

Consolidated Annual Report

Northwest Florida Water Management District



March 1, 2008

Cover Photo: New River, Franklin County.

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Executive Summary

This Consolidated Annual Report fulfills the requirement of section 373.036(7)(a), Florida Statutes (F.S.), that the Northwest Florida Water Management District (NFWFMD or District) annually submit a report on management of water resources to the Governor, the President of the Senate, the Speaker of the House, and the Department of Environmental Protection (DEP). Copies of the report must also be provided to the chairs of legislative committees having substantive or fiscal jurisdiction over water management districts and the governing boards of all counties having jurisdiction or deriving funds for operations of the district. Each report must also be made available to the public in either a printed or electronic format.

The March 1, 2008, NFWFMD Consolidated Annual Report includes seven required reports, as specified in Section 373.036(7)(b), F.S. These are:

- The District Water Management Plan Annual Report;
- The 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 final annual Five-Year Water Resource Development Work Program (s.373.536(6)(a)4, F.S.);
- The Alternative Water Supplies Annual Report (s. 373.1961(3)(n), 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 sections, each district may also include additional information on the status or management of water resources as deemed appropriate. This report includes one optional element, a Surface Water Improvement and Management Program and Watershed Restoration Summary Report. The summary report focuses on project implementation under the framework of the Surface Water Improvement and Management (SWIM) program.

These reports are provided in the following chapters and provide a current status of a number District programs, including land acquisition and management, watershed restoration, water resource development, and alternative water supply development. Among the programs and accomplishments reported are the following.

- Phase I (stormwater) of the Environmental Resource Permitting (ERP) program officially began October 1, 2007, and offices were opened in Tallahassee and Crestview. With the first phase, the District implemented stormwater permitting to address water quality and flooding from construction and development. Phase II (wetland permitting) is expected to be implemented in mid- to late-2008. Phase II will enhance protection for wetlands connected to other surface waters, as well as isolated wetlands not previously protected by state law in northwest Florida. Workshops on how to complete e-permits were held in September for the public. E-permitting is expected to be operational in 2008.
www.nfwmd.state.fl.us/permits/permits-ERP.html (District Water Management Plan Annual Report).

- A Regional Water Supply Plan was approved for Region V, consisting of Gulf and Franklin counties. The plan provides for a Region V Water Resource Development Component and includes four alternative water supply development projects. Approximately nine million gallons per day (MGD) of alternative water supply have been identified to provide for existing and future demands. www.nwfwmd.state.fl.us/pubs/rwsp/plan.htm **(District Water Management Plan Annual Report, Water Supply; Water Resource Development Work Program Annual Report)**
- The District issued a water shortage warning on June 5, 2007, for all users across the District's 16-county area calling for voluntary reductions in water use and the employment of water conservation practices. Fifteen months of below-normal rainfall had resulted in low surface water levels throughout the District with a number of monitored sites at or near record daily low flows. Ground water levels also declined and moderate to extreme drought conditions existed across the northwest area. This was the second water shortage warning to be declared by the District in its history. **(District Water Management Plan Annual Report, Water Supply)**
- The District initiated development of an updated Water Supply Assessment. The assessment will include demand projections through 2030. It is anticipated that the final assessment and projections will be complete during the summer of 2008. **(District Water Management Plan Annual Report, Water Supply)**
- District-wide, nine alternative water supply development and water resource development projects have been approved for funding through the Water Protection and Sustainability Program. Sixteen million dollars in grant funding have been awarded for projects that are expected to provide over 20 MGD of alternative water supplies. **(Alternative Water Supplies Annual Report)**
- Work continues on the Flood Map Modernization program being implemented in cooperation with the Federal Emergency Management Agency (FEMA). Final effective digital flood insurance rate maps (DFIRMs) have been completed for Escambia, Santa Rosa, and Gulf counties. Preliminary DFIRMS have been completed in Bay, Gadsden, and Leon counties, and work continues on updating maps in Walton, Wakulla, Calhoun, Washington and Holmes counties. www.nwfwmdfloodmaps.com **(District Water Management Plan Annual Report, Flood Protection and Floodplain Management)**
- The District has completed acquisition of detailed elevation data, acquired through use of Light Detection and Ranging (LiDAR) technology, for nearly the entire District. Final data acquisition for Okaloosa, Jackson, Calhoun, and portions of Liberty counties is expected in early-to mid-2008. **(District Water Management Plan Annual Report, Flood Protection and Floodplain Management)**
- Through the end of fiscal year 2007, the District has acquired 213,148 acres through donation, fee and less-than-fee purchases of the 382,649 acres identified through the District's 2007 Florida Forever Land Acquisition Work Plan. Of this, 170,783 acres of floodplain have been acquired of 289,227 floodplain acres identified. This comprises 59 percent of the acres identified as vulnerable to flooding and represents significant progress by the District in floodplain protection. **(District Water Management Plan Annual Report; Florida Forever Five Year Work Plan)**

