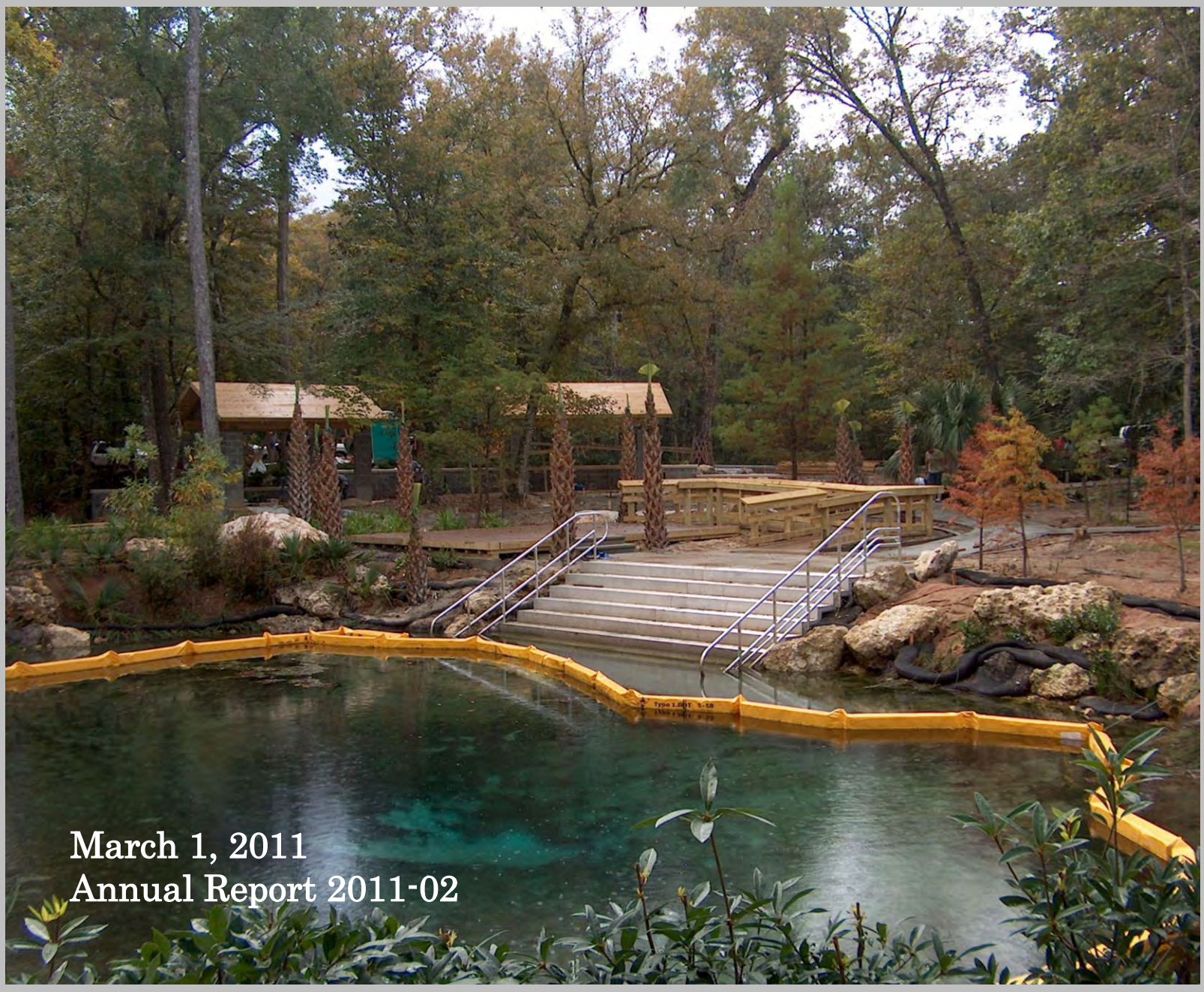


Northwest Florida Water Management District

Consolidated Annual Report



March 1, 2011
Annual Report 2011-02

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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ANNUAL REPORT 2011-02

Cover photos of 2009-2010 activities include (from top left): tidal creek and wetland restoration at Liza Jackson Park in Fort Walton Beach; NWFWMD's new West Region land management field office; shoreline restoration and oyster reef establishment at Live Oak Point on Choctawhatchee Bay; and restoration of the Pitt Spring complex in the Econfina Creek Water Management Area.

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4 – Water Supply ..... Christina Coger
5 – Florida Forever Work Plan Annual Report ..... Carol Bert, Christina Coger, Leigh Brooks, and Paul Thorpe
6 – Mitigation Donation Annual Report ..... Lee Marchman, Duncan Cairns, and Leigh Brooks
7 – SWIM Program Summary Report ..... Paul Thorpe

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Introduction

Pursuant to Section 373.036(7), Florida Statutes (F.S.), a consolidated annual report on District programs is submitted by March 1st of each year to the Governor, the President of the Senate, the Speaker of the House, 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 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.

As provided under s. 373.036(7)(b), Florida Statutes (F.S.), the consolidated annual report must include the following elements:

- A District Water Management Plan annual report or an annual work plan report on strategic plan implementation;
- The DEP approved Minimum Flows and Levels annual priority list (per s. 373.042(2), F.S.);
- The annual Five-year Capital Improvement 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, the statute provides that districts may 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 provides 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.

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

- Strategic Water Management Plan (SWMP), newly approved (s. 373.036, F.S.) – www.nwfwmd.state.fl.us/pubs/swmp2010/swmp2010.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 Florida Department of Transportation (s. 373.4137, F.S) – www.nwfwmdwetlands.com.
- Flood hazard mapping updates for 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/swmp2010/swim.html.

This consolidated annual report is available through the District's web site at www.nwfwmd.state.fl.us/pubs/consolidatedAR/consolAR.html.

1. 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 requirement to develop a 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/swmp2010/swmp2010.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.

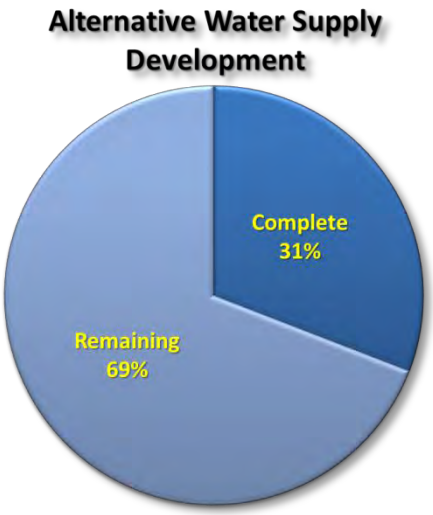
1.2 FY 2011-2015 SWMP Implementation – Strategic Priorities

The following pages describe progress toward accomplishment of the District's strategic priorities, as defined within the FY 2011 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 projects as follows:



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

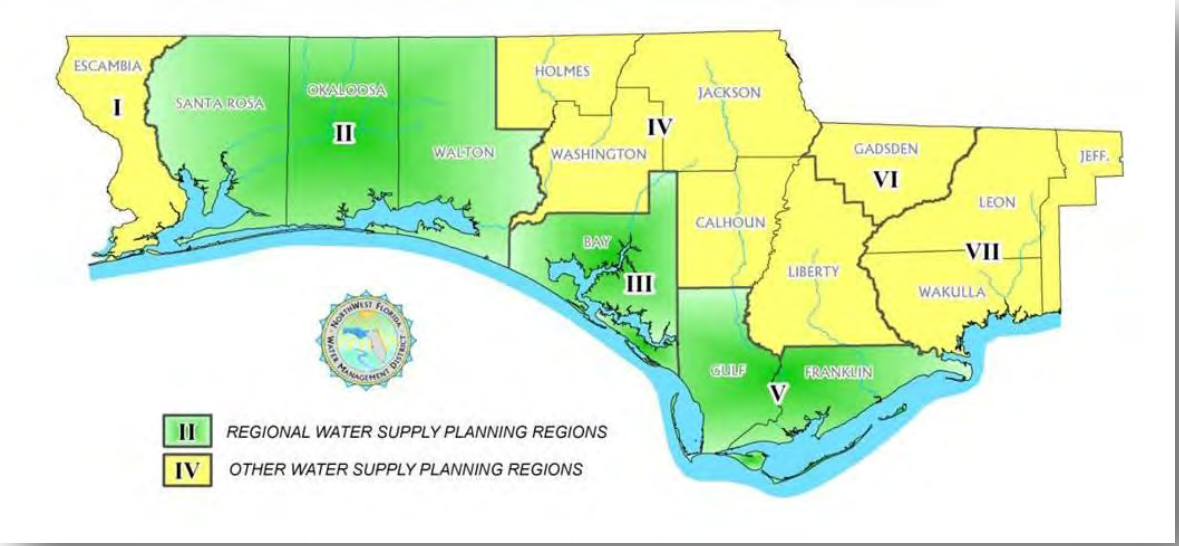
- Inland Sand and Gravel Wellfield Expansion (Santa Rosa County) – 18 million gallons per day (mgd)
- Inland Floridan Aquifer Wellfield Expansion (Walton County) – 9 mgd
- Surface Water Sources (Okaloosa County) – 25 mgd
- Water Reuse Facilities – 5 mgd

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



The success indicator is defined as **alternative water supply made available**. The criterion 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 22 mgd of alternative water supply has been developed and permitted, which equates to 31% of the target.

Indicator Evaluation			
Water Supply Planning Region	*AWSD Target (mgd)*	*Complete*	*Percent Complete*
Region II	57	16	28%
Region III	5	0	0%
Region V	9	6	67%
NWFWMD Total	71	22	31%
FY 2010 Milestones			
Milestone / Deliverable		*Schedule / Status*	
Walton Co. Inland Wellfield Expansion		Completed 2010	

Specific Accomplishments – Alternative Water Supply Development

- The District has to date received over $21 million in Water Protection and Sustainability Program appropriations, matched by over $56 million in local funding for alternative water supply development. Okaloosa County's Bob Sikes Water Reclamation Facility was completed in 2010, and work continues on Wakulla County reuse and Bay County inland ground water projects.
- Regional Utilities completed expansion of an inland wellfield as an alternative water supply for southern Walton County. The wellfield includes eight wells with a maximum capacity of approximately 16.8 mgd. Associated facilities constructed included a second 24-inch transmission pipeline across Choctawhatchee Bay.
- The District began to work cooperatively with Okaloosa County to determine the feasibility of purchasing a 562-acre watershed for a 160-acre pumped storage reservoir designed to hold direct withdrawals from the Shoal River.
- The District continues to provide educational guidance on water conservation to utilities, local governments, and residents. Over 93,770 brochures and other documents have been distributed through fiscal year 2010. As of September 2010, 34 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 2010, the District awarded a $50,000 grant to help the City of Port St. Joe upgrade its aging water distribution system. The District also awarded grant funding to help the City of Laurel Hill complete its water supply facilities work plan and to help the City of Paxton complete needed well improvements.
- The District helped the Eastpoint Water and Sewer District develop two inland test-production wells for future use. This will enable reduced use of wells closer to the coast and thus avoid salt water intrusion impacts.
- The District provided a $100,000 grant to the City of Carrabelle for evaluation of a potential interconnection with the Alligator Point Water Resources District. The grant also helped the city enact a conservation rate structure.
- 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 $400,000 grant for construction.

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 with the planning and design of priority water system interconnections. The underlying objective is to enhance coastal water systems resilience and reliability by enabling 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 a major milestone will be the Phase I Plan, including the Basis of Design Report, which is scheduled for completion by September 30, 2011. Evaluations completed to date include hydraulic modeling, water quality blending analysis, and the initial alternatives analysis.

Indicator Evaluation

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

Specific Accomplishments – Coastal Utilities Interconnection

- Hydraulic modeling, water quality blending analysis, and the initial alternatives analysis and selection were all completed during 2010.

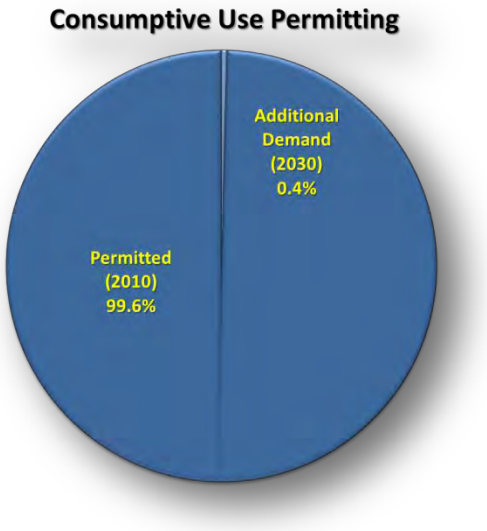
Strategic Priority: Consumptive Use Permitting

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 use regulation is implemented 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 permit areas that are established based on 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 257 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 Permitted*
Consumptive use demand permitted	258	257	99.6%

*Public Supply

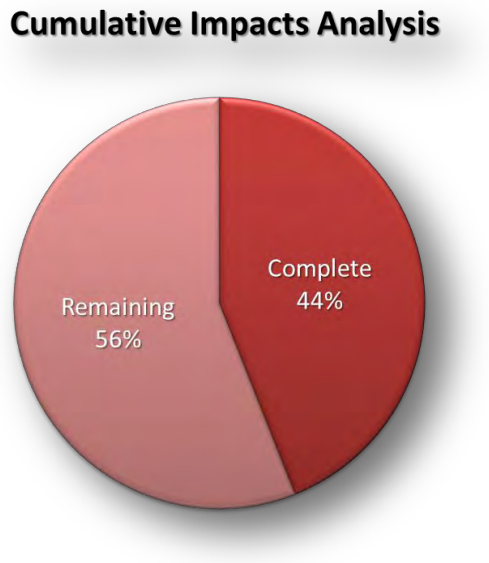
Specific Accomplishments – Consumptive Use Permitting

- The District approved a rule change to allow use of shallow wells for non-potable uses in coastal Gulf and Franklin counties. The rule was amended to help sustain Floridan Aquifer water for potable use and reduce regulation on small users. The change extends exemptions previously existing in other coastal areas.
- Regulation of Wells Program continues to promote proper plugging and abandonment of wells throughout northwest Florida, with over 1,077 wells plugged 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 2009-2010, the District provided grants totaling $108,944. Funds were used mainly to plug 48 large-diameter agricultural irrigation wells on the former First American Farms site that were a potential hazard to the Walton County inland wellfield.
- The Regulation of Wells Program enhanced service to Florida licensed water well contractors by adding online account functionality to pay for applications, request extensions, and check permit and application status. Another recent service upgrade allows licensed contractors to make required notifications to the District via an automated telephone system. Both services allow contractors 24-hour access.

Strategic Priority: Cumulative Impacts Analysis

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

Florida Statutes Section 373.016(2) requires water management districts to manage water resources to ensure their sustainability, taking cumulative impacts to those resources into account. The NWFWMD 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. The 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	44%
Assessment Status		
SWIM Priority Watershed	Waterbody Assessment	Percent Complete
Apalachicola River and Bay	Jackson Blue Springs	40%
Pensacola Bay System	Inland Sand and Gravel Aquifer	40%
Choctawhatchee River and Bay	Morrison Spring	10%
St. Andrew Bay	Deer Point Lake Reservoir/North Bay	100%
St. Marks River Watershed	Wakulla Springs/St. Marks River	30%

* 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 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 as part of 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.

