- Econfina Creek Springs Complex Restoration (District Project). Restoration was completed at Pitt Springs, to include natural bank/shoreline restoration, vegetation restoration, and construction of stormwater treatment areas, sediment removal, and compatible public access improvements. Construction was completed at a cost of $1,137,500.

Additionally, substantial progress was made in the construction of the Cascade Park Watershed Restoration project (Blueprint 2000). Components under construction include major stormwater ponds, retaining walls, utility relocations, landscaping to support riparian vegetation, and stream restoration.

Fiscal Year 2012-2016 Capital Improvement Work Plan

Although the Florida Forever Act was extended to 2018, appropriations have been eliminated and future funding may be unavailable. Table 5-6 lists capital improvement projects proposed for implementation over the next five years, depending on funding availability. These projects are funded from previous year allocations and are eligible for capital improvement funding from Florida Forever, as well as from SWIM, legislative special appropriation, Water Management Lands Trust Fund, federal grants, local governments, and potentially other sources. The funding indicated represents current estimates and may be revised based on evolving project needs.

Table 5-6. Current Approved Capital Improvement Projects

Project	Watershed	Description	Project Partners	Progress	Estimated Funding
Apalachicola River and Bay Wetland Restoration	Apalachicola River and Bay	Water quality, hydrologic, and habitat restoration. Includes restoration of Apalachicola River floodplain, Tate's Hell Swamp, and coastal wetlands	DOF, DEP, FWC, local governments	Whiskey George basin project complete; Pine Log Creek restoration at completion	$200,000
Watson Bayou Stormwater Retrofit	St. Andrew Bay	Stormwater retrofit for water quality and flood control. Spring Avenue cooperative project approved in 2011.	Bay County	Engineering and permitting in progress	$800,000
Cascades Park Watershed Resource Restoration	St. Marks River	Stormwater retrofit and stream restoration. Grant project approved in 2009.	Blueprint 2000	Under construction	$300,000
				Total	**$1,300,000**

Figure 5-5 illustrates the distribution of current and past capital improvement projects District-wide. Additional preservation, enhancement, and restoration projects accomplished to meet regional mitigation needs are described in the Northwest Florida Umbrella, Watershed-based, Regional Mitigation Plan ("Umbrella Plan"), available at www.nwfwmdwetlands.com/.