- The Governing Board approved funding 11 new grant projects under the Florida Forever Capital Improvement Grant Program to assist local governments with funding capital improvement projects that will provide water quality and associated aquatic and wetland ecosystem benefits. Over \$4.3 million in grant funding was awarded this year for implementation of stormwater retrofit and habitat restoration projects in six counties. **(District Water Management Plan Annual Report; Florida Forever Five Year Work Plan)**
- During the past fiscal year, District staff developed mitigation plans to provide compensatory wetland mitigation for impacts incurred by three new Florida Department of Transportation (FDOT or DOT) projects. Implementation efforts continued for 41 existing projects across northwest Florida. During the coming year, continued emphasis will be placed on implementing mitigation projects within the District's plan and identifying future mitigation efforts for FDOT. www.nfwmdwetlands.com **(District Water Management Plan Annual Report)**
- Restoration and management continue at the Sand Hill Lakes Mitigation Bank in Washington County. Activities completed include recording of a conservation easement, resource protection, law enforcement, restoration of erosion sites, hydrologic restoration at Black Pond and Dykes Mill Pond, removal of sand pine plantations, shrub reduction, re-planting of wiregrass and longleaf pine, native and exotic species surveys, fire management, water level monitoring, and exotics removal. **(District Water Management Plan Annual Report, Natural Systems)**
- Under the framework of the Surface Water Improvement and Management (SWIM) Program, priority watershed restoration activities are in progress across the District. These include approximately 70 construction projects implemented across seven watersheds, funded through special appropriation and other complementary SWIM programs and in cooperation with local governments and state and federal agencies. The current projects represent long-term watershed resource restoration and wetland mitigation efforts encompassing over 40,000 acres District-wide. **(SWIM Program and Watershed Restoration Summary Report)**

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

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I. Introduction

Overview

Chapter 2005-36, Laws of Florida, as enacted through 2005 House Bill 727, implemented statewide a consolidation of legislatively mandated plans and reports regarding the status of water management district programs and water resources within each district's jurisdiction. Beginning March 1, 2006, and annually thereafter, a consolidated annual report is submitted 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 to be provided to the chairs of all legislative committees having substantive or fiscal jurisdiction over water management districts, as well as the governing boards of all counties having jurisdiction or deriving any funds for operations of the district. The report must also be 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 5-year Capital Improvement Plan (s. 373.536(6)(a)3, F.S.);
- The Alternative Water Supplies Annual Report (s. 373.1961(3)(n), F.S.);
- The final annual 5-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.).

Each of the aforementioned requirements must be addressed in separate chapters, although elements common to more than one requirement may be consolidated where appropriate. In addition to the required chapters, 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 Program and Watershed Restoration Summary Report. The summary report focuses on project implementation under the framework of the Surface Water Improvement and Management (SWIM) program. Inclusion of this element is appropriate given the importance of the SWIM program for the Northwest Florida Water Management District. This program encompasses watershed management District-wide; it therefore provides the planning context for identifying, prioritizing, and implementing cooperative watershed protection and restoration projects.

Together these reports provide the status of Northwest Florida Water Management District programs including land acquisition and management, watershed restoration, water resource development, alternative water supply development, and minimum flows and levels. Information relating to the status of other important District programs may be found through the following sources:

Introduction

- Environmental Resource Permitting for northwest Florida (s. 373.4145, F.S. – www.nfwmd.state.fl.us/permits/permits-ERP.html).
- Regional Mitigation for wetland impacts incurred by Florida Department of Transportation impacts (s. 373.4137, F.S) – www.nfwmdwetlands.com.
- Northwest Florida Flood Hazard Map Modernization in cooperation with the Federal Emergency Management Agency – www.nfwmdfloodmaps.com.

Report Organization

The required and optional elements are organized in this report as follows:

- Chapter I. Introduction
- Chapter II. District Water Management Plan Annual Report
- Chapter III. Minimum Flows and Levels Annual Priority List
- Chapter IV. Annual Five-Year Capital Improvements Plan
- Chapter V. Water Supply
 - 5.1 Annual Five-Year Water Resource Development Work Program
 - 5.2 Alternative Water Supplies Annual Report
- Chapter VI. Florida Forever Water Management District Work Plan Annual Report
 - 6.1 Land Acquisition Five Year Work Plan
 - 6.2 Land Management and Acquisitions
 - 6.3 Florida Forever Capital Improvement Projects
- Chapter VII. Mitigation Donation Annual Report
- Chapter VIII. Surface Water Improvement and Management Program and Watershed Restoration Summary Report
- Chapter IX. References

II. District Water Management Plan Annual Report

Introduction

The second update of the Northwest Florida Water Management District's District Water Management Plan (DWMP) was approved by the Governing Board in September 2005. The plan was initially completed in 1994, and it was first updated in 2000. The 2005 update describes recent initiatives together with continuing long-term programs. Additionally, the plan describes how a broad array of plans and programs fit within an integrated framework so as to address the District's statutorily-defined areas of responsibility (AORs): water supply, flood protection and floodplain management, water quality, and natural systems.

Provisions of Chapter 62-40.520, Florida Administrative Code (F.A.C.), require the District to include within the DWMP a procedure for evaluating progress toward implementing the plan on an annual basis. The DWMP is organized to address District programs and projects across the above-mentioned AORs. It should be noted that most issues and programs span two or more of these interrelated AORs, and it is customary to approach specific programs and projects in an interdisciplinary, holistic manner. For reporting purposes, however, accomplishments and priorities are primarily described within one category. Individual tasks are also compiled into Table 2.1 under the sub-heading of District-Wide Activities. The table lists tasks, activities, and status during fiscal year 2006-2007, and it notes AORs addressed by each task. Appendix A provides updated values applicable to standardized statewide performance measures.

Water Supply

Recent Accomplishments

Over the past year, the District has made noteworthy efforts and accomplishments in regional water supply planning, water resource assessments, water conservation, water supply facilities, and alternative water supply development. Among these are the following:

- The District issued a water shortage warning on June 5, 2007, for all users across the District's 16-county area calling for voluntary reductions in water use and for water conservation practices. Fifteen months of below normal rainfall had resulted in low surface water levels throughout the District with a number of monitored sites at or near record daily low flows. Ground water levels also declined and moderate to extreme drought conditions existed across the northwest area. This was the second water shortage warning to be declared by the District in its history.
- A Regional Water Supply Plan was developed and approved by the Governing Board for Region V, which consists of Gulf and Franklin counties. The plan (available at www.nwfwmd.state.fl.us/pubs/rwsp/plan.htm) includes a Water Resource Development Component and recommends alternative water supply development projects. Information has also been provided to local governments to assist in the development of local water supply facilities work plan comprehensive plan amendments. Further information is provided in Section 5.1.
- The District initiated development of an updated Water Supply Assessment. The assessment will include demand projections through 2030. It is anticipated that the final assessment and projections will be complete during the summer of 2008.