Strategic Priority: Environmental Resource Permitting

Fully implement Environmental Resource Permitting in Northwest Florida.

Environmental Resource Permitting (ERP) is the regulatory program recently established for the geographic area of the Northwest Florida Water Management District. It is jointly administered 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 (Chapter 62-25, FAC) 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 requirements applicable to sensitive karst areas.

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

The established target for ERP is 100% timely issuance of qualified permits. During FY 2010, the District received and issued 251 qualified permit applications. The average review period was approximately nine days, as compared with the statutory maximum of 90. None fell outside of the 90 day period, signifying the program has been successfully implemented in an efficient and effective manner and in full compliance with permit requirements.

Indicator Evaluation

Indicator	*Target*	*Qualified Applications (FY 2010)*	*Percent Complete*
Timely issuance of qualified permits	100%	251	100%

FY 2010 Milestones

Milestone / Deliverable	*Schedule / Status*
ERP Phase II Enacted	Complete (November 1, 2010)

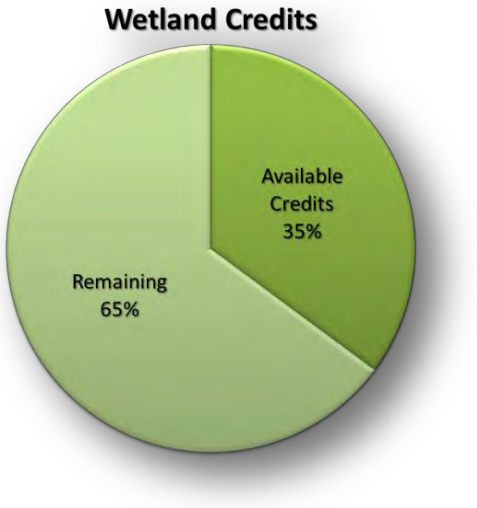
* Inclusive of all permits required to be issued during FY 2010. Permits still under review at the end of the FY will be included in next year's report.

Specific Accomplishments – Environmental Resource Permitting

- ERP is fully operational in northwest Florida. Phase I (stormwater) began in 2007 to address water quality and flow from construction and development. Phase II (wetlands) began in November 2010. Phase II enhances protection of isolated wetlands not previously protected by state law in northwest Florida.
- The District has implemented e-permitting. Via the Internet, applicants are able to see if a project or activity is exempt, electronically submit a permit application and supporting documentation, and access permit status. The public can access the system to view permit applications or to sign up for notices by email.

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, 602.64 credits have been developed. Of this total, 419.83 have been used. The target established is to develop 520 wetland mitigation credits by 2015.

Indicator Evaluation			
Indicator	*Target*	*Developed Credits*	*Percent Complete*
Credits developed	520	182.81	35%
FY 2010 Milestones			
Milestone / Deliverable		*Schedule / Status*	
Annual Update		Current	

Specific Accomplishments – No Net Loss of Wetland Function

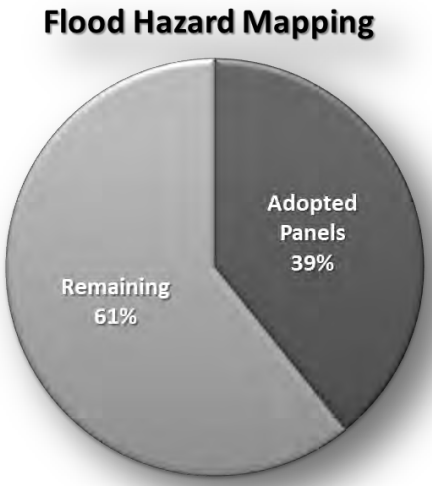
- Nuisance shrub and exotic grasses were treated at five DOT mitigation sites, including Perdido River, Yellow River Ranch, Lafayette Creek, Sand Hill Lakes Mitigation Bank, and Ward Creek West. Herbicide treatment removed invasive species while preserving native vegetation.
- District staff are updating the mitigation plan to be compliant with mitigation banking and in-lieu fee rules under 40 CFR Part 230. The plan provides compensatory wetland mitigation for impacts caused by DOT projects, as well as others.
- Restoration and management of the 2,155-acre Sand Hill Lakes Mitigation Bank in Washington County included sand pine plantation removal, exotics removal, shrub reduction and re-planting of native grasses.
- Restoration of 1,600 feet of shoreline continues at Live Oak Point on Choctawhatchee Bay. The 475-acre property is located north of Hogtown Bayou in Walton County and consists almost entirely of estuarine marsh. This restoration provides mitigation and protects the bay.

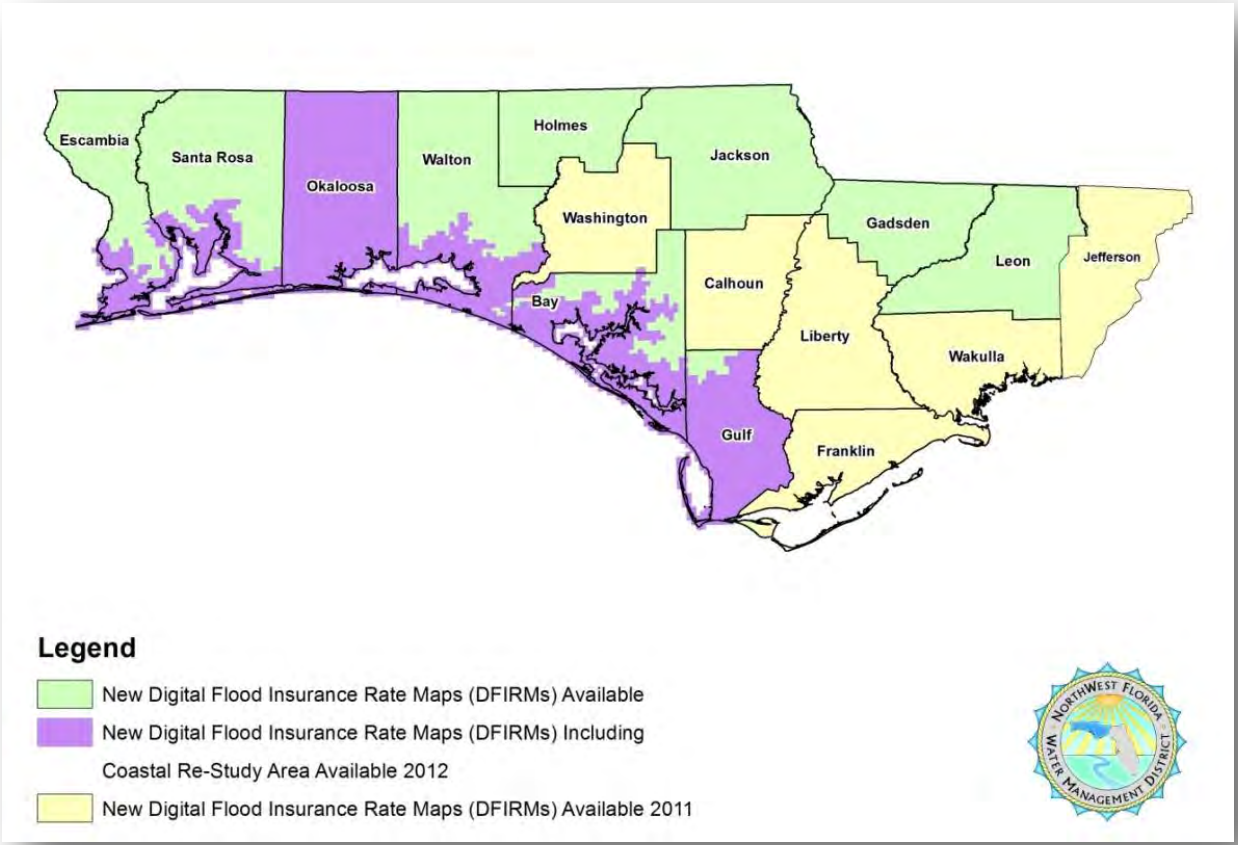
Strategic Priority: Flood Hazard Mapping

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 and support action that reduces risk to life and property. Risk MAP aims to foster informed risk management decisions and actions to mitigate flood risk through a consistent risk-based 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.

Indicator Evaluation			
Indicator	*Target*	*Complete*	*Percent Complete*
All new map panels adopted for low-lying coastal and riverine communities	1,261	495	39%
FY 2010 Milestones			
Milestone / Deliverable	*Schedule / Status*		
Business Plan update	2010 (complete)		

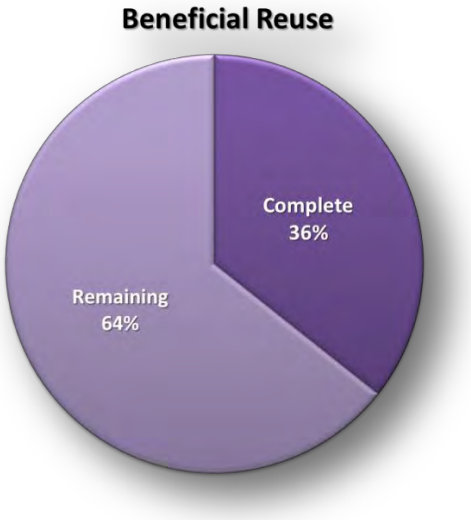
Specific Accomplishments – Flood Hazard Mapping

- During FY 2009-2010, final effective DFIRMs were completed for Walton County. Final DFIRMs for Escambia, Santa Rosa, Bay, Gulf, Gadsden, and Leon counties had previously been completed. Preliminary DFIRMS have been completed in Calhoun, Holmes, Jackson, and Washington counties, and work continues on updating maps in Franklin, Jefferson, Liberty, and Wakulla counties.
- An agreement with the City of Tallahassee and Leon County to continue a stormwater flow monitoring program was approved in September. The program includes operation of 51 surface water and rainfall data collection stations. The District has operated this monitoring network for 20 years. The agreement also provides a real-time radio telemetry flood warning network that is a cooperative program involving the District, Leon County, and the National Weather Service (NWS). It includes 14 stream and rainfall stations that help identify developing flood conditions for emergency management staff. The District and the NWS cooperate on the management and operation of Leon County's flood warning network.
- Work also continues on an initiative to develop more accurate coastal flood hazard maps. The project involves utilizing previously acquired detailed elevation data and performing hydrologic and storm surge modeling to produce more detailed DFIRMs for local governments. Work on Wakulla, Franklin, and Jefferson counties is nearing completion, and work on Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties is ongoing.
- In partnership with the FEMA, Risk MAP efforts continue. In addition to the coastal analysis project, riverine analysis efforts in Escambia, Santa Rosa, Okaloosa, Bay, and Gulf counties to update existing DFIRMs are planned or are underway.

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 reported wastewater flow from major facilities in 2009 was 94.84 mgd. The 30 mgd target value may need to be reevaluated upon completion of the reuse plan.

Indicator Evaluation

Indicator	*Target (mgd)*	*Current (mgd)*	*Complete*
Additional beneficial reuse from priority facilities, as identified in the District Reuse Plan*	30	11	36%

FY 2010 Milestones

Milestone / Deliverable	*Schedule / Status*
Okaloosa Co. Bob Sikes WRF Facility Complete	2010 (complete)

*Under development; to be completed in 2011

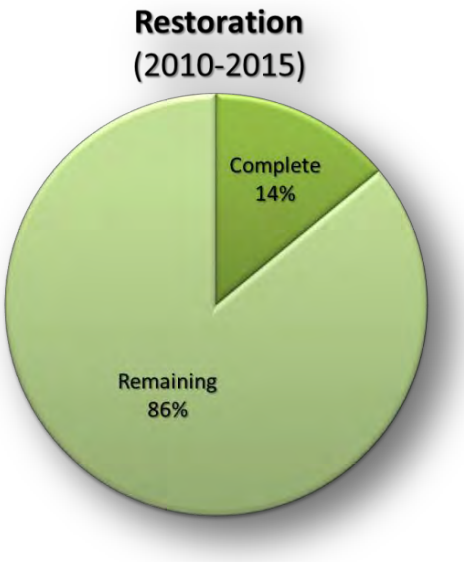
Specific Accomplishments – Reuse of Reclaimed Water

- The District has 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 improved surface and ground water quality.
- Construction of Okaloosa County's Bob Sikes Water Reclamation Facility has been completed, providing up to 700,000 gallons per day (0.7 mgd) of new public access reuse water.

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.



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* (under development)
- *Perdido River and Bay SWIM Plan* (under development)
- *Tate's Hell State Forest Hydrologic Restoration Plan* (2010)
- *Florida Forever Capital Improvements Plan*

Indicator Evaluation			
Indicator	*Target**	*Complete*	*Percent Complete*
Acres Restored	30,000	4,236	14%

** 2010-2015*

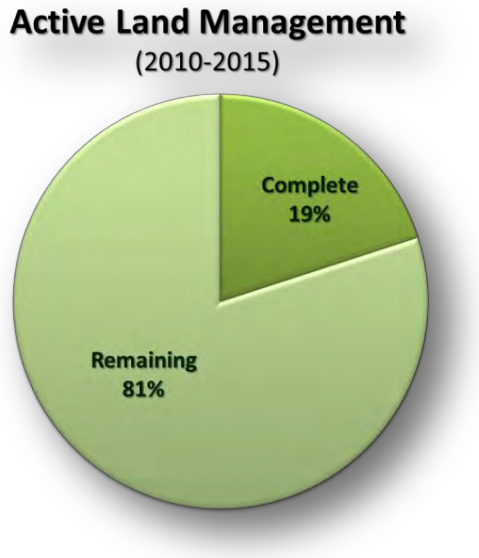
The success indicator for Restoration is to **accomplish watershed-scale restoration initiatives across District lands and for priority waters identified in SWIM and land management plans**. The 2010-2015 restoration target is 30,000 acres.