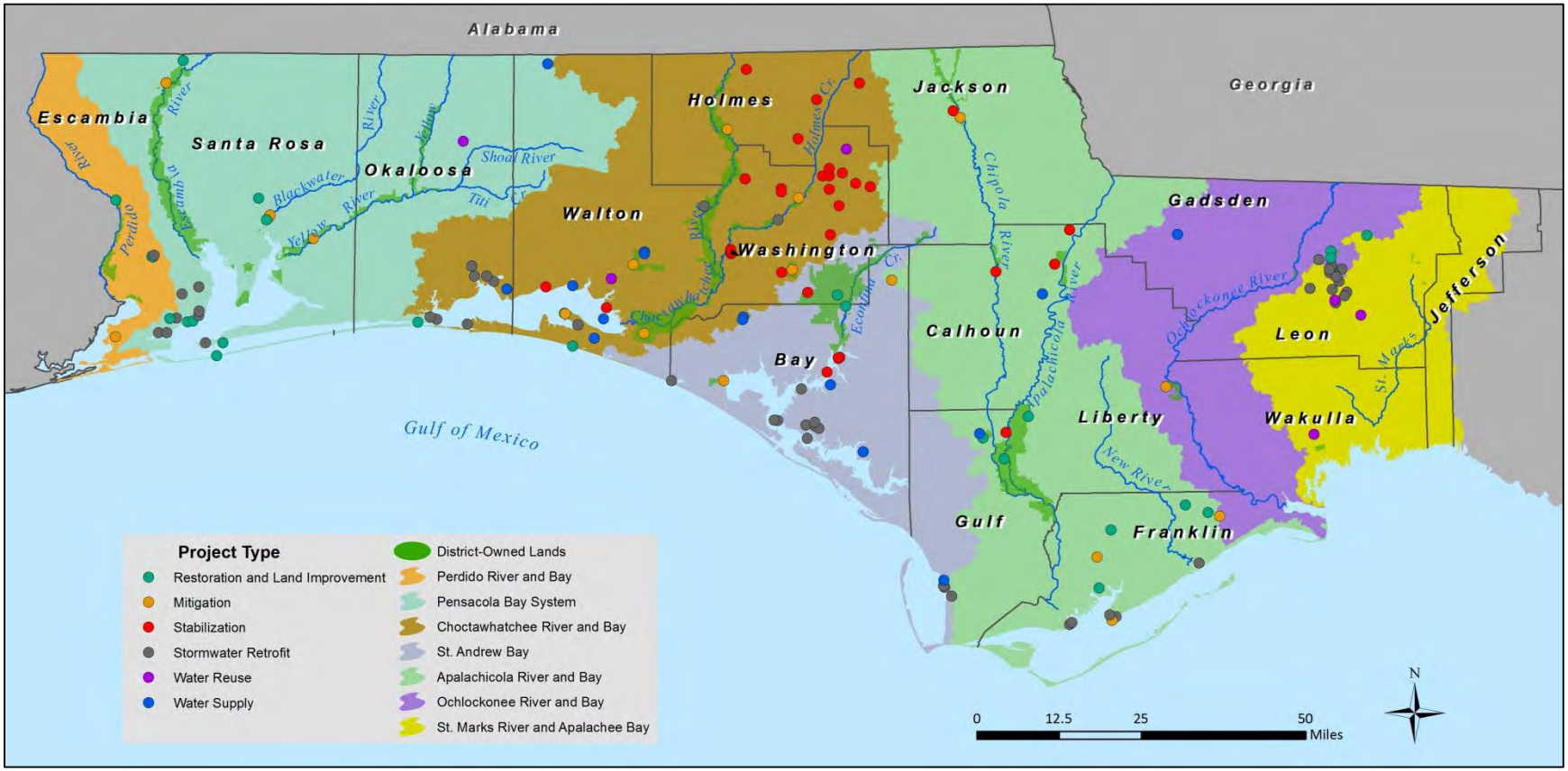


Figure 5-5. NWFWMD Capital Project Distribution

Chapter Six: Mitigation Donation Annual Report

Section 373.414(1)(b)2, F.S., requires the District and DEP to report by March 1 of each year, as part of this report, all cash donations accepted as mitigation for use in duly noticed environmental creation, preservation, enhancement, or restoration projects that offset impacts permitted under Section 373, Part IV, F.S., Management and Storage of Surface Waters. The report is required to include a description of the endorsed mitigation projects and, except for projects governed as mitigation banks or regional offsite mitigation, must address, as applicable, success criteria, project implementation status and timeframe, monitoring, long-term management, provisions for preservation, and full cost accounting. The report specifically excludes contributions required under Section 373.4137, F.S. (regional mitigation for specified transportation impacts).

The Northwest Florida Water Management District implemented Environmental Resource Permitting (ERP) Phase II (wetland resource permitting), jointly with DEP, beginning on November 1, 2010. Any cash donations accepted by the District as mitigation during the current fiscal year will be reported annually in this report. No cash donations were received in FY 2010-2011.

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Chapter Seven: Surface Water Improvement and Management Program Summary Report

7.1 Introduction

Section 373.036(7)(d), F.S., provides that districts may include in the Consolidated Annual Report additional information on the status or management of water resources as deemed appropriate. The NWFWMD has a long-term program to protect and restore watershed resources. The Surface Water Improvement and Management (SWIM) program provides the framework for watershed and project planning for the major riverine-estuarine watersheds as previously indicated above in Figure 5-5.

7.2 SWIM Priority List

The Northwest Florida Water Management District's SWIM Priority list is provided in Table 7-1. Pursuant to Section 373.453, F.S. Periodically or when substantial new sources of funding becomes available for implementation, the SWIM priority list may be reviewed with updates as reflected in this section. In addition to respective watersheds, the list identifies major tributaries and waterbodies. All other tributaries, sub-embayments, and contributing basins are also considered as being within the listed priority waterbodies.

SWIM plans in northwest Florida attempt to address the cumulative adverse effects of existing development on water quality and natural systems through assessment, regional stormwater retrofit, and mutually beneficial natural systems restoration projects. The positive benefits of SWIM projects are cumulative and long lasting. Figure 5-5 above shows the distribution of previously SWIM coordinated capital improvements which have been implemented through a variety of activities, including stormwater retrofits for water quality and flood protection improvement, wetland and aquatic habitat restoration, freshwater needs assessments and other resource assessments, springs protection, public outreach and awareness, and intergovernmental review of proposed land use changes and other activities.

Historically, SWIM plan implementation has integrated and leveraged a variety of funding sources, including SWIM (s. 451-459, F.S.), the Water Management Lands Trust Fund (s. 373.59, F.S.), Florida Forever (s. 259.105 and s. 373.199, F.S.), legislative special appropriations, the Water Protection and Sustainability Program (s. 403.890, F.S.), state and federal grants, and funding through local government partnerships. Cumulatively, the overall effort has resulted in significant protection and improvement of water resources District-wide. However, in the last two years there have been no new sources of revenue, and there are no significant sources of revenue available for the District to continue to implement SWIM plans. There are only potential sources to pursue, such as federal Natural Resource Damage Assessment funding and limited potential to generate revenue for water resources restoration and protection through wetlands mitigation. Thus, the current financial status for the SWIM program is that there is a significant list of projects proposed which would accomplish the SWIM plan goals and objectives but funding is extremely limiting; allowing only low level planning activities to enable pursuit of some of them.

Table 7-1. NWFWMD SWIM Priority List

Watershed		SWIM Plan Status
Apalachicola River and Bay Watershed		
Apalachicola River Apalachicola Bay Chipola River	New River Lake Seminole	Plan update approved 1996
Pensacola Bay System		
Escambia River Blackwater River Yellow River Shoal River East Bay River Pensacola Bay	Escambia Bay East Bay Blackwater Bay Western and Central Santa Rosa Sound Big Lagoon	Plan update approved 1997
Choctawhatchee River and Bay Watershed		
Choctawhatchee River Holmes Creek Choctawhatchee Bay	Eastern Santa Rosa Sound	Plan update approved 2002
St. Andrew Bay Watershed		
St. Andrew Bay North Bay West Bay East Bay	St. Joseph Bay Deer Point Lake Reservoir Econfina Creek	Plan approved 2000
St. Marks River and Apalachee Bay Watershed		
St. Marks River Wakulla River Lake Miccosukee	Lake Lafayette Lake Munson Apalachee Bay	Plan update approved 2009
Ochlockonee River and Bay Watershed		
Ochlockonee Bay Ochlockonee River	Lake Jackson Lake Iamonia	Draft plan complete 2011 Lake Jackson plan update approved 1997
Perdido River and Bay Watershed		
Perdido River	Perdido Bay	Draft plan complete 2011

Chapter Eight: References

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