- During FY 2006-2007, \$6 million in new funding was made available through the Water Protection and Sustainability Program Trust Fund for priority alternative water supply and water resource development projects. Grants awarded included \$4 million to the City of Port St. Joe for construction of a surface water treatment plant, \$500,000 to the City of Chipley for construction of a reuse system, \$500,000 to Wakulla County for construction of a reuse system, \$150,000 to Bay County for water resource development activities, \$500,000 to South Walton Utility Company for construction of a reuse system, and an additional \$350,000 to the City of Tallahassee for construction of the Tram Road public access reuse facility.
- District-wide, nine alternative water supply development and water resource development projects have been identified for funding through the Water Protection and Sustainability Program. These projects are expected to provide over 20 MGD of alternative water supplies and are detailed further in Section 5.2 of this report.
- For the past three years, the District has supported the operation of a Mobile Irrigation Lab in northwest Florida, serving Jackson, Calhoun, and Gadsden counties. Agricultural irrigation systems are evaluated and recommendations made to increase water use efficiency. The work is in cooperation with the Florida Department of Agriculture and Community Services, the United States Department of Agriculture, Natural Resources Conservation Service, and the West Florida Resource and Conservation Development Council. The District contributes \$50,000 annually for the operation of the lab.
- In January, the Governing Board approved a \$3 million grant to the City of Freeport to develop a reuse system. The reuse of public access quality reclaimed water made available through the upgrade of the city's wastewater treatment plant will help reduce ground water withdrawals in an area experiencing rapid growth and declining ground water levels. Reclaimed water will be used for irrigation of public access areas such as roadside landscaping and golf courses, reducing the impact of wastewater on ground water and Choctawhatchee Bay. Construction of about 10 miles of reclaimed water distribution lines and a 750,000 gallon storage tank will be part of the upgrade.
- A \$750,000 grant was awarded to Okaloosa County to provide safe drinking water to the residents of Seminole Community Center, Inc. The Community Center provides drinking water to about 300 homes in eastern Okaloosa County, southeast of Niceville. Additionally, these funds will be used to improve the limited pumping, storage, and transmission facilities currently available for fire protection service.
- Work continued on the Franklin County aquifer testing program. Possible inland ground water sources are being evaluated for their ability to help meet future water supply needs while limiting the exposure of coastal wells to potential salt water intrusion. The associated ground water modeling will ascertain the potential yield from inland wells and quantify the effects from associated drawdowns to the both the Floridan and Surficial aquifers, including the potential for saltwater intrusion.
- The City of Wewahitchka was awarded a \$300,000 grant to implement water supply improvements for this growing area. With these funds, two ten-inch municipal water supply wells and associated infrastructure will be added. After evaluating a number of alternatives, it was concluded that adding municipal wells near the distribution systems would best serve the public interest. The city's plan ultimately calls for constructing a total of four wells.
- Implementation of the updated Regional Water Supply Plan for Region II (Santa Rosa, Okaloosa, and Walton counties) continues. The plan recommended alternative water supply projects and supporting water resource development projects. The recently

completed model was applied to evaluate the sustainability of the coastal Floridan Aquifer and technical assistance was provided to local governments for the development of local water supply facilities work plan comprehensive plan amendments. Further information is provided in Section 5.1. The Region II plan is available at www.nfwfmd.state.fl.us/pubs/2006Rwsp/rwsp.htm.

- An agreement with DEP to implement the well permitting requirements of Chapter 62-524, F.A.C., has been in place since 1991 and has continued each subsequent year. The program addresses potable well construction in specific delineated areas including portions of Escambia, Jackson, Leon and Santa Rosa counties and will be effective through June 2011. Geospatial well location data are being added to the database. Water well contractors, other agencies, and the public are provided with reliable data and information.
- The District continues to provide educational brochures and guidance documents on water conservation to utilities, local governments, and interested citizens. Over 50,000 such brochures and documents were distributed to utilities and local governments through September 2007. As of September 2007, 13 major hotels are participating in the Conservation Hotel and Motel Program (CHAMP) District-wide. The program promotes water and energy conservation by requesting guests to consider having towels and linens laundered less frequently than daily. Participating hotels report water use data from before and after the program for documentation and evaluation. In addition to these activities, the District continued distribution of WaterWise Florida Landscapes, a four-color, 64 page publication distributed to county extension offices, utilities, and the public.
- The District has taken several steps toward implementing e-permitting. Elements of a comprehensive e-permitting system are expected to include: (1) an e-compliance module that allows permittees to enter pumpage, water level and water quality as required by the conditions of their permits and (2) well completion report entry system that will allow all contractors to enter well completion reports on-line.
- In cooperation with Bay County, the District continues operating the monitoring network for stream flow and rainfall within the Deer Point Lake Reservoir watershed.
- The District continues to provide hydrologic condition data through its website. Data are posted for major waterbodies, watersheds, and aquifers. Included are accumulated rainfall amounts, drought conditions, stream flows, lake levels, and ground water levels. The information is updated at least every six months or as conditions warrant.