Specific Accomplishments – Restoration

- A hydrologic restoration plan was completed for Tate's Hell State Forest, which covers nearly 205,000 acres in Franklin and Liberty counties. The plan identifies and prioritizes areas for restoration and includes conceptual designs for priority projects. It also includes recommendations for monitoring and maintenance and clarifies agency roles and responsibilities. The plan's goals are to restore the quality of surface water flows and runoff discharged to East Bay, Apalachicola Bay, and surrounding waters; to restore wetland hydrology and functions; and to restore a mix of native ecological communities.
- The District completed the Whiskey George basin restoration project of the Tate's Hell restoration plan, enhancing wetlands, restoring historic drainage, and improving water quality across a 2,850-acre area. Six miles of dirt logging roads and adjacent ditches were removed, and six hardened low water crossings and several ditch plugs were installed. The Pine Log Creek basin project will begin construction in 2011. Hydrology, wetlands, and water quality will be restored across a 15,000-acre basin.
- SWIM plans are under development for the Ochlockonee River and Bay and Perdido River and Bay watersheds. These watersheds cover 691,000 and 160,000 acres of northwest Florida respectively. Encompassed strategies are expected to include stormwater treatment and habitat restoration. The plans will support District management actions and cooperative local government projects. Governing Board approval is anticipated in 2011.
- Grant recipients have continued progress in completing Florida Forever capital improvement projects with watershed benefits. Eight projects were completed in 2010 within Franklin, Gulf, Okaloosa, Escambia, and Bay counties. Together, these activities provided restoration and new water quality treatment for 687 acres.
- In 2010, the District completed restoration of the Pitt Spring Complex associated with Econfina Creek in Bay County. The cracked retaining wall was removed and restored to a more natural condition using limestone boulders and native vegetation.
- In partnership with and for Leon County, construction of the Okeeheepkee Prairie Regional Stormwater Treatment Facility was completed adjacent to Meginniss Arm of Lake Jackson. The wetland treatment system reduces pollutants from runoff discharging from 328 acres of before it enters the lake.
- The District rehabilitated a 10-acre, three-cell artificial marsh at the Lake Jackson Regional Stormwater Facility by removing invasive plants and planting approximately 35,000 native wetland plants. The marsh provides nutrient removal for a 2,230-acre watershed before runoff enters the lake.
- The District, with federal, state, and local partners, has completed detailed elevation data for the entire District, acquired through Light Detection and Ranging (LiDAR) technology. Efforts continue for processing and distribution to the public.
- Habitat restoration was completed on 363 acres of District land. Approximately 50,820 longleaf pines, 91,708 slash pines, 13,310 pond cypress, and 16,568 hardwood trees were planted. Additionally, 614,680 wiregrass tubelings and 77,440 toothache grass tubelings for groundcover restoration.

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, District has preserved over 221,000 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 210,498 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.

Indicator Evaluation			
Indicator	*Target**	*Complete*	*Percent Complete*
Acres active management	50,000	9,709	20%

** 2010-2015*

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.

Specific Accomplishments – Lands Management

- Through agreement with Liberty County, substantial work was accomplished toward providing all-weather public access roads on Florida River Island in Liberty County, a popular portion of the Apalachicola River Water Management Area (WMA). These improved roads provide public access to approximately 6,000 acres of floodplain with excellent hunting, fishing, and hiking opportunities.
- Timber harvests were ongoing or completed on the District's Econfina Creek, Ward Creek West, and Perdido River water management areas.
- The new Whitewater Lake camping area was prepared for a 2011 opening. This site will be the District's newest group camping site, where reservations are required to secure the site. These group sites are very popular due to the unique private experience

that is available to the public at no cost through a simple reservation system.

- The District acquired 494 acres along the Escambia River in 2010.
- In support of the Pitt Spring restoration, an enhanced canoe dock was installed along with a float tube launching dock. Boardwalks have been constructed, along with viewing decks and decorative wooden rail fencing. Improved parking, a composting restroom, and picnic pavilions have also been constructed.
- District staff continue to work with equestrian users to evaluate, develop, and maintain horse trails on the Econfina Creek and Perdido River WMAs. During 2009-2010, equestrian trail development was started on the Lafayette Creek tract in Walton County. Virtually all equestrian trail planning, construction, and maintenance are performed by volunteers.
- A grand opening was held for the new canoe and kayak launching facility at Fillingim Landing on the Perdido River WMA in Escambia County. This facility provides public access to an area of the Perdido River that has not had a public launching location for many years.
- The District completed construction of a permanent field office in Milton to house the Western Region Land Management operations. This facility replaced a rented office that did not have adequate space for the region's equipment inventory.

2. 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 are 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 (2010)

#	Waterbody	WB Type	County	2009 List	2010 List	Date Est.	Peer Rev.	Reason for Schedule Change	Existence of or Potential for Significant Harm
1	Floridan Aquifer	A	Coastal Portions of Santa Rosa, Okaloosa, Walton	2010	2017		N	Aquifer is sustainable through consumptive use permits	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	2010	2015		N	Need for greater resolution identified	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	2010	2017		N	Potential for development of this resource has greatly diminished	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 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.

WB Type: A=Aquifer, Fl=Floridan, E=Estuary, L=Lake, R=River, S=Spring, W=Wetland; 2010 List=anticipated MFL establishment date proposed in October 2010; Peer Rev.=voluntary peer review of MFL; * MFL in rule making; ** MFL rule challenged.

3. 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 2010-2011 through 2014-2015. 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 2010-2015

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS

2.1 Land Acquisition

Revenues ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Water Management Lands Trust Fund	279,473	100,000	250,000	275,000	300,000
Florida Forever	150,000	0	3,750,000	3,750,000	3,750,000
Department of Defense REPI Funds	1,800,000	0	0	0	0
District Land Acquisition Reserve	200,000	250,000	0	0	0
TOTAL	**2,429,473**	**350,000**	**4,000,000**	**4,025,000**	**4,050,000**

Expenditures ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Florida Forever - Land Acquisitions	150,000	0	3,750,000	3,750,000	3,750,000
Land Acquisition	200,000	250,000	0	0	0
Nokuse Plantation CE (Eglin AFB Buffer)	1,800,000	0	0	0	0
Water Management Lands Trust Fund	279,473	100,000	250,000	275,000	300,000
TOTAL	**2,429,473**	**350,000**	**4,000,000**	**4,025,000**	**4,050,000**

2.2 Water Source Development

Revenues ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Florida Forever	150,000	0	500,000	500,000	500,000
TOTAL	**150,000**	**0**	**500,000**	**500,000**	**500,000**

Expenditures ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Florida Forever - Land Acquisitions	150,000	0	500,000	500,000	500,000
TOTAL	**150,000**	**0**	**500,000**	**500,000**	**500,000**

2.3 Surface Water Projects

Revenues ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
DOT Mitigation Funds	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
TOTAL	**12,000,000**	**12,000,000**	**12,000,000**	**12,000,000**	**12,000,000**

Expenditures ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
DOT Mitigation Funds	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
TOTAL	**12,000,000**	**12,000,000**	**12,000,000**	**12,000,000**	**12,000,000**

2.5 Facilities Construction and Major Renovations

Revenues ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Florida Forever	0	0	0	0	0
Water Management Lands Trust Fund	0	100,000	0	100,000	0
TOTAL	**0**	**100,000**	**0**	**100,000**	**0**

Expenditures ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Marianna Field Office (Renovate for add. Office space – Field Staff)	0	100,000	0	100,000	0
TOTAL		**100,000**	**0**	**100,000**	**0**

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 Land Management

Revenues ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Water Management Lands Trust Fund	775,000	350,000	400,000	300,000	800,000
Florida Forever	1,000,000	0	0	0	0
TOTAL	1,775,000	350,000	400,000	300,000	800,000

Expenditures ($)	Fiscal Year				
	2010-11	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Public/Land Management Access Bridges	175,000	300,000	300,000	300,000	300,000
Choctawhatchee Basin Recreation Sites	400,000	0	0	0	0
Spring Restoration	1,000,000	0	0	0	500,000
Chipola River Recreation Sites	100,000	0	100,000	0	0
Public Access Road Construction	50,000	0	0	0	0
Creek Bank and Solution Hole Stabilization	50,000	50,000	0	0	0
TOTAL	**1,775,000**	**350,000**	**400,000**	**300,000**	**800,000**
TOTAL CAPITAL EXPENDITURES ($)	**16,354,473**	**12,800,000**	**16,900,000**	**16,925,000**	**17,350,000**

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 2010-2011

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, 2011

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, 2011.

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: Econfina Springs Complex – Restoration and Protection Project, Phase I - Pitt/Sylvan Springs and Phase II - Williford Springs

Type: Multiple Spring Restoration and Protection Project

Physical Location: Econfina Creek Water Management Area

Square Footage/Physical Description: Proposed restoration and protection of Pitt, Sylvan and Williford springs. 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 almost complete, but construction stabilization and landscape grown-in expected to take 12 to 18 months. Fifty-percent designs are being prepared for Phase II – Williford Spring. Final designs for Phase II are anticipated to be complete by the summer of 2011. Construction of Phase II is scheduled to begin on or before September 30, 2011, 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 was completed in late 2007.

Expected Completion Date: Phase II - September 30, 2012

Historical Background/Need for Project: Project will prevent erosion/sedimentation/water quality impacts 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): $1,000,000, 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: Public/Land Management Access Road Construction (Materials Only)

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

Physical Location: Davisson Road, East Milton, Fl. – Blackwater River Water Management Area

Square Footage/Physical Description: Asphalt Davis Road – approx. 40,000 square feet

Expected Completion Date: January 30, 2011.

Historical Background/Need for Project: Davisson Road is currently clay that experiences considerable erosion during heavy rainfall events. Paving the road will lessen erosion and provide enhanced public/land management access to a portion of the Blackwater River WMA and to the new West Region Field Office.

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 a nearby drain, hinder vehicular access by the public to District lands, hinder access by staff to the West Region Field Office.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Cooperative project with Santa Rosa County - $50,000 for asphalt only. County 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: Erosion Control Stabilization/Structures

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

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

Expected Completion Date: September 30, 2011

Historical Background/Need for Project: Devil's Hole, Devil's Hole Spring and Sea Shell 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 bank and spring bank. The project will stabilize highly erodible slopes and creek/spring banks while providing for public/recreational access to these three 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 $50,000.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at $20,000 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 – 1) River Landing and Dead River Landing Boat Launch and Campsite Areas (Cooperative Agreement - Walton County), and; 2) Hightower, Spurling and Live Oak Landings Boat Launch, Stream bank Stabilization, and Other Recreational Facilities (Cooperative Agreement - Washington County)

Type: Public Recreation Site Development/Improvement

Physical Location: 1) River Landing and Dead River Landing Boat Launch and Campsite Areas – Walton County, Choctawhatchee River Water Management Area, and; 2 Hightower, Spurling and Live Oak Landings Boat Launch, Stream bank Stabilization, and Other Recreational Facilities, Holmes Creek Water Management Area

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

Expected Completion Date: All locations, subject to final engineering designs and permitting – September 30, 2011.

Historical Background/Need for Project: All boat landings/campsites are experiencing heavy use and abuse by the recreational public. In addition, all landings need additional site development and improvements to regulate parking, stormwater and camping. Boat 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 these popular public access and recreation sites.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): 1) Estimated at $200,000 – Walton County sites, and; 2) Estimated at $200,000 – Washington County sites (Local Govts. 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, and 2) $10,000 - 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 $10,000 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: Boat Launch Repair/Improvement, Access Ramps/Boardwalks, Stormwater, Erosion Control Stabilization/Structures

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, Erosion Control Stabilization/Structures, etc., subject to engineering design.

Expected Completion Date: September 30, 2011

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 $100,000.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at $25,000 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 $10,000 annually for site cleanup and maintenance

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.

4. Water Supply

4.1 Five-Year Water Resource Development Work Program: FY 2010-2011

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 the coastal area, where long-term pumping from Floridan Aquifer wells has caused a pronounced drawdown in the coastal Floridan Aquifer that could result in 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 are presently required and that water supply planning and implementation efforts should continue in regions II, III, and V (NWFWMD 2008a).

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 stressed as a means of improving water use efficiency and further ensuring long-term water resource sustainability. It should also 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 is discussed in more detail below.

Figure 4.1 Water Supply Planning Regions

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 2006b). 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. During the 2010-2011 fiscal year, the District will begin another update of the Region II RWSP, 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 Deer Point Lake Reservoir to 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 developed concurrently with the Region II RWSP update and was approved by the Governing Board in January 2007 (NWFWMD 2007). During the 2010-2011 fiscal year, staff will likely begin working on an update to the RWSP.

All Regions

A major District priority is the coastal water systems interconnection initiative. Through this effort, the District will work in cooperation with local utilities to explore and develop possibilities for the interconnection of water supply systems. Significant investments in alternative water supplies in the coastal regions have resulted in a diverse base of water supply sources. Interconnection of water supply systems is expected to 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.

The initial interconnect reconnaissance study was completed in January 2009. This study resulted in development of a conceptual implementation plan and schedule, identification of candidate utilities from Gulf to Escambia counties, and identification of key issues and challenges. Work continues on

developing alternative alignments, preliminary designs, and cost estimates. Phase I of this project, which includes analysis of utility emergency capacities, hydraulic modeling of utility interconnects, blending and water quality analysis of target utilities, evaluation and selection of alignment alternatives, conceptual designs and estimates of probable costs, is expected to be completed by September 2011.

The District has also initiated development of a District-wide reuse plan. The project 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 enhancing the sustainability of water resources and related natural systems. The plan will summarize potentially feasible reuse projects, including those previously proposed, for a 20-year timeframe that can be used to support RWSPs, SWIM plan updates, prioritization of grant funding, and other District objectives. Finally, development of this plan will also 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

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

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.

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.

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, Monitoring, and Analysis;
2. Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance;
3. Water Reuse and Conservation Assistance; and
4. Regional Water Supply Plan Implementation.

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

Funding for Water Resource Development

Since 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. To date, the District has identified or secured funding for WRD and supply development 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 included 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. Because of this, new capital project funding from the District has been greatly diminished.

Water resource development activities and support functions will continue to be funded with the Water Management Lands Trust Fund (WMLTF), grant funds, and other sources as available. The District has also set aside reserves that may be necessary to fund WRD efforts and water supply development assistance, including possible funding for other regions in the future. Major District expenditures for land acquisition and protection of important recharge lands should also be recognized. Future acquisitions, however, are constrained by the availability of Florida Forever funding.

The District assists with priority 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 public access reuse projects in the City of Tallahassee and in Wakulla County, and assistance in the extension of water systems within central Gadsden County.

Funding budgeted for WRD is listed within the project descriptions below and in summary tables for regions II, III, and V (Tables Table 4.10, Table 4.14, and Table 4.19, respectively). The total proposed FY 2010-2011 WRDWP budget is $3,280,000. This amount will adequately fund the planned WRD programs for the year. It represents a significant increase from the previous year, reflecting continued implementation of the coastal water system interconnection and reclaimed water initiatives, initiation of the regional water supply plan update for Region II, and land acquisition and associated development of a surface water source in Region II. 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 Project 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. Projects completed during the last fiscal year include construction of a reclaimed water line in Freeport and interconnection of utilities in coastal Okaloosa County including well abandonment. Active projects include additional development of the Rock Hill inland wellfield in Walton County and transmission and interconnection support to the City of Freeport.

In Region III, the City of Callaway project to extend the water transmission system down the Allanton Peninsula was completed. Funding has been awarded to Bay County for development of an inland ground water source. Construction is anticipated to be in progress during FY 2010-2011.

In Region V, the District provided substantial assistance to the City of Port St. Joe in the construction of the City's new surface water treatment facility. Water supply development projects currently underway include water supply distribution system improvements for the City of Wewahitchka, as well as funding for water distribution system repairs in the City of Port St. Joe.

Alternative water supply development assistance and water resource development projects funded through the WPSPTF and other sources are listed in Chapter 4.2. 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, and 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, 2007c). 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 establishment of minimum aquifer levels. Current funding expectations are listed in Table 1. Project funding will be provided by the WMLTF.