Water Supply Priorities for FY 2007-2008

- Complete development of an updated Water Supply Assessment and water demand projections.
- Work with Bay County to develop a new inland ground water source. Bay County has traditionally relied on surface water from Deer Point Lake Reservoir, which may be vulnerable to the effects of hurricane surge. To provide a back-up supply and to provide an alternative source of supply for future growth in the county, the District and the County are working together to develop a new inland ground water source to provide the needed additional source capacity for growth and as back-up for the surface water source.
- Work in cooperation with local governments and utilities to explore possibilities for interconnection of alternative water supplies. The significant investments in development of alternative water supplies, including from both ground and surface water sources, have resulted in a diverse base of water supply sources that, when interconnected, will

significantly further the goal of drought-proofing the coastal area of the District by allowing short-term transfer of water between utilities.

- Implement regional water supply plans, as approved by the Governing Board, for Regions II and V. Implementation includes construction of alternative water supply development projects, water resource development, providing water conservation information to utilities and the public, and providing technical assistance to local governments for the development of local water supply comprehensive plan amendments.
- Implement alternative water supply development and water resource development projects through the Water Protection and Sustainability Program, in accordance with Governing Board resolutions and as detailed in Section 5.2.
- Continue development of the inland wellfield in Walton County to serve as an alternative water supply source for coastal Walton County.
- Continue to work with Okaloosa County to identify and develop alternative sources, including reuse, inland groundwater, and potentially inland surface water sources.
- Implement and apply the Floridan Aquifer sustainability model, including its use as a tool to evaluate future withdrawals from inland areas and other water supply alternatives.
- Continue monitoring the Floridan Aquifer and substantially complete modeling analysis to assess the feasibility of inland Floridan Aquifer alternative water supply in Franklin County.
- In cooperation with utilities, maintain and, where necessary, expand the monitoring network for surface water flow and quality and groundwater level and quality to support water supply development planning in critical areas.
- Continue to make the Florida Forever capital improvement grant program available to local governments and public utilities that wish to apply for grants for implementation of reuse projects and other qualifying water resource restoration and protection projects.
- Continue to provide water conservation educational information to utilities, local governments, utilities, and residents. The CHAMP program will be focused on regions II and V.

Flood Protection and Floodplain Management

Recent Accomplishments

- Phase I (stormwater) of the Environmental Resource Permitting (ERP) program officially began October 1, 2007, and offices were opened in Tallahassee and Crestview. With the first phase, the District began issuing stormwater permits to address water quality and flooding from construction and development. Phase II (wetland permitting) is expected to begin in mid to late 2008. Phase II will enhance protection for wetlands connected to other surface waters, as well as isolated wetlands not previously protected by state law in northwest Florida. Workshops on how to complete e-permits were held in September for the public. E-permitting is expected to be operational in 2008. Training tutorials are available on the District's web site or on CD by request.
- Work continues on the Flood Map Modernization program being implemented in cooperation with the Federal Emergency Management Agency (FEMA). Final effective digital flood insurance rate maps (DFIRMs) have been completed for Escambia, Santa Rosa, and Gulf counties. Preliminary DFIRMS have been completed in Bay, Gadsden, and Leon counties,

and work continues on updating maps in Walton, Wakulla, Calhoun, Washington and Holmes counties.

- The District continued to provide hydrologic condition data through its website. The data is posted for major waterbodies, watersheds, and aquifers. It includes accumulated rainfall amounts, drought conditions, stream flows, lake levels, and ground water levels. The information is updated at least every six months or as conditions warrant.
- The District continues the operation of real-time stage and rainfall data collection via GOES satellite at three stations: Yellow River at SR2 in Okaloosa County, FAF #47 (groundwater level) in Walton County and Clark Sand (ground and surface levels) in Escambia County. Data are available through the District's website.
- An agreement with Bay County to continue a monitoring program for the Deer Point Lake Reservoir watershed was approved in September. The District has operated and maintained this monitoring network for the county since 1998. The monitoring program includes six discharge stations and three rainfall stations. These monitoring stations measure continuous discharge, rainfall and stage levels. These data provide the major stream flows into Deer Point Lake and are used to manage water resources and identify areas that may require acquisition or additional protection.
- An agreement with the City of Tallahassee and Leon County to continue a stormwater flow monitoring program was approved in September. The program includes the operation of 53 surface water and rainfall data collection stations. The District has operated this stormwater monitoring network for 17 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.
- Newly awarded Florida Forever capital improvement grants for stormwater retrofit projects in Apalachicola, Carrabelle, Okaloosa County, and Gulf Breeze will have flood protection, as well as water quality benefits.
- The District has completed acquisition of detailed elevation data, acquired through use of Light Detection and Ranging (LiDAR) technology, for nearly the entire District. Final data acquisition for Okaloosa, Jackson, Calhoun, and portions of Liberty counties is expected in early-to mid-2008.
- The District is providing funding to Gulf County to remove dredge spoil sand from the floodplain of the Apalachicola River on Site 39 southeast of Wewahitchka. The project will restore the floodplain habitat and enhance the ecosystem of the river and Apalachicola Bay.
- During FY 2006-2007, the District protected 49.6 acres through fee simple acquisition and donation. The District also conducted an exchange in the Choctawhatchee River Water Management Area and received 59.31 acres for 18.67 acres. To date, 213,148 acres of land have been protected for water resource purposes through the land acquisition efforts of the District. Of this, 170,783 acres are floodplain. These acquisitions provide long-term protection of floodplain functions, as well as water quality, natural systems, and public access.
- The District continues implementation of the dam safety program through the Chapter 40A-4, F.A.C., Management and Storage of Surface Waters program.