Table 4.1 Floridan Aquifer Sustainability Model Applications and Support

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$136,000
Estimated 5-Year Cost (FY 11-15):	$246,000
Potential Funding Sources:	WMLTF
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 nearly 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 actual 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 10-11):	$ 77,000
Estimated 5-Year Cost (FY 11-15):	$192,000
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 potential 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 lays the groundwork for several potential technically and economically feasible AWS development projects, including direct river withdrawal (potentially with offline tributary surface impoundments) and riverbank filtration. The District also concurrently conducted an evaluation of the county's Yellow River Reservoir proposal 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 within potential project areas and more detailed evaluation of potential surface water project sites. Associated with these activities, the District will evaluate needs and opportunities for watershed resource protection, potentially including land acquisition and restoration.

Table 4.3 Development of Feasible Surface Water Resources

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$380,000
Estimated 5-Year Cost (FY 11-15):	$620,000
Potential Funding Sources:	WMLTF, WPSPTF, 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 potentially 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 further 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 at low cost more effectively than above ground storage facilities. 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 is coordinating with DEP and utilities regarding ASR permitting activities. In 2009, Destin Water Users was permitted for ASR in the lower portion of the Surficial Aquifer. Testing continues and if successful, it is estimated that 2.1 mgd of additional 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:	NWFWMD, Local governments, Utilities
Proposed FY Expense (FY 10-11):	$ 3,000
Estimated 5-Year Cost (FY 11-15):	$ 13,000
Potential Funding Sources:	NWFWMD, Utilities, local governments
Quantity of Water Made Available:	2.1 mgd
Project Status:	Ongoing

Strategy 5.0 Water Reuse Coordination

Of the 28 wastewater facilities permitted for 0.1 mgd or more in Region II, 17 are currently permitted or have future plans for public access reuse water. As of 2009, an estimated 9.63 mgd of reclaimed water was used for public access reuse in Region II (DEP 2010). This includes irrigation of an estimated 1,321 residences, 19 golf courses, seven parks, three schools and one cemetery.

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.

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 the fall of 2011.

District staff also continue to emphasize reuse and conservation in both resource regulation and in reviewing proposed comprehensive plan amendments and developments of regional impact (DRIs) District-wide. 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.

Table 4.5 Water Reuse Coordination

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$ 45,000
Estimated 5-Year Cost (FY 11-15):	$165,000
Potential Funding Sources:	WMLTF, Local Governments, Utilities
Quantity of Water Made Available:	5 mgd to date; More TBD
Project Status:	Ongoing

The funding represents an increase over previous years, largely due to increased staff time and utility coordination in the development of the reuse plan and anticipated future efforts in planning and implementing new projects. Additional construction funding assistance has been made available through other funding sources (Chapter 4.2). Planning, coordination, and assessment funding is provided through the WMLTF.

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 32,350 brochures distributed over the last four years. 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 2010, 34 hotels are participating in the program, including 15 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 2006, requests for the model have been sent on to Dr. Whitcomb for 31 utilities.

As with water reuse, District staff emphasize water conservation measures in both resource regulation and in reviewing proposed 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.

District staff provide technical assistance to local governments and state agencies in reviewing local water supply facility work plans and associated comprehensive plan amendments. The sufficiency of water conservation policies is a focus of these reviews. Additionally, in concert with a District-wide water reuse plan, District staff are compiling and evaluating data on the scope of water conservation efforts among utilities, with the objective of identifying those where improvements can be made.

These efforts complement measures established under the District's Regulatory program for the coastal WRCA. Under this program, new uses of the Floridan Aquifer for non-potable uses are not permitted. 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 10-11):	$ 26,000
Estimated 5-Year Cost (FY 11-15):	$ 86,000
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 will 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 DEP 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. In cooperation with the Department of Community Affairs (DCA) and DEP, District staff reviewed water supply facility work plans submitted by local governments as amendments to their comprehensive plans. Of the 18 local governments in Region II, reviews have been conducted for all three counties and nine municipalities.

During the past year, the District also continued RWSP and WPSPTF implementation tracking and coordination of program funding sources and contracts. The 2009-2010 WRDWP Annual Report was completed and incorporated into the March 1st Consolidated Annual Report (March 2010).

Table 4.7 Regional Water Supply Planning Strategies

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$1,220,000
Estimated 5-Year Cost (FY 11-15):	$1,445,000
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

The funding identified in Table 7 represents a substantial increase from previous estimates. This increase reflects the coastal interconnection initiative, including development and implementation of capital projects. This amount also reflects developing an update to the Region II RWSP, which will begin in FY 2010-2011.

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.

The District will continue to operate gauging stations on tributaries in the region, including within the Yellow and Choctawhatchee river basins. Ground water quality monitoring for saltwater intrusion and limited aquifer level monitoring will also continue. The monitoring network will continue to be useful to ensure that long-term water supply initiatives will be successful and for refining tools and analyses needed to make future management decisions and further develop water management strategies.

Table 4.8 Hydrologic Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$143,000
Estimated 5-Year Cost (FY 11-15):	$543,000
Potential Funding Sources:	WMLTF, WPSPTF
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 at total 3,982 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 2009-2010, the District permitted the proper plugging of 201 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. During FY 2009-2010, the District worked on major well abandonment programs at the former Owl's Head farm and the Nokuse Plantation, both in Walton County. Additional projects were completed for public supply wells with Okaloosa County Water and Sewer and Auburn Water System.

Well abandonment is an ongoing project and it is likely that more wells will be identified for plugging in the future. The projected increase in spending over the next fiscal year and the five-year planning timeframe is attributable to continued work on Nokuse Plantation, as well as other sites in the region. 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 10-11):	$ 55,000
Estimated 5-Year Cost (FY 11-15):	$175,000
Potential Funding Sources:	NWFWMD, 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. The District anticipates continued use of these sources to fund well plugging that is not associated with regulatory requirements.

Table 4.10 2010-2015 Region II WRDWP Project Funding

	Region II Water Resource Development Projects	RWSP Page #	FY 09-10* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 10/11 – FY 14/15)
				FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	
1	Floridan Aquifer Sustainability	21	$44,611	$136,000	$50,000	$30,000	$20,000	$10,000	$246,000
2	Inland Sand-and-Gravel Aquifer Sustainability	21	$45,062	$77,000	$45,000	$30,000	$20,000	$20,000	$192,000
3	Development of Feasible Surface Water Sources	22	$90,310	$380,000	$100,000	$80,000	$40,000	$20,000	$620,000
4	Aquifer Storage and Recovery Feasibility	23	$1,389	$3,000	$2,500	$2,500	$2,500	$2,500	$13,000
5	Water Reuse	24	$28,651	$45,000	$50,000	$30,000	$20,000	$20,000	$165,000
6	Water Conservation	24	$13,894	$26,000	$15,000	$15,000	$15,000	$15,000	$86,000
7	Regional Water Supply Planning Strategies (incl. Coastal Interconnect Project)	25	$224,855	$1,220,000	$75,000	$50,000	$50,000	$50,000	$1,445,000
8	Hydrologic Data Collection and Analysis	26	$83,687	$143,000	$100,000	$100,000	$100,000	$100,000	$543,000
9	Abandoned Well Plugging	27	$58,181	$55,000	$30,000	$30,000	$30,000	$30,000	$175,000
TOTAL			$590,641	$2,085,000	$467,500	$367,500	$297,500	$267,500	$3,485,000

* Preliminary cost figures; final cost distribution information was unavailable at the time this report was prepared.

Water Resource Development Projects – Region III: Bay County

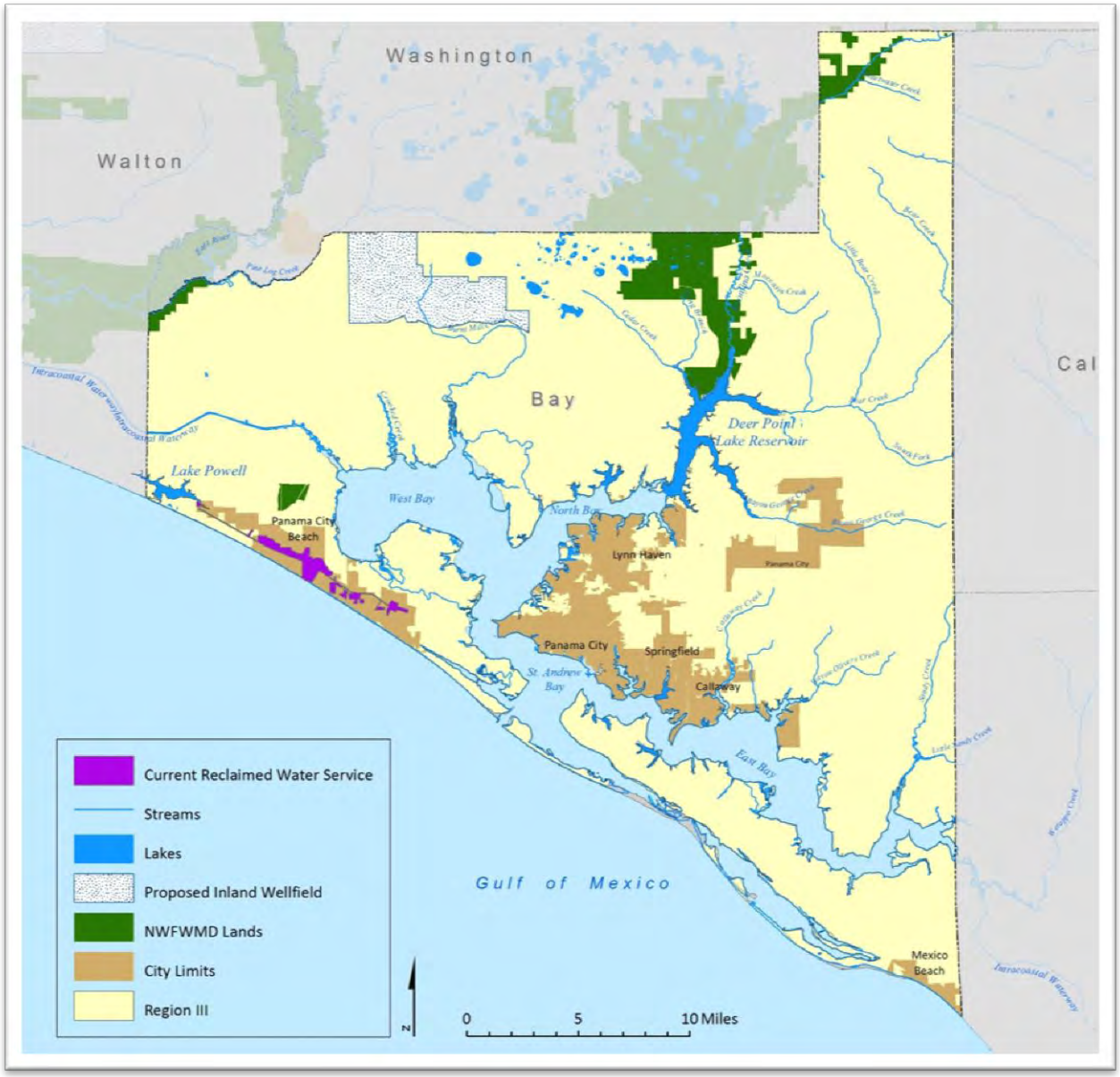


Figure 4.3 Water Supply Planning Region III

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 provided 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.

Table 4.11 Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

Implementing Agency:	Bay County, NWFWMD
Proposed FY Expense (FY 10-11):	$ 30,000
Estimated 5-Year Cost (FY 11-15):	$150,000
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 2007, an estimated 3.52 mgd of reclaimed water was used for public access reuse in Region III (DEP 2010). This includes irrigation of an estimated 820 residences, five 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. The reuse plan is scheduled to be complete in the fall of 2011.

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. Over the past two years, the District has distributed approximately 3,900 water conservation brochures to utilities and local governments in the county.

Additionally, District staff continue to review local government comprehensive plan amendments and water supply facility work plans and submit recommendations, as necessary, to local governments and DCA for fully implementing water conservation and reuse opportunities in both existing and newly developing areas. In particular, it is noted that the substantial future development proposed for Bay County provides an opportunity to develop both reclaimed water infrastructure and requirements and to promote water conservation at the earliest stages of community development.

Table 4.12 Water Reuse and Conservation Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$ 30,000
Estimated 5-Year Cost (FY 11-15):	$110,000
Potential Funding Sources:	WMLTF
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. In cooperation with DCA and DEP, District staff review and provide comments as appropriate on local government water supply facility work plans and comprehensive plan amendments.

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 10-11):	$ 870,000
Estimated 5-Year Cost (FY 11-15):	$1,070,000
Potential Funding Sources:	WMLTF, NWFWMD General Fund
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

The funding identified in Table 13 represents a substantial increase from previous estimates. This increase reflects the coastal interconnection initiative, including development and implementation of additional analysis and design.

Table 4.14 2010-2015 Region III WRDWP Project Funding

Region III Water Resource Development Projects		RWSP Page #	FY 09-10* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 10/11 – FY 14/15)
				FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	
1	Hydrologic and Water Quality Data Collection and Analysis	10	$29,532	$30,000	$30,000	$30,000	$30,000	$30,000	$150,000
2	Water Reuse and Conservation Assistance	10	$26,112	$30,000	$30,000	$20,000	$15,000	$15,000	$110,000
3	Coordination and Technical Assistance (incl. Coastal Interconnect Project)	10	$199,053	$870,000	$100,000	$50,000	$30,000	$20,000	$1,070,000
TOTAL			$254,698	$930,000	$160,000	$100,000	$75,000	$65,000	$1,330,000

* Preliminary cost figures; final cost distribution information was unavailable at the time this report was prepared.

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

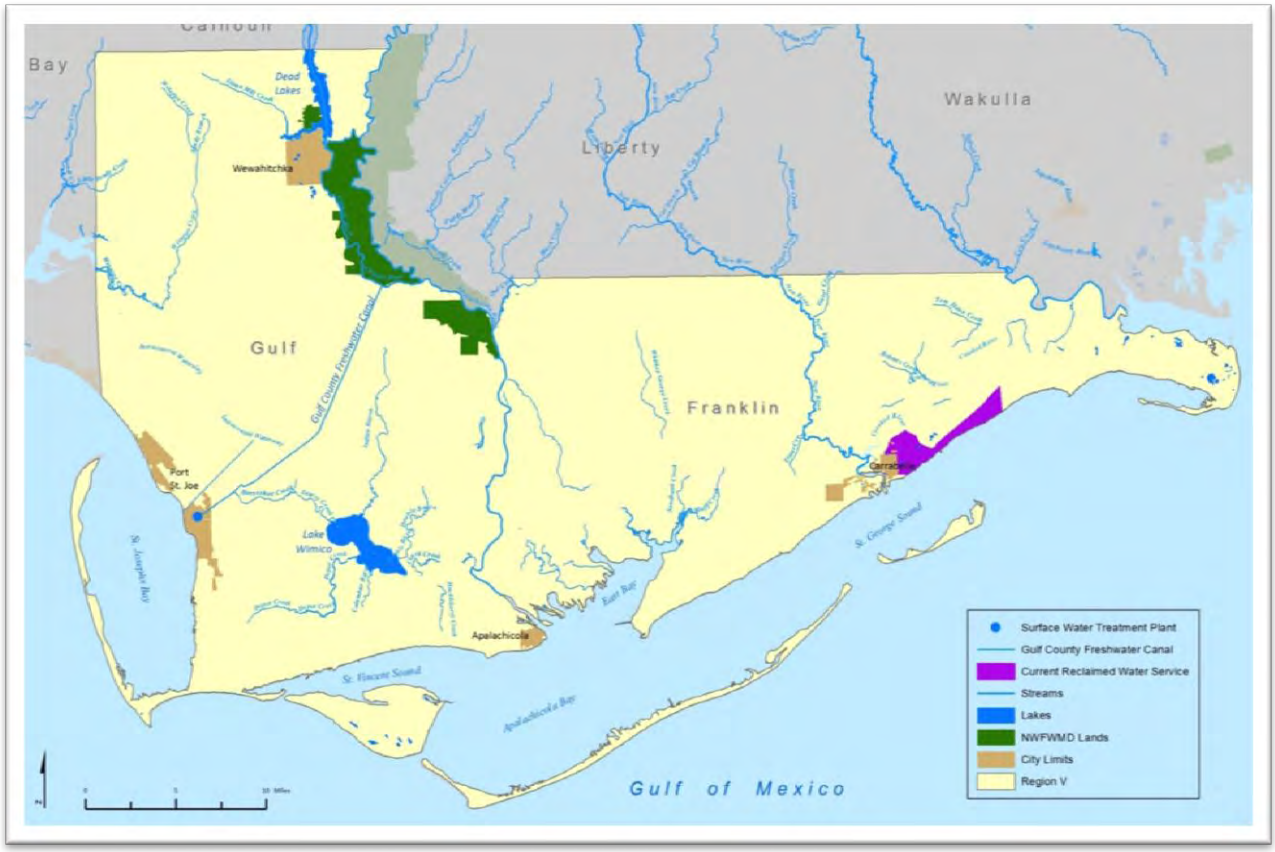


Figure 4.4. Water Supply Planning Region V

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. The scope of the project is inclusive of water resource development in support of identifying and developing alternative sources of water supply to serve all 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 has conducted significant data collection and analysis to evaluate the feasibility of an inland ground water source for Franklin County. The work includes 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 information is currently being used by their consultant to develop a ground water model to assess the long term sustainability of projected ground water withdrawals in the Eastpoint area.

Table 4.15 Hydrologic and Water Quality Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$ 55,000
Estimated 5-Year Cost (FY 11-15):	$185,000
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 (Chapter 4.2). District general funds could also be used for this purpose.

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

District staff provide 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. After the initial reconnaissance study completed in 2009, it was determined that completion of the 6 mgd surface water treatment plant, in cooperation with the NWFWMD, by the City of Port St. Joe as an alternative water source will reduce reliance on the Floridan Aquifer as the only water source. Completion of this new surface water treatment plant will also allow the Floridan Aquifer to be utilized as a backup emergency supply should the need arise.

Additionally, the District has initiated work with the City of Carrabelle to develop preliminary engineering for 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. Additional technical assistance has also been provided to the Eastpoint Water and Sewer District and the City of Wewahitchka for inland test well development.

Table 4.16 Coordination, Source Protection, and Engineering and Technical Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$165,000
Estimated 5-Year Cost (FY 11-15):	$275,000
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 (Chapter 4.2).

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 2009, an estimated 0.10 mgd of reclaimed water was used for public access reuse in Region V (DEP 2010). 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. The reuse plan is scheduled to be complete in the fall of 2011.

District staff also review local comprehensive plan amendments and development proposals to assist in local reuse and conservation planning, provide consumptive use permit review and issuance, and coordinate with DEP's reuse regulation responsibilities. In reviewing comprehensive plan amendments and proposed DRIs, District staff continue to emphasize both reuse and conservation measures.

Other conservation assistance provided by the District to Region V has been distribution of the water rates model (Whitcomb 2005) to several utilities in the region, and significant dedication of District staff resources to water education and outreach during the last year. The Water CHAMPS initiative has been extended to Region V, with two hotels in Port St. Joe participating as of September 2010.

Table 4.17 Water Reuse and Conservation Coordination and Assistance

Implementing Agency:	NWFWMD, Local governments, Utilities
Proposed FY Expense (FY 10-11):	$ 37,000
Estimated 5-Year Cost (FY 11-15):	$ 82,000
Potential Funding Sources:	WMLTF, WPSPTF
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Increases in funding for this project are 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.

As discussed in Strategy 3.0, District staff also work with local governments and state and regional agencies to improve coordination of land use and water supply planning. District staff have worked with DEP, DCA, and local governments to develop and distribute updated guidelines as well as conduct technical workshops for preparing water supply comprehensive plan amendments and water supply facility work plans. Additionally, in cooperation with DCA, District staff reviewed and provided technical assistance for the water supply facility work plan prepared by the City of Apalachicola.

Table 4.18 RWSP Implementation

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 10-11):	$ 8,000
Estimated 5-Year Cost (FY 11-15):	$ 38,000
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 2010-2015 Region V WRDWP Project Funding

Region V Water Resource Development Projects		RWSP Page #	FY 09-10* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 10/11 – FY 14/15)
				FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	
1	Hydrologic and Water Quality Data Collection and Analysis	10	$26,718	$55,000	$40,000	$30,000	$30,000	$30,000	$185,000
2	Coordination, Source Protection, and Engineering and Technical Assistance (incl. Coastal Interconnect project)	11	$49,880	$165,000	$50,000	$20,000	$20,000	$20,000	$275,000
3	Water Reuse and Conservation Assistance	11	$16,019	$37,000	$15,000	$10,000	$10,000	$10,000	$82,000
4	Regional Water Supply Plan Implementation	11	$3,817	$8,000	$10,000	$10,000	$5,000	$5,000	$38,000
TOTAL			$96,433	$265,000	$115,000	$70,000	$65,000	$65,000	$580,000

* Preliminary cost figures; final cost distribution information was unavailable at the time this report was prepared.

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 long-term efforts of the District and local utilities to identify and develop alternative water supplies through dedicated water resource development efforts. It should also be noted that substantial water supply development assistance was provided to local governments and utilities prior to enactment of the WPSPTF. This has included facilitation of a $3.1 million federal grant for development of the Fairpoint Regional Utility System inland Sand and Gravel Aquifer wellfield and provision of $750,000 in assistance to the City of Crestview for repairs to an existing inland public supply well and construction of another.

Planning during the year was 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. Table 4.21 lists other water supply development assistance projects.

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	10.0	$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	1.0	$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	*	$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	$16,000,000	$20,000,000	80%
City of Chipley Reuse Project	Chipley	Water reuse	Complete	FY 2007	0.95	$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	Construction	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	10.0	$5,470,000	$9,530,000	$15,000,000	64%
			Total		**37.00**	**$21,470,000**	**$56,621,891**	**$78,091,891**	**73%**

*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 contributions, to be repaid by the local governments.

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
Gadsden County Watermain Extension	Gadsden County	Engineering for watermain extension and interconnection	Complete	FY 2010	$49,888	District General Fund
Walton County Phase II Regional Water Supply	Regional Utilities, Inc.	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 2011	$400,000	District General Fund
Water Transmission Line Construction and Interconnection	Freeport	Water supply development	In progress	FY 2011	$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
Gretna Preliminary Engineering	Gretna	Engineering for watermain extension and interconnection	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 2011	$2,100,000	District General Fund
Okaloosa County AWS - Surface Water	Okaloosa County	Land acquisition for surface water reservoir site	Planned	FY 2011	$1,500,000	District General Fund
Gretna to Greensboro Watermain Construction	Gretna	Water supply transmission and distribution	In progress	FY 2012	$400,000	District General Fund
				Total	**$14,728,588**	

5. Florida Forever Five Year Work Plan Annual Report

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 ninth annual update of the 2001 Florida Forever Work Plan and 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 continues 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 authorizes 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). **In 2010, Florida Forever was not fully funded as outlined in the table below. However, the Legislature authorized $15 million for Florida Forever and the District's portion of that was $337,500**.

Table 5.1 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*

***Actual FY 2009-2010 funding was $337,500; future funding is uncertain.**

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 the "discretionary" 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.

5.1 Land Acquisition Work Plan

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 222,000 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 surplusing completed by the District in 2010 is provided below.

Table 5.2 Summary of Acquisitions and Surplusing Completed in 2010

Property	Date Purchased	Acres	Cost	Funding Source(s)	Water Management Area
Fee Simple Acquisitions					
Swift	04/22/10	494.30	$999,000	Florida Forever	Escambia River
Pridgen	10/28/10	0.34	$20,000	DOT Mitigation	Perdido River
	SUB-TOTAL	**494.64**	**$1,019,000**		
Less-Than-Fee Acquisitions					
Jackson	09/24/10	109.2	Donation	N/A	Ochlockonee River
	SUB-TOTAL	**109.2**			
Surplused Lands					
FDOT	06/28/10	0.024	$500.00	FDOT paid $500	Yellow River
	SUB-TOTAL	**(0.024)**	**$500.00**		
	GRAND TOTAL	**603.81**	**$1,019,000**		

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 waterbodies, it is desirable to acquire both the floodplain and a natural buffer zone to provide further water resource protection.

Table 5.3 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 others flowing into Deer Point Lake	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 & Coldwater creeks	Gainer Springs		
	Ochlockonee River & its major tributaries			
	Yellow & Shoal Rivers			
	Perdido River and Bay			

Table 5.4 Additional Approved Acquisition Areas and Methods

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 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 2010.

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.

5.2 Florida Forever Goals and Numeric Performance Measures

Reported as of October 1, 2010

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 = 185,988 Total acres
14,519 Florida Forever acres
340 Acres acquired FY 2009/2010

(2)(d)2. Acquisitions for water resource development to date = 41,545 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 =	20,000 acres
Undergoing restoration =	2,245 acres
Restoration completed =	15,203 acres
Restoration maintenance =	15,203 acres

(4)(a)3. Refer to Section 5.6, (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 2010-2011 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 5.6) of the Consolidated Annual Report for resource-based recreation facilities by type.

5.3 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.