Flood Protection and Floodplain Management Priorities for FY 2007-2008

- The District will continue to emphasize nonstructural flood protection including land acquisition, floodplain map modernization, and technical assistance to local governments, as well as implementation of stormwater components of ERP.
- It is anticipated that wetland resource regulation aspects of Environmental Resource Permitting will be implemented in 2008.
- The District will continue to operate a flood warning and monitoring network in cooperation with local governments and federal agencies for flood protection and water resource management.
- It is anticipated that the availability of hydrologic data on the NFWFMD website will continue to be enhanced.
- The District will continue operation of real-time stage and rainfall data collection via GOES satellite at three stations as described above. Operation of real-time data collection stations continues at other locations throughout the District and is available on the District's website.
- The District will continue efforts with FEMA to implement the district-wide floodplain map modernization program.
- Acquisition of lands to protect water resources will continue. Approximately 118,444 acres of floodplain have been identified for purchase or conservation easement
- The District will continue oversight of structural flood protection (facilities) through the District's Management and Storage of Surface Waters rule (Chapter 40A-4, F.A.C.).
- The District will distribute brochures and informational handouts to increase permittee understanding of issues and restrictions associated with the construction of permitted water management systems.

Water Quality

The District's surface water quality protection efforts are primarily coordinated under the auspices of the Surface Water Improvement and Management (SWIM) program, with funding provided by state SWIM appropriations, Florida Forever capital improvement funding, legislative special appropriations, local government contributions, and federal grants. Limited state and federal funding is also provided for the Integrated Water Resource Monitoring (IWRM) Network and the Springs Initiative program.

Recent Accomplishments

- As described above, ERP Phase I was initiated in October 2007. Implementation of this program is expected to result in long-term benefits for water quality, flood protection, and natural systems.
- The Governing Board approved funding 11 new grant projects under the Florida Forever Capital Improvement Grant Program to assist local governments with funding capital improvement projects that will provide water quality and associated aquatic and wetland ecosystem benefits. Over \$4.3 million in grant funding was awarded this year for implementation of stormwater retrofit and habitat restoration projects in six counties.
- Grant recipients have made substantial progress in completing Florida Forever capital improvement projects. Those completed over the past year include twelve hilltop-to-hilltop

unpaved road/stream stabilization sites (work completed by the Orange Hill Soil and Water Conservation District), Call and Cadiz Street stormwater retrofit project (Tallahassee), St. Joseph Lake stormwater retrofit project (Port St. Joe), Port Panama City Stormwater Improvements (Panama City Port Authority), Okeehoopkee basin stormwater retrofit (Leon County), Phase I Stormwater Improvements (Gulf Breeze), Lamb Eddy Road stabilization (Calhoun County), and the Carpenter Creek basin stormwater retrofit (Pensacola).

- Work is continuing on a stormwater retrofit project in Eastpoint to treat stormwater before it flows into Apalachicola Bay. The project is a cooperative effort using EPA 319 and District funding to install eight baffle boxes to treat stormwater runoff from the Avenue A basin in Eastpoint.
- The District provided grant funding to the Friends of St. Andrew Bay/Bay Environmental Study Team to assist in development of a watershed-wide stormwater management plan and to educate the public about preventing pollution.
- The District entered into a cooperative agreement with Okaloosa County for funding assistance to investigate, analyze and design a stormwater retrofit and treatment plan for the Gap Creek watershed. Gap Creek is a primary tributary of Cinco Bayou, a major embayment in western Choctawhatchee Bay. The creek drains portions of Fort Walton Beach and Hurlburt Field, as well as other unincorporated areas, before discharging to the bayou.
- The District is assisting Escambia County in removal of accumulated sediment from Bayou Chico to improve water quality and estuarine habitat. The project is funded through the Pensacola Bay Surface Water Improvement and Management (SWIM) program.
- The District removed 32,686 cubic yards of accumulated stormwater sediment from the Lake Jackson Regional Stormwater Facility, installed new stop logs on the outfall structures, and installed a new control gate on the diversion chamber.
- Through the Florida Springs Initiative and an agreement approved in September with DEP, the District monitors discharge from Wakulla Spring, monitors water quality at Merritt's Mill Pond, and samples six springs in Jackson County to estimate ground water age and to define the recharge areas for these springs. The agreement also provides for the design of restoration work near the spring vent and shoreline adjacent to Gainer Spring in Bay County. The Gainer Springs restoration work is planned as a public/private partnership undertaken to protect a unique and valuable resource within the District. It is also anticipated that the District will better define ground water contribution areas for Jackson Blue, Wakulla, and Morrison springs.
- The District completed a refinement of the Wakulla and Morrison Springs basins using LiDAR elevation data.
- The District completed a water chemistry study in the Merritts Mill Pond Spring basin. Technical File Report 07-01 includes an analysis of land use change from 1994-2004, results of submerged discharge measurements, and spring basin refinement of Jackson Blue Spring. This study will assist the District in characterization of ground water contribution areas within the spring basin.
- A Springs Inventory Special Report for Pine Log Creek has been completed.
- In June, the District and DEP renewed an ongoing agreement to participate in the Integrated Water Resources Monitoring program. This program provides for ground and surface water sampling at a network of sites around the District. Through the statewide monitoring

program, water quality data from confined and unconfined aquifers, rivers, streams and lakes will be collected and interpreted.

- The District renewed its agreement with DEP to continue monitoring under the Ambient Surface Water Quality Assessment program. This program provides long-term water quality trends for major streams and rivers within the District's 16 counties. Data obtained are used by DEP and the District to develop management strategies to improve surface water quality and to characterize the quality of our surface water resources.
- The District collected 180 water quality samples from sites in the Pensacola Bay watershed. These sites included lakes, streams, rivers, and confined and unconfined wells.
- As described above, acquisition of LiDAR data for the District is nearly complete.

Water Quality Priorities for FY 2007-2008

- District efforts will continue to focus on implementation of SWIM plans and related projects to address existing and potential water quality issues. SWIM planning efforts will include updating and streamlining SWIM plans where watershed needs have been identified and where priorities need to be reassessed.
- The District will develop an update to the St. Marks River Watershed SWIM Plan.
- The District will continue monitoring ambient surface and ground water quality through the status monitoring network and Surface Water Temporal Variability monitoring network. For FY 2007-2008, monitoring will focus on the Perdido River watershed.
- The District will install a stage, salinity, and rainfall station near the confluence of the St. Marks and Wakulla rivers.
- The District will continue to sample 17 sites in the Econfina Creek watershed monthly to monitor water quality for recreation purposes.
- The District will install a data logger within the vent of Jackson Blue Spring for the purpose of establishing a long-term discharge record.
- The District will conduct quarterly discharge measurements at its major springs: Wakulla, St. Marks, Jackson Blue, Gainer and Cypress.
- The District will conduct a study of ground water age and recharge rate of springs located in Merritt's Mill Pond, Jackson County.
- The Springs Inventory of the NFWFMD will be updated in 2008 to include Holmes Creek and springs located since 2005.
- Stormwater retrofit planning and construction will continue for the community of Eastpoint, on Apalachicola Bay in Franklin County.
- The District will continue to work in cooperation with local governments to implement priority capital improvement projects through the Florida Forever Capital Improvement Grant Program.

Natural Systems

Recent Accomplishments

- The District has continued land acquisition and restoration efforts through the Florida Forever and FDOT mitigation programs. Through the end of FY 2007, the District has acquired 213,148 acres through fee, donation, and less-than-fee purchases of the 382,649 acres identified in the District's 2007 Florida Forever Land Acquisition Work Plan to protect water quality, natural systems, and floodplain functions.
- Acquisition of 17.7 acres in Okaloosa County was approved in February. The property is located on the west side of the Yellow River and primarily consists of floodplain habitat. It is bordered by existing District lands on three sides. Eight acres in Washington County within the Econfina Creek area also were approved in February. This tract is located southeast of Sparkleberry Lake and consists mostly of xeric sandhill uplands.
- In September, the Governing Board approved the donation of a 150-acre conservation easement along the Ochlockonee River in Gadsden County from Coastal Plywood Company. Portions of the property are encumbered by a 1943 mosquito control easement held by the Board of Trustees. This tract is a narrow strip along the western riverbank that is 260 feet wide and over three miles in length. It consists mainly of mixed bottomland hardwood habitats associated with the Ochlockonee River and is interspersed with some areas of upland pine plantations. In July, the Governing Board approved purchase of a conservation easement of 1,544 acres along the Apalachicola River. This tract, located six miles north of Blountstown in Calhoun County, will protect backwater slough systems and two miles of river frontage. The total acreage owned by the District in the Apalachicola/Chipola River Water Management Area is now 45,251 acres.
- The purchase of a conservation easement of 1,528.9 acres along the Ochlockonee River in Liberty County was approved in July. Located between Highway 67 and the Apalachicola National Forest, the tract includes one mile of river frontage and important mixed bottomland hardwood forest habitat.
- The District is continuing implementation of the Umbrella Regional Mitigation Plan for mitigation of regional transportation impacts. The plan encompasses state mitigation requirements under Section 373.4127, F.S., and federal requirements under Section 404 of the Federal Clean Water Act, and it is available at www.nwfwmdwetlands.com.
- Implementation continues for restoration and management of the Sand Hill Lakes Mitigation Bank in Washington County. Activities completed include recording of a conservation easement, resource protection, law enforcement, restoration of erosion sites, hydrologic restoration at Black Pond and Dykes Mill Pond, removal of sand pine plantations, shrub reduction, re-planting of wiregrass and longleaf pine, native and exotic species surveys, fire management, water level monitoring, and exotics removal.
- During FY 2006-2007, habitat restoration was ongoing on 1,550 acres of District lands.
- As described above, implementation of ERP Phase I (stormwater) was initiated in October 2007, and work is proceeding toward implementation of ERP Phase II (wetland resource protection). Implementation of this program is expected to result in long-term benefits for water quality, flood protection, and natural systems.
- The Governing Board approved funding 11 new grant projects under the Florida Forever Capital Improvement Grant Program. These projects are expected to help protect and

restore aquatic and wetland habitats across the District, including in estuarine and stream habitats.

- The District has initiated development of a hydrologic restoration plan for Tates Hell State Forest. This project involves: (1) identifying and prioritizing areas for hydrologic restoration, (2) developing conceptual engineering designs for approximately 10 to 12 high priority restoration projects (to be implemented as funds become available), (3) developing recommendations for environmental monitoring and maintenance of restoration projects, and (4) clarifying agency roles and responsibilities. It is anticipated that this project will be completed in 2008.
- In 2006, the District acquired four tracts along the Perdido River totaling 5,456 acres. Since then, a public workshop was held to obtain suggestions on the proposed recreational uses of the property, and representatives from recreational user groups were selected to serve on a stakeholder committee. After several meetings, consensus was reached on the recreational uses, which were presented in another public workshop in March.
- District staff are working with equestrian users to evaluate and develop horse trails. The Florida Fish and Wildlife Conservation Commission (FWC) provided expertise and labor to rebuild the Sand Landing boat ramp. The District provided materials, fencing and parking lot/road improvements. The Pipes Landing picnic area/canoe launch was improved and opened. Also preliminary improvements were undertaken to allow for the opening of the Fillingim Landing canoe launch in 2008.
- A public workshop was held in May at Pitt Spring to provide an overview of the Econfina Springs Complex spring restoration and protection conceptual plan. District staff and consultants presented designs, and walking tours of Pitt, Sylvan, and Williford springs were available to the public. Proposed changes include replacing the retaining wall at Pitt Spring with natural lime rock and vegetation, enhancing the canoe dock with ladders, adding a tube launch dock with ladders, constructing decks to overlook spring pools, extending boardwalks over sensitive natural areas, building an elevated observation deck at Williford and more. In September, the Governing Board approved moving forward to prepare final designs for Phase I – Pitt and Sylvan springs.
- The District completed a resource investigation, published in October, which included monitoring and identification of spring discharges to Merritt's Mill Pond. Merritt's Mill Pond forms the headwaters of Spring Creek, a tributary to the Chipola River. Spring Creek's flow results from the discharge of numerous Floridan Aquifer springs and seeps, including one first magnitude spring, Jackson Blue. The water quality of the second magnitude and smaller springs were compared to Jackson Blue. At least eight springs are located within Merritt's Mill Pond: Jackson Blue, Shangri La, Indian Washtub, Twin Caves, Heidi Hole, Hole-in-the-Wall, Lamar's Landing and Gator Hole.
- *Voices of the Apalachicola* received the 2007 Samuel Proctor Oral History Award and was issued in paperback this past year. The award was presented by the Florida Historical Society. The book was published by the University Press of Florida on behalf of the District. In its pages, one of Florida's most endangered river systems comes alive through personal accounts of livelihoods and experiences. This book is available on the District's web site free of charge and a printed copy can be purchased through the University Press of Florida.
- The new *Saving Our Shorelines* brochure was completed this past year. The brochure stresses the importance of natural shorelines for water quality, fish and wildlife habitat, and shoreline stability. The benefits of natural shorelines are described and illustrated, and

methods of protecting and restoring shoreline habitats are presented. *Saving Our Shorelines* is available through the District's website and by request.

- The District continued to assist DOT through implementation of the Efficient Transportation Decision Making (ETDM) process. This process improves linkages between land use, transportation and environmental resource planning initiatives. The District's role includes evaluation of proposed projects with regard to potential water resource, floodplain, and wetland impacts and the development of related data and information.

Natural Systems Priorities for FY 2007-2008

- During the coming year, land acquisition emphasis is expected to be placed on inholdings and additions within the existing water management areas.
- The District will continue to implement wetland restoration and enhancement projects as mitigation for Department of Transportation activities in accordance with the ongoing development and updates of the Umbrella, Watershed-Based Regional Mitigation Plan.
- The District will continue to focus on restoration and management of the 2,155-acre Sand Hill Lakes Mitigation Bank in Washington County.
- The District will initiate permitting and design of the Gainer Springs Restoration Project.
- Efforts will continue to focus on implementation of SWIM plans and related projects to protect and improve aquatic habitat, wetland, and riparian habitat quality, as well as watershed resource functions of contributing terrestrial lands. In addition to project implementation, SWIM planning efforts will include updating and streamlining SWIM plans where watershed needs have been identified and where priorities need to be reassessed.
- The District will continue to work in cooperation with local governments to implement priority capital improvement projects through the Florida Forever Capital Improvement Grant Program. These include projects within the Apalachicola, St. Andrew/St. Joe, Pensacola, and Choctawhatchee watersheds.
- It is anticipated that the hydrologic restoration plan for Tates Hell State Forest will be completed during fiscal year 2007-2008. Implementation may be accomplished through the SWIM and FDOT Mitigation programs.
- The District continues to work with Escambia County to accomplish dredging of the main channel of Bayou Chico. The project will be completed in cooperation with the U.S. Army Corp of Engineers.
- The District will continue to work with Gulf County to remove dredge spoil sand from the floodplain of the Apalachicola River on Site 39 southeast of Wewahitchka. The project will restore floodplain habitat and hydrology, which will enhance the riverine ecosystem.

District-Wide Activities

Major tasks have been compiled into the table below with description of recent activities and status during fiscal year 2006-2007 (October 1, 2006 through September 30, 2007). The tasks are subdivided into water management program areas. Project status is denoted by 'Ongoing' (O) and 'Completed' (C). The 'Ongoing' designation has been applied to on-going, day-to-day programs, such as regulatory activities, plan implementation, intergovernmental coordination, and multi-year projects which, combined, account for the majority of District activities. The 'Completed' designation is applied to discrete projects that have been completed. The Areas of Responsibility (AOR) are water supply (WS), flood protection and floodplain management (FP), water quality (WQ), and natural systems (NS).

Table 2.1 District-Wide Activities

TASK	RECENT ACTIVITY	STATUS	RELATED AOR			
			WS	FP	WQ	NS
Water Resource Planning and Monitoring Program						
Water Supply Assessment	The initial <i>Water Supply Assessment</i> was completed in 1998, and, in 2003, water supply projections were extended to 2025. Staff are continuing work on an updated assessment and set of projections. Completion is anticipated in 2008.	O	√			
Regional Water Supply Plan – Region II	The Governing Board approved the updated Regional Water Supply Plan (RWSP) in October 2006. A number of Water Resource Development Work Program (WRDWP) projects are being implemented, as well as water supply development assistance in support of the RWSPs. Additionally, coordination with local governments to assist in related comprehensive plan requirements is ongoing.	O	√			
Regional Water Supply Plan – Region V	The Governing Board approved the RWSP in January 2007. A number of WRDWP projects are being implemented, as well as water supply development assistance in support of the RWSPs. Additionally, coordination with local governments to assist in related comprehensive plan requirements is ongoing.	O	√			
Floridan Aquifer Sustainability Modeling Project	Model development and calibration have been completed. Ongoing work is focused on model application.	O	√			√
Ground Water Quality Special Projects	The District continued Springs Inventory updates, and the groundwater temporal variability network sampling will continue. The District will install a data logger in Jackson Blue Spring and conduct a study of ground water age and recharge rate of springs located in Merritt's Mill Pond, Jackson County.	O	√		√	√
Water Quality and Quantity Monitoring	This program continued according to schedules established in agreements with DEP and local governments for ongoing data collection and research efforts.	O	√		√	√
Surface Water Availability Assessment	The District completed a feasibility assessment and cost estimates for developing surface water sources in Okaloosa County.	C	√		√	√
Water Flows and Levels Monitoring	Monitoring programs continue with USGS, DEP, and local governments to collect streamflow and water level data on a limited number of streams and lakes, as well as Sand-and-Gravel Aquifer in Region II.	O	√	√	√	√
Surface Water Monitoring Program	The trend monitoring program continued with DEP in order to monitor 24 stations throughout the District, and programs continued through agreements with Tallahassee, Leon and Bay counties to measure continuous rainfall, water levels and stream flow. Additional project-specific data collection and analysis were undertaken. The District renewed involvement in STATUS, a statewide water quality program, which includes sampling 180 randomly chosen sites annually.	O	√	√	√	√