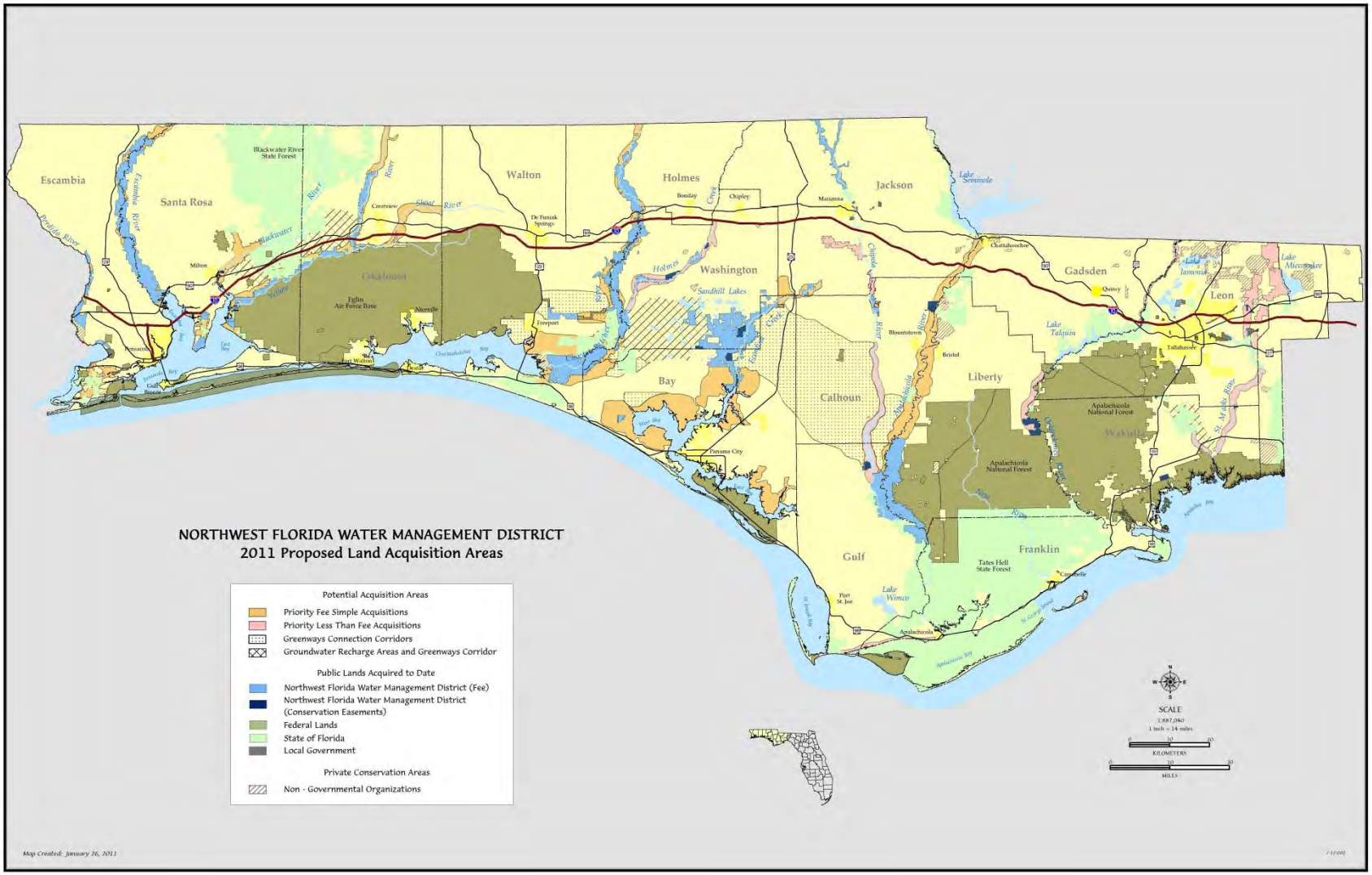


Figure 5.1 2011 Proposed Land Acquisition Areas

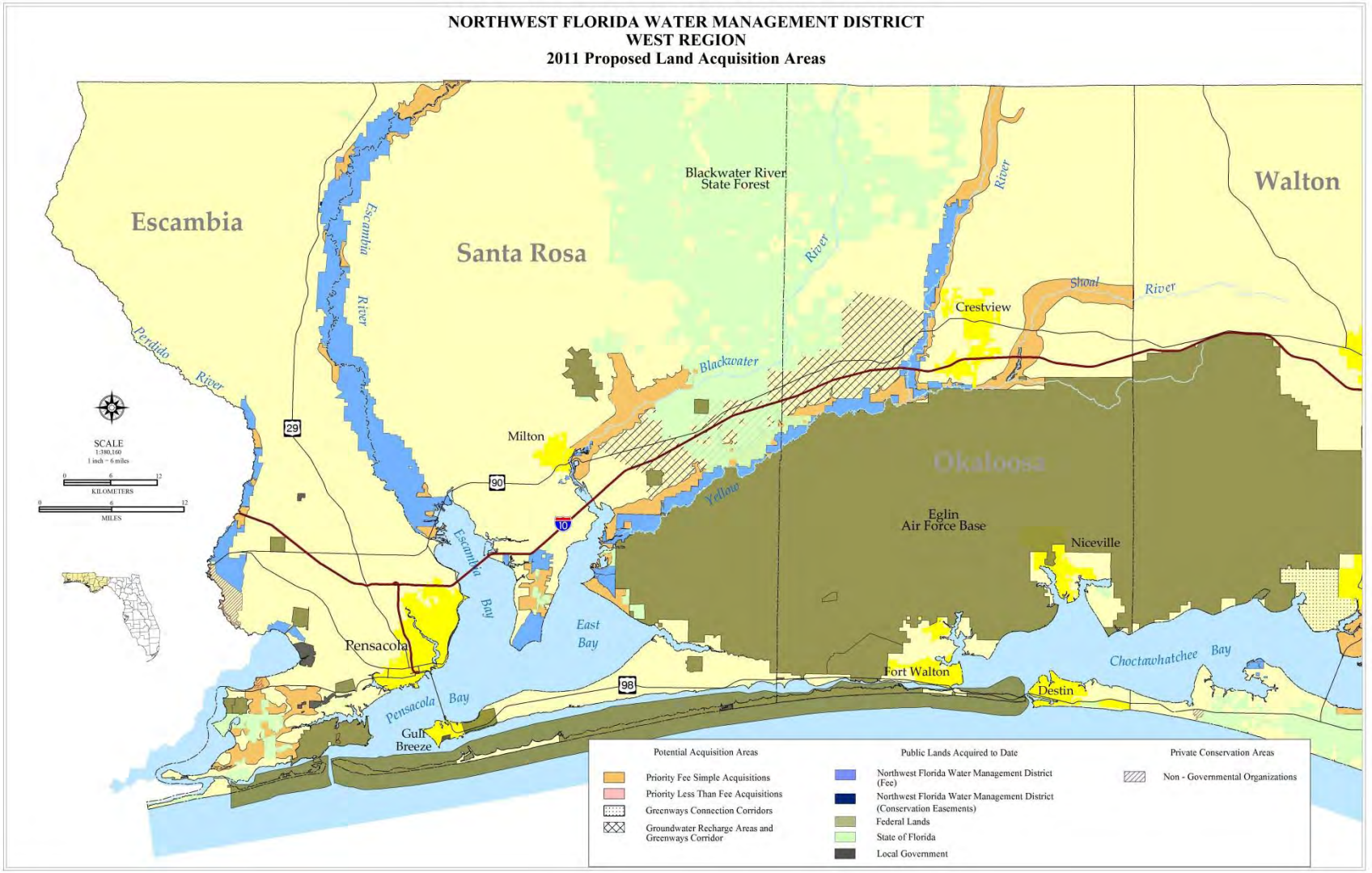


Figure 5.2 2011 Proposed Land Acquisition Areas (West Region)

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. Other bays in the immediate area include Tarkiln Bay, Arnica Bay, Bay La Launch and Bayou St. John. Perdido Key separates Perdido, Tarkiln, and Arnica bays, Bay La Launch and Bayou St. John from the Gulf of Mexico. Two barrier islands, Perdido Key and Santa Rosa Island, surround Perdido 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 of the bay 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 Pensacola and Perdido bays. The proposed acquisition borders a major urban area and is under rapid 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 uses will be maintained 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 Buffer 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 emptying 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 in Pensacola Bay. 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 Pensacola Bay, 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, 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 39,982 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.

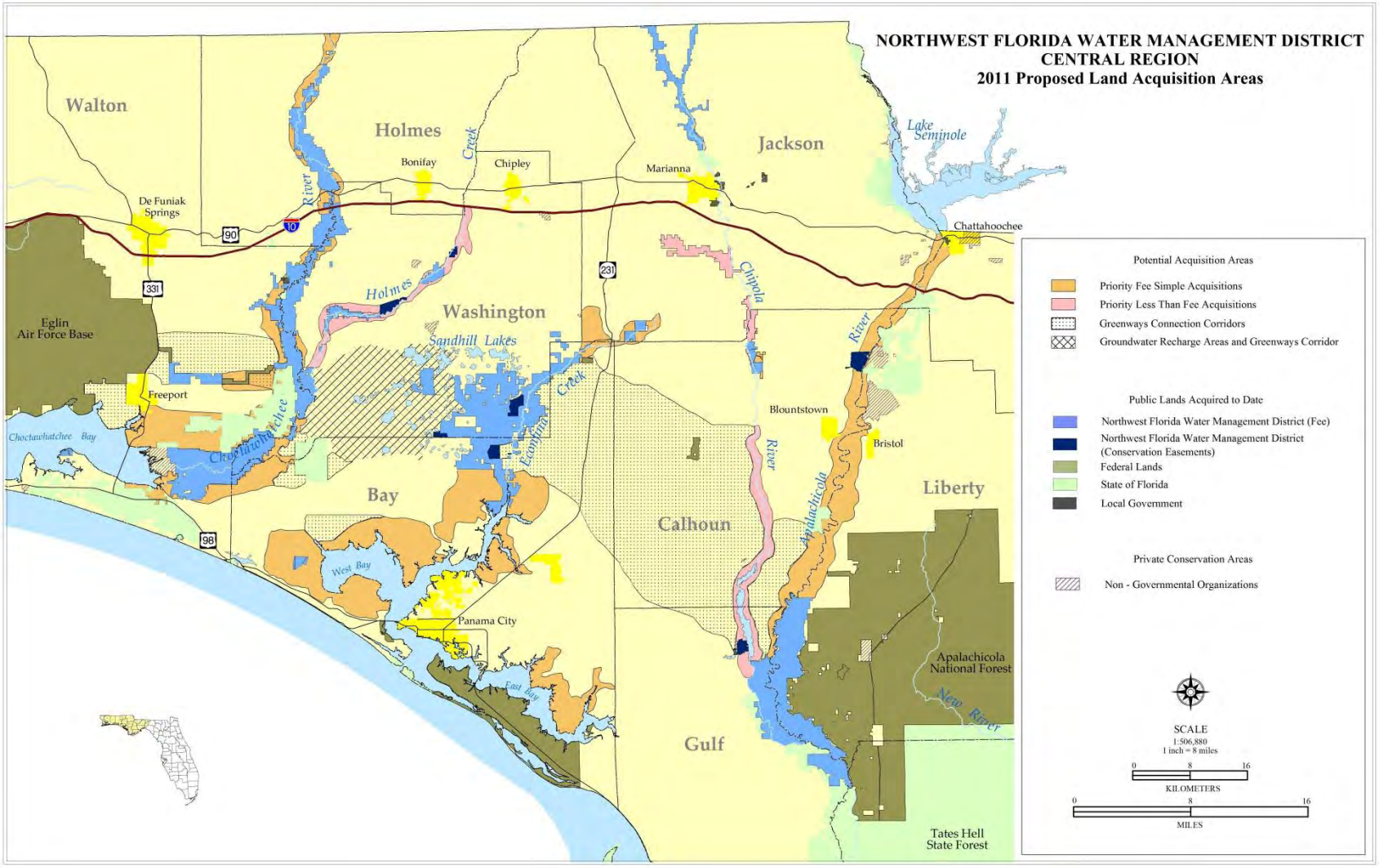


Figure 5.3 2011 Proposed Land Acquisition Areas (Central Region)

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 Connection 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, is endeavoring to buy a Conservation Easement from Nokuse Plantation on approximately 1,095 acres 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, 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 62,290 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 56,159 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 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 43,700 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 39,740 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.

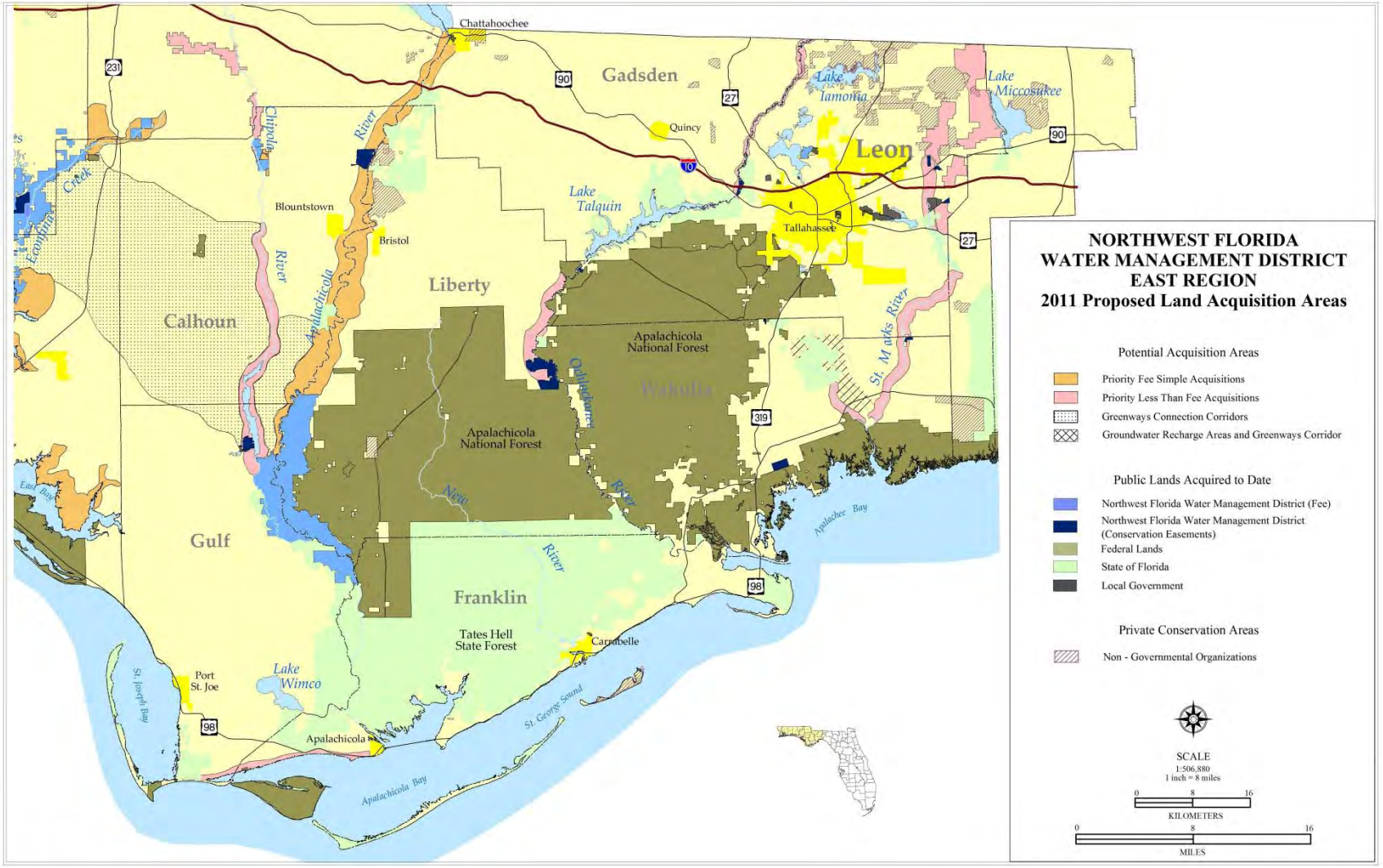


Figure 5.4 2011 Proposed Land Acquisition Areas (East Region)

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 "Look-N-Tremble". 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 proposed less-than-fee acquisition 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 35,506 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 51,449 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.

5.4 Implementation of the 2009-2010 Work Plan

During the 2009-2010 fiscal year, the District completed 2,153.66 acres of fee simple land acquisitions and 109.2 acres of less-than-fee acquisitions. In addition, 1.224 acres of land in the Econfina Creek and Yellow River water management areas were surplused during the 2009-2010 fiscal year. A summary of the acquisition projects are listed below.

- A purchase in 2009 will provide additional protection to the Choctawhatchee River and Holmes Creek. The District purchased 121.5 acres on Holmes Creek in Washington County. This property will be used as a Department of Transportation (DOT) mitigation parcel. It will be used to mitigate for two bridge replacements on Highway 79. The parcel is also adjacent to existing District property and will provide public access for District lands north of Holmes Creek. This property was acquired with Florida Forever funds.
- An inholding containing 160.1 acres in the Econfina Creek basin was purchased by the District in December 2009. The property consists of xeric sandhill uplands and is located between Strickland Road and Econfina Creek, south of Quail Run Plantation in Washington County. Recreational opportunities on the tract include hiking, hunting and nature appreciation. The purchase was made with Florida Forever funds.
- A portion of the middle Chipola River corridor, including Look-n-Tremble rapids, will be protected by a District purchase approved in October 2009. The 1,377.76-acre tract in Calhoun County includes 3.5 miles of river frontage north and south of County Road 274, three perennial streams and seven diverse upland and wetland habitat types. The District plans to make the area available for recreation activities, subject to public input. These may include canoeing, tubing, hiking, fishing, hunting, birding, primitive camping and nature appreciation.
- In January 2010, the Governing Board approved the purchase of 494.3 acres on the Escambia River in Santa Rosa County. The property primarily consists of mixed bottomland hardwood forest, mesic pine/hardwood uplands, slope forest, wet pine flatwoods and several swamp lakes. Acquisition of this tract will protect approximately three-fourths of a mile of the east bank of the Escambia River and will provide public access to another 2,500 acres of adjacent District lands to the southwest for enhanced public recreation. Florida Forever funds were utilized to make this purchase.
- The Governing Board approved the donation of a conservation easement on 109.2 acres in Leon County in the Ochlockonee River basin in April 2010. The District received the development and land use conversion rights through this donation. The property is primarily composed of mixed bottomland hardwood forest, mesic pine/hardwood uplands and a few acres of disturbed longleaf pine/wiregrass habitat. Acceptance of this donation as a conservation easement enhanced the water resource protection/preservation efforts in the Ochlockonee River basin.

The District also completed numerous land management activities during fiscal year 2009-2010. Management and restoration efforts, including prescribed burns, native species planting and timber harvesting, continue across the District's 210,992 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 5.5 and Table 5.6 provide additional information on specific land restoration activities completed during the year. The projected 2010-2011 staffing and management budget by water management area can be found in Table 5.7.

- In 2010, construction started on Phase 1 of the Econfina Springs restoration project. This substantial spring restoration and recreational facility construction project included replacing a retaining wall around Pitt Spring with natural limestone and vegetation, enhancing the canoe dock, adding a tube launch dock, constructing decks to overlook spring pools, extending boardwalks over sensitive natural areas, building an elevated observation deck at Sylvan Spring, installing a permanent restroom facility and more.
- Design and permitting work was started for Phase 2 (Williford Spring) of the Econfina Springs Complex-Spring Restoration and Protection project.
- Restoration and management continued within the Sand Hill Lakes Mitigation Bank in Washington County. Removal of sand pine plantations, shrub and oak reduction, re-planting of wiregrass, toothache grass and longleaf pines, native and exotic species surveys, fire management, water level monitoring, and exotics removal all continue on the property. The efforts on this property have received very good reviews from the mitigation bank permitting and oversight agencies.
- Through an agreement with Liberty County, substantial work was accomplished toward providing all-weather public access roads on Florida River Island in Liberty County, a popular portion of the Apalachicola River Water Management Area. These improved roads help facilitate public access to approximately 6,000 acres of floodplain lands with excellent hunting, fishing, and hiking opportunities.
- During fiscal year 2009-2010, habitat restoration was completed on 363 acres of District land. Approximately 50,820 longleaf pines, 91,708 slash pines, 13,310 pond cypress, and 16,568 mixed bottomland hardwood trees were planted. Additionally, 614,680 wiregrass tubelings and 77,440 toothache grass tubelings were planted to help restore groundcover species on District-owned properties.
- District staff continue to work with equestrian users to evaluate, develop, and maintain horse trails on the Econfina Creek and Perdido River Water Management Areas. During fiscal year 2009-2010, equestrian trail development was started on the Lafayette Creek tract in Walton County. Virtually all equestrian trail planning, construction, and maintenance is performed by volunteers.
- A "Grand Opening" was held for the recently constructed new canoe/kayak launching facility at Fillingim Landing on the Perdido River Water Management Area in Escambia County. This facility provides public access to an area of the Perdido River that has not had a public launching location for many years.
- The Division of Land Management and Acquisition completed construction of a permanent field office in Milton to house Western Region Land Management staff, equipment and supplies. This facility replaced a rented office that did not have adequate space for the region's equipment inventory. Staff from the Western Region moved into the new field office in September 2010.

- Timber harvests were ongoing or completed on the District's Econfina Creek, Ward Creek West, and Perdido River water management areas. Revenue from timber harvests is used for restoration activities on these lands.
- The new Whitewater Lake camping area was prepared for a 2011 opening. This site will be the District's newest "group camping" site, where reservations are required to secure the site. These group sites are very popular due to the unique "primitive" camping experience that is available to the public at no cost through a simple reservation system.

Table 5.5 Restoration, Enhancement and Maintenance (2010)

	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											**3**				3
Garcon Point	**31**			31							**3**				3
Blackwater River															
Yellow River	**349**	342		7							**2**				2
Perdido River	**558**	12	541	5		**740**	78	662			**538**			532	6
Choctawhatchee River	**1289**	1182	91		16	**16**	16				**55**				55
Econfina Creek	**3168**	1420	1320	338	90	**982**		982			**331**	121	208		2
St. Andrews	**256**		256			**223**		223							
Carter Restoration	**811**	680		131		**398**	398				**87**			87	
Ward Creek West	**127**	127				**82**	82				**219**	47	172		
Devils Swamp Restoration						**145**				145					
Chipola River															
Apalachicola River	**27**			27											
Lake Jackson	**291**	246		45											
Totals	**6,907**	**4,009**	**2,208**	**584**	**106**	**2,586**	**574**	**1,867**		**145**	**1,238**	**168**	**380**	**619**	**71**

Table 5.6 Access and Recreation Management (2010)

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	10			1	2		27	25				20	2
Garcon Point				3						3			3					10	
Blackwater River		1				1												10	1
Yellow River	9	2	7	6		4	3		50				47					25	
Perdido River		3	3	4	1	3	4	3	9				32					40	1
Choctawhatchee River	8	9	12	12		10	8		15				43					80	4
Econfina Creek	10	14	8	18	4	4	12	56	22	18	2		23	168				279	8
Chipola River	1			1		2			5.5	1									
Apalachicola River	1	1		1		1	1			2.5									
Lake Jackson			1	2			1			10									
Totals	**42**	**39**	**39**	**56**	**6**	**33**	**39**	**59**	**101.5**	**35.5**	**4**		**175**	**193**				**464**	**16**

Table 5.7 Projected Funding, Staffing and Resource Management for FY 2010-2011

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	35,413		$456,686	$380,850
	Escambia Conservation Easements	19		$1801	$500
	Garcon Point	3,245		$124,092	$68,900
	Yellow/Escribano	17,742		$346,130	$298,700
	Blackwater	380		$134,824	$110,600
	Perdido	6,261		$538,834	$460,650
	Perdido Conservation Easements	4		$1,281	$500
	Western Region Total	**63,064**	**3**	**$1,603,648**	**$1,320,700**
Central	Choctawhatchee	60,848		$1,305,433	$1,132,225
	Choctawhatchee/Holmes Conservation Easements	1,442		$28,229	$25,472
	Econfina	39,112		$3,161,566	$2,866,050
	St. Andrew/Econfina Conservation Easements	2,433		$4,055	$472
	Ward Creek West	719		$47,750	$47,750
	Carter Restoration	2,155		$231,333	$191,600
	Central Region Total	**106,709**	**6**	**$4,778,366**	**$4,263,569**
Eastern	Chipola	9,094		$402,130	$269,750
	Apalachicola	35,506		$524,921	$439,350
	Apalachicola/Chipola Conservation Easements	2,360		$4,055	$472
	Lake Jackson	516		$64,843	$8,100
	St. Marks Conservation Easements	1,376		$4,305	$722
	Ochlockonee Conservation Easements	3,675		$4,055	$472
	Eastern Region Total	**52,527**	**2**	**$1,004,309**	**$ 718,866**
Regional Totals		**222,300**	**11**	**$7,386,323**	**$6,303,135**
Management Administration			4	$1,066,003	$ 615,000
Grand Total		**222,300**	**15**	**$8,452,326**	**$6,918,135**

5.5 APPENDIX: DEP Florida Forever Priority List

	Critical Natural Lands Projects	County [1]	Remaining Acres	Cumulative Acres[2]	Work Plan Priority[3]
1	Lake Wales Ridge Ecosystem *CL*	Lake/ Osceola/ Highlands/ Polk	27,121	27,121	High
2	Wekiva – Ocala Greenway *CL, AA, PO*	Lake/ Orange/ Seminole/ Volusia	26,190	53,311	High
3	Bombing Range Ridge *CL*	Polk/ Highlands/ Osceola	35,403	88,715	High
4	Apalachicola River	Jackson/ Gadsden/ Liberty/ Calhoun	11,205	99,920	High
5	Panther Glades	Hendry	40,638	140,558	High
6	Wacissa/ Aucilla River Sinks	Jefferson/ Taylor	10,033	150,591	High
7	Upper St. Marks River Corridor	Leon/ Jefferson/ Wakulla	11,030	161,621	High
8	Triple Diamond	Okeechobee	7,997	169,619	High
9	Belle Meade BA	Collier	6,160	175,779	High
10	Perdido Pitcher Plant Prairie	Escambia	2,471	178,250	High
11	Caloosahatchee Ecoscape	Hendry/ Glades	13,516	191,765	High
12	Longleaf Pine Ecosystem BA	Hamilton/ Gilchrist/ Volusia/ Marion	11,334	203,099	High
13	Etoniah/Cross Florida Greenway	Clay/ Putnam/ Marion/ Levy/ Citrus	66,399	269,498	High/Medium
14	Pine Island Slough Ecosystem	Osceola	48,847	318,345	Medium
15	Osceola Pine Savannas BA	Osceola	27,023	345,368	Medium
16	Camp Blanding – Raiford Greenway	Baker/ Bradford/ Clay/ Union	33,861	379,229	Medium
17	Twelvemile Slough	Hendry	8,569	387,798	Medium
18	Devil's Garden	Hendry/ Collier	82,994	470,792	Medium
19	South Goethe	Marion/ Levy	11,699	482,491	Medium
20	Half Circle L Ranch	Hendry/ Collier	11,176	493,667	Medium
21	Kissimmee – St. Johns River Connector	Okeechobee/ Indian River	34,561	528,227	Medium
22	Bear Hammock	Marion	4,677	532,904	Medium/Low
23	Bear Creek Forest	Bay/ Calhoun/ Gulf	100,462	633,366	Low
24	Lake Hatchineha Watershed BA	Osceola/ Polk	5,443	638,809	Low
25	Wolfe Creek Forest	Santa Rosa	10,090	648,899	Low
26	Pinhook Swamp	Baker/ Columbia	60,416	709,315	Low
27	San Pedro Bay	Madison/ Taylor	45,001	754,316	Low
28	Southeastern Bat Maternity Caves	Jackson/ Alachua/ Marion/ Citrus/ Sumter	579	754,895	Low
29	Shoal River Buffer	Okaloosa	2,089	756,985	Low
30	Upper Shoal River	Walton	12,019	769,004	Low
31	Ichetucknee Trace	Columbia	1,901	770,904	Low
32	Hixtown Swamp	Madison	22,319	793,223	Low
	Subtotal: 32 Projects (28%)	***40 of 67 counties***	***793,223 acres***		***(40%)***
Rank	**Critical Historical Resources Projects**	**County [1]**	**Rem. Acres**	**Cum. Acres[2]**	**WP Priority[3]**
1	Windover Archaeological Site *AA*	Brevard	8	8	High
2	Pierce Mound Complex	Franklin	564	572	High/Medium
3	Three Chimneys	Volusia	55	627	Medium

4	Okeechobee Battlefield	Okeechobee	88	715	Medium
5	Battle of Wahoo Swamp	Sumter	856	1,571	Medium/Low
6	Pineland Site Complex	Lee	142	1,713	Low
	Subtotal: 6 Projects (5%)	***6 of 67 counties***	***1,713 acres***		***(0.1%)***
Rank	**Substantially Complete Projects**	**County [1]**	**Rem. Acres**	**Cum. Acres[2]**	**WP Priority[3]**
1	Estero Bay	Lee	2,386	2,386	High
2	Spruce Creek	Volusia	460	2,846	High
3	Charlotte Harbor Estuary	Charlotte/ Lee/ Sarasota	6,848	9,694	High/Medium
4	South Walton County Ecosystem	Walton	3,238	12,932	Medium/Low
5	Save Our Everglades † *CL*	Collier	374	13,306	Low
6	Lochloosa Wildlife	Alachua	5,096	18,402	Low
	Subtotal: 6 Projects (5%)	***7 of 67 counties***	***18,402 acres***		***(1%)***
Rank	**Climate Change Lands Projects**	**County [1]**	**Rem. Acres**	**Cum. Acres[2]**	**WP Priority[3]**
1	Florida Keys Ecosystem ‡ *BA, AA, PO*	Monroe	6,248	6,248	High
2	Caber Coastal Connector	Levy	7,398	13,647	High
3	North Key Largo Hammocks *AA*	Monroe	871	14,517	High
4	St. Joe Timberland	Bay/ Franklin/ Gadsden/ Gulf/ Jefferson/ Leon/ Liberty/ Taylor/ Wakulla/ Walton/ Washington	87,341	101,858	High/Medium
5	Northeast Florida Blueway †‡ *AA*	Duval/ St. Johns/ Flagler	13,317	115,175	Medium/Low
6	Coupon Bight/ Key Deer	Monroe	1,583	116,758	Low
7	St. Johns River Blueway † *AA*	St. Johns	26,202	142,961	Low
8	Florida Springs Coastal Greenway	Citrus	9,931	152,891	Low
9	Terra Ceia BA	Manatee	1,780	154,671	Low
10	Archie Carr Sea Turtle Refuge BA	Brevard/ Indian River	274	154,945	Low
11	Dickerson Bay/ Bald Point	Wakulla/ Franklin	2,996	157,942	Low
12	Garcon Ecosystem	Santa Rosa	3,857	161,798	Low
13	Peaceful Horse Ranch	Desoto	4,171	165,969	Low
14	Tiger/ Little Tiger Island	Nassau	1,141	167,110	Low
	Subtotal: 14 Projects (12%)	***23 of 67 counties***	***167,110 acres***		***(8%)***
Rank	**Less-Than-Fee Projects**	**County [1]**	**Remaining Acres**	**Cumulative Acres[2]**	**Work Plan Priority[3]**
1	Adams Ranch	Osceola	10,304	10,304	High
2	Ochlockonee River Conservation Area	Gadsden/ Leon	3,254	13,558	High
3	Seven Runs Creek ‡ *AA, PO*	Walton	26,160	39,718	High
4	Ayavalla Plantation	Leon	5,936	45,654	High
5	Fisheating Creek Ecosystem	Glades/ Highlands	108,974	154,628	High/Medium
6	Lower Suwannee River and Gulf Watershed NP	Dixie	46,515	201,143	Medium
7	Myakka Ranchlands	Sarasota	11,244	212,387	Medium
8	Big Bend Swamp/ Holopaw Ranch	Osceola	46,842	259,229	Medium
9	Clay Ranch	Putnam	2,458	261,686	Medium

10	Ranch Reserve	Brevard/ Indian River/ Osceola	12,594	274,281	Medium
11	Raiford – Osceola Greenway	Baker/ Union	67,457	341,738	Medium/Low
12	Tiger Cattle Company Ranch	Okeechobee	2,234	343,972	Low
13	Gulf Hammock	Levy	25,598	369,569	Low
14	Mill Creek	Marion	12,296	381,865	Low
15	Maytown Flatwoods	Brevard	7,184	389,050	Low
16	Hosford Chapman's Rhododendron Protection Zone	Gadsden/ Liberty	6,927	395,976	Low
17	Lower Perdido River Buffer	Escambia	2,375	398,352	Low
18	Old Town Creek Watershed	Hardee/ Polk	7,306	405,658	Low
19	Peace River Refuge	Desoto	3,863	409,520	Low
20	West Aucilla River Buffer	Jefferson	697	410,218	Low
21	Little River Conservation Area	Gadsden	2,057	412,274	Low
22	San Felasco Conservation Corridor	Alachua	373	412,647	Low
23	Horse Creek Ranch NP	DeSoto/ Hardee	16,317	428,964	Low
24	Millstone Plantation	Leon	57	429,020	Low
25	Suwannee County Preservation	Suwannee	1,256	430,276	Low
	Subtotal: 25 Projects (22%)	***24 of 67 counties***	***430,276 acres***	***(22%)***	