TASK	RECENT ACTIVITY	STATUS	RELATED AOR			
Update/Revise SWIM Priority List	The updated SWIM priority list update was completed in 2006.	C		√	√	√
SWIM Plan Development, Implementation, Assessment, and Revision	Implementation of SWIM plans continued. Work on an update to the St. Marks SWIM plan was initiated.	O		√	√	√
Flood Hazard Map Modernization	This activity includes project scoping, DFIRM development, development of project proposals for FEMA funding, and development of interagency funding agreements with FEMA.	O		√	√	√
Acquisition, Restoration, and Public Works Program				WS	FP	WQ NS
Land Acquisition and Management	In FY 06-07, 89.02 acres of land protected through the Florida Forever and FDOT mitigation programs. Management is in place for all 213,148 acres.	O	√	√	√	√
Abandoned Well Plugging	During FY 06-07, 1,764 abandoned wells were plugged.	O	√		√	
Floodplain Land Acquisition and Restoration	Over 170,780 acres along the Perdido, Escambia, Blackwater, Choctawhatchee, Holmes, Econfina, Chipola and Apalachicola rivers are managed specifically for natural flood protection and floodplain benefits, and the restoration of natural habitat and the removal of any impediments to natural flows and flooding.	O		√	√	√
Restoration Projects	The District continued work to restore the natural flow and hydroperiod within Tates Hell Swamp. Restoration work also included efforts to restore floodplain and sloughs on the Apalachicola River and implementation of wetland mitigation projects for DOT.	O	√	√	√	√
Operation and Maintenance of Lands and Works Program				WS	FP	WQ NS
Management of District-Owned Lands	The 213,148 acres of District-owned lands are managed to protect water resources including natural floodplain functions, groundwater recharge and water quality. This includes restoration and maintenance of upland habitat. The District planted approximately 778,000 longleaf pines and 133,100 wiregrass plugs during FY 06-07.	O	√	√	√	√
Operation and Maintenance of Lake Jackson Stormwater Facility	Improvements and maintenance of the stormwater facility are ongoing. Activities this year included the following: trash removal, exotic species eradication, educational field trips, and filter maintenance and repairs.	O		√	√	√
Regulation Program				WS	FP	WQ NS
Consumptive Uses of Water Regulatory Program (Chapter 40A-2, F.A.C.)	Administration and enforcement for consumptive use of water is an ongoing regulatory program that is meeting the objectives of Chapter 40A-2, F.A.C. During FY 2006-2007, 119 Consumptive Use Permits were issued.	O	√		√	√
Well Construction Regulatory Program (Chapter 40A-3, F.A.C.)	Rule administration and enforcement is a fully implemented regulatory activity. During FY 2006-2007, 9,787 well construction permits were processed.	O	√		√	
Artificial Recharge Regulatory Program (Chapter 40A-3, F.A.C.)	This rule was repealed effective July 1, 1998. The administration and processing of the artificial recharge permits was incorporated into the well construction regulatory program and is an ongoing activity.	O	√		√	
Regulation of Agricultural and Forestry Surface Water Management Projects (Chapter 40A-44, F.A.C.)	No Agriculture and Forestry individual surface water permits were issued during 2006-2007.	O		√	√	√
Management and Storage of Surface Waters (Chapter 40A-4, F.A.C.)	The District processed 333 MSSW permits during FY 2006-2007.	O	√	√	√	√
Environmental Resource Permitting (Chapter 62-346, F.A.C.)	Stormwater management aspects of ERP began to be implemented in October 2007; implementation of wetland resource protection ERP is anticipated in 2008.	O	√	√	√	√

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TASK	RECENT ACTIVITY	STATU S	RELATED AOR			
			WS	FP	WQ	NS
Outreach Program						
WaterWays Education Program	Development and production of materials has been completed; distribution of materials is a continuing responsibility.	O	√	√	√	√
Participation on Interagency Hazard Mitigation Team, State Emergency Operations, and Annual State Hurricane Exercise	The District participates in a statewide program with EOC to prepare for and respond to hurricanes in northwest Florida. The District continued to monitor rivers and streams and provide information to the state, EOC, counties, National Weather Service, and the public. The District also works with Leon County on the real time Capital Area Flood Warning Network.	O	√	√		
Technical Assistance and Intergovernmental Coordination	The District reviewed approximately eight projects under the ETDM program during FY 2006-2007. Additionally, District staff reviewed Northwest Florida Transportation Corridor Authority (NWFTCA) plans, local government comprehensive plan amendments, developments of regional impact (DRIs), external permits, and clearinghouse issues. The District continued to maintain a library of FEMA and USGS flood prone area maps.	O	√	√	√	√

III. 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 are based on the importance of the waters to the state or region and the existence of or potential for significant harm to the water resources or ecology of the state or region. The list includes those waterbodies experiencing or that may reasonably be expected to experience adverse impacts. 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 areas are illustrated in Figure 3.1, and the 2007 MFL priority list is presented in Table 3.1.

Figure 3.1 NFWWMD MFL Priorities