Rank	Partnerships & Regional Incentives Projects	County [1]	Rem. Acres	Cum. Acres[2]	WP Priority[3]
1	Florida's First Magnitude Springs ‡ *PO*	Walton/ Washington/ Bay/ Jackson/ Wakulla/ Leon/ Hamilton/ Madison/ Suwannee/ Lafayette/ Levy/ Marion/ Hernando	5,843	5,843	High
2	Northeast Fla. Timberlands & Watershed Reserve ‡ *AA, PO*	Duval/ Nassau/ Clay	87,200	93,043	High
3	Brevard Coastal Scrub Ecosystem ‡ *AA*	Brevard	20,047	113,090	High
4	Indian River Lagoon Blueway	Volusia/ Brevard/ Indian River/ St. Lucie/ Martin	20,949	134,039	High
5	Escribano Point	Santa Rosa	1,794	135,833	High
6	Corkscrew Regional Ecosystem Watershed	Lee/ Collier	38,755	174,588	High
7	Wakulla Springs Protection Zone	Wakulla/ Leon	3,989	178,577	High
8	Annutteliga Hammock	Citrus/ Hernando	19,075	197,652	High/Medium
9	Clear Creek/ Whiting Field ‡ *AA*	Santa Rosa	3,590	201,242	Medium
10	Volusia Conservation Corridor	Volusia/ Flagler	32,410	233,651	Medium
11	Heather Island/ Oklawaha River	Marion	19,925	253,576	Medium
12	Dade County Archipelago	Miami-Dade	318	253,894	Medium
13	Flagler County Blueway	Flagler	4,273	258,167	Medium
14	Middle Chipola River	Jackson/ Calhoun	11,489	269,656	Medium
15	Rainbow River Corridor	Marion/ Citrus	1,176	270,832	Medium
16	Watermelon Pond BA	Levy/ Alachua	5,829	276,661	Medium
17	Sand Mountain	Washington/ Bay	14,517	291,177	Medium
18	Charlotte Harbor Flatwoods	Charlotte/ Lee	3,882	295,059	Medium
19	Atlantic Ridge Ecosystem	Martin	8,428	303,487	Medium

20	Lake Santa Fe	Alachua/ Bradford	9,799	313,286	Medium
21	Catfish Creek	Polk	9,194	322,480	Medium
22	Pal – Mar	Palm Beach/ Martin	10,303	332,783	Medium
23	Green Swamp	Lake/ Polk	183,021	515,804	Medium/Low
24	Pumpkin Hill Creek	Duval	11,049	526,853	Low
25	Carr Farm/ Price's Scrub	Marion/ Alachua	304	527,158	Low
26	Crossbar/ Al Bar Ranch	Pasco	12,439	539,597	Low
27	Baldwin Bay/ St. Marys River	Duval/ Nassau	9,134	548,730	Low
28	Florida National Scenic Trail	Columbia	6	548,736	Low
29	Lafayette Forest	Lafayette	10,276	559,013	Low
30	Hall Ranch	Charlotte	8,511	567,524	Low
Subtotal: 30 Projects (27%)		***36 of 67 counties***	***567,524 acres***	***(29%)***	
TOTAL of 113 projects		***63 of 67 counties***	***1,978,248 acres***		

[1] Counties with no remaining acreage to acquire in a project not listed here – see individual project summaries for additional counties in which acquisitions completed.

[2] Cumulative acres used to calculate in which Priority Group of the Acquisition Work Plan each project will qualify.

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

High/Med = Portion of project in High Priority Group & portion in Medium Priority Group

Med/Low = Portion of project in Medium Priority Group & portion in Low Priority Group

Projects Included in FY 2010-11 Work Plan: **CL** = Approved contracts in Closing ***AA*** = *Anticipated Acquisitions*

† Projects included in work plan due to good faith negotiations that began in 2008 when project was ranked in the A Priority Group.

NP = New Project added to list.

BA = Boundary Amended.

High Priority Group = top 1/3 acreage within each Category

Medium Priority Group = middle 1/3 acreage within each Category

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

PO = Potential Opportunities

‡ Grant Funds or partner funding also available.

5.6 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/swmp2010/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 competitive grants to local governments for capital improvements that help implement the District's SWIM and regional water supply plans. These included retrofit, restoration, reuse, and stormwater master plan projects. Over $21 million for 52 projects has been awarded under the program. These grants have leveraged significant additional funding, with nearly $53 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 two years.

Performance measures for restoration projects are incorporated within the Strategic Water Management Plan (www.nwfwmd.state.fl.us/pubs/swmp2010/swmp2010.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/FFCIGrantSummary_Jan2011.pdf by SWIM watershed and jurisdiction.

Implementation of the 2009-2010 Five Year Work Plan

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

- Water Street and Avenue G Stormwater Improvements. The City of Apalachicola installed a stormwater treatment vault in the downtown area. The project treats approximately eight acres, reducing flooding and improving the quality of stormwater discharged to Apalachicola Bay, a SWIM priority waterbody, Aquatic Preserve, National Estuarine Research Reserve, and Outstanding Florida Water (OFW). The District provided $257,904 in construction funding, and the City of Apalachicola contributed $50,250 in design and engineering for this project.
- Sand Hills Pond Stormwater Improvement. The City of Port St. Joe received a $300,000 District grant to construct a stormwater treatment facility to improve water quality in St. Joseph Bay, a SWIM priority waterbody, Aquatic Preserve, and OFW. The facility treats stormwater from 29 acres within the downtown area. The City provided $40,500 of in-kind support for the project.
- Santa Rosa Sound Ecosystem Restoration. The Choctawhatchee Basin Alliance (CBA) of Northwest Florida State College restored an existing ditch outfall in Liza Jackson Park into a vegetated, meandering tidal creek. In addition to stream and wetland restoration, the project increased detention and improved the quality of water entering Santa Rosa Sound. The project included a significant public awareness and education component. The District provided a grant of $198,617, and the CBA provided $101,062 in matching funds.
- Lower Choctawhatchee Bay Stormwater Initiative. The City of Fort Walton Beach installed four pollutant separator units to existing conveyance infrastructure to remove debris, waste, and sediments from stormwater before it enters Santa Rosa Sound and Choctawhatchee Bay. The units were

installed at Hollywood Boulevard, Brooks Street, Liza Jackson Park, and Garniers Beach, treating runoff from 283-acres. A District grant of $306,435 along with $62,219 in local funding from the City of Fort Walton Beach accomplished these water quality improvements.

- Eglin Parkway Stormwater Improvements. The City of Fort Walton Beach installed a pollutant separator unit near the intersection of Eglin Parkway and California Ditch. The unit improves water quality from 62-acres of urban landscape discharging to Choctawhatchee Bay. The District provided a grant of $198,617, and the City provided $20,865 in matching funds.
- Little Sabine Bay Circulation Project. To improve flushing and water quality in Little Sabine Bay, the Santa Rosa Island Authority (SRIA) constructed an intake facility, pumps, and transmission piping to circulate water from Little Sabine Bay to an artificial embayment adjoining Santa Rosa Sound. The SRIA completed associated stormwater retrofits on Pensacola Beach to improve water quality within the Sound and Little Sabine Bay. The District provided a $375,000 grant, while over $2 million in supporting funds was provided by the SRIA and the state.
- Rocky Drive Stormwater Retrofit. Okaloosa County constructed a linear stormwater treatment facility and conveyances to treat a 6-acre basin prior to discharge into Rocky Bayou. This project was accomplished with $75,163 from the District and $147,941 from Okaloosa County.
- Mainsail Drive Stormwater Retrofit. Okaloosa County constructed an exfiltration trench underneath a roadway and recontoured swales to treat stormwater from a 4-acre basin prior to discharge into Rocky Bayou. The District contributed $33,800, and the county provided $153,585 for this project.
- East Ten Mile Creek Stream Restoration. Escambia County completed a third restoration project within the Ten Mile Creek basin in the Perdido Bay watershed, applying natural stream channel design methods to restore floodplain function, reduce sedimentation, and improve water quality. The District provided a grant of $499,984, and the County contributed $619,766 in matching funds.
- Robindale Subdivision Stormwater Improvement. The City of Springfield constructed a stormwater pond for a 53-acre basin in the Martin Lake watershed. This project was part of the Martin Lake Restoration Plan, a cooperative effort by several local and state agencies to improve water quality and habitat conditions in the St. Andrew Bay watershed. The District contributed $500,000, while over $2.5 million was provided by the city and other project partners.
- West Region Land Management Field Office. The District constructed a new land management field office in September 2010. The office, located in Milton, services water management areas of the Perdido, Escambia, Blackwater, and Yellow rivers; Garcon Point; and Grassy Point. The 4,900 square foot facility includes office space, enclosed storage, and open, covered equipment storage. The project was coordinated with the Department of Management Services.
- Whiskey George Basin Hydrologic Restoration Project. The District completed a hydrologic restoration project in the northwestern portion of Tate's Hell State Forest in September 2010. Direct enhancement and restoration were provided for 40-acres within a larger 2,850-acre basin. Approximately six miles of dirt logging roads were removed and recountoured. Six low water crossings, five ditch plugs, and several culvert modifications were also constructed. Construction expenses totaled $137,350.
- Restoration of Disposal Areas on the Apalachicola River – Site 39. Gulf County removed spoil sediments from approximately 16-acres of bottomland hardwood swamp along the Apalachicola River near Wewahitchka. The District provided $44,625 toward this project.
- Okeeheepkee-Prairie Regional Stormwater Treatment Facility. The District and Leon County constructed a major stormwater treatment facility adjacent to Meginniss Arm on Lake Jackson. The facility treats runoff from the 400-acre Okeeheepkee sub-basin using a wetland treatment design. The

project implements the Lake Jackson Management Plan (SWIM Plan) and a long-term, multi-agency effort to protect and improve the water resources of Lake Jackson. The District contributed $366,974 and Leon County provided $427,342.

Fiscal Year 2011-2015 Capital Improvement Work Plan

Although the Florida Forever Act was extended to 2018, appropriations have been reduced and future funding may be unavailable. Table 5.8 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 5.8 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 and habitat restoration. Includes restoration of Apalachicola River floodplain and Tate's Hell Swamp.	DOF, DEP, FFWCC, local governments	Whiskey George basin project complete; Pine Log Creek restoration underway.	$200,000
10th Street Stormwater Improvements	Apalachicola River and Bay	Stormwater retrofit for water quality and flood control. Grant project approved in 2008.	City of Carrabelle	Under construction	$662,582
River Road Stabilization	Choctawhatchee River and Bay	Stabilization and sedimentation reduction to protect adjacent wetlands. Grant project approved in 2007.	Washington County	Under construction	$450,000
Oyster Lake Restoration	Choctawhatchee River and Bay; Oyster Lake	Restore lake and wetland habitat and associated hydrology. Grant project approved in 2003.	Walton County	Under construction (completion)	$487,500
Springs Restoration and Protection	St. Andrew Bay; Econfina Creek	Protection and restoration of spring, wetland, riparian and associated watershed habitats. Enhancement of public access consistent with resource restoration and protection.		Pitt Spring restoration complete. Design and permitting for Williford Spring underway.	$1,137,500
Watson Bayou Stormwater Retrofit	St. Andrew Bay	Stormwater retrofit for water quality and flood control. Cooperative project approved in 2011.	Bay County	New project; design and permitting	$800,000
Cascade Park Watershed Resource Restoration	St. Marks River	Stormwater retrofit and stream restoration. Grant project approved in 2009.	Blueprint 2000	Under construction	$300,000
			Total		$4,037,582

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/index.php?Page=11.

Figure 5.5 NWFWMD Capital Project Distribution

6. Mitigation Donation Annual Report

Section 373.414(1)(b)2, Florida Statutes, 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 Phase II (wetland resource permitting) of the District's Environmental Resource Permitting (ERP) program on November 1, 2010; thus, there are no donations to report for fiscal year 2009-2010. Wetland resource impacts came under regulation within northwest Florida jointly by the District and DEP at that time. Any cash donations accepted by the District as mitigation during the current fiscal year will be reflected in the next report. The District may also receive funds through its agreement with the U.S. Army Corps of Engineers under the Umbrella Watershed-Based Regional Mitigation plan. Thus far no donations have been received or planned through this agreement.

7. Surface Water Improvement and Management Program Summary Report

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. Northwest Florida Water Management District 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 indicated below (Figure 7.1).

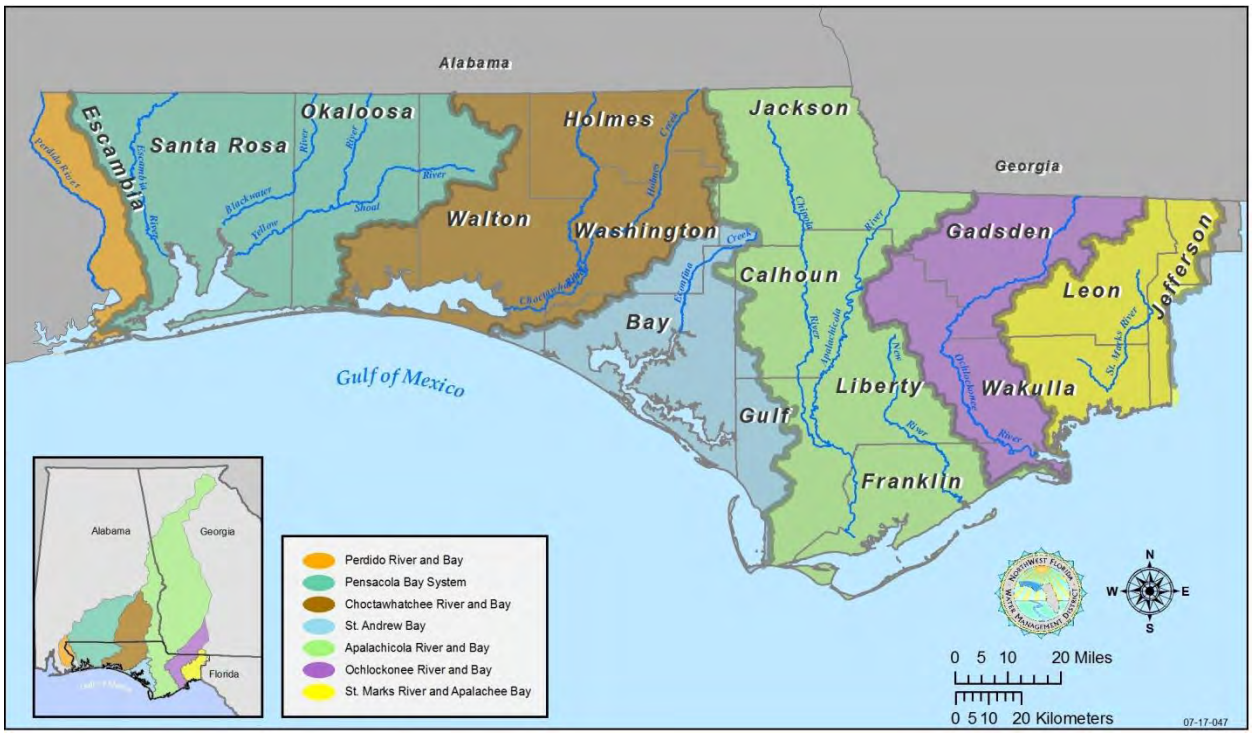


Figure 7.1 NWFWMD SWIM Priority Watersheds

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., the SWIM priority list is reviewed with updates 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.

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	Plan under development Lake Jackson plan update approved 1997
Perdido River and Bay Watershed		
Perdido River	Perdido Bay	Plan under development

SWIM Plans are implemented through a variety of activities, including stormwater retrofit planning and construction for water quality and flood protection improvements, 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.

Implementation integrates and leverages 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 local government contributions. Cumulatively, the overall effort results in significant protection and improvement of watershed resources District-wide.

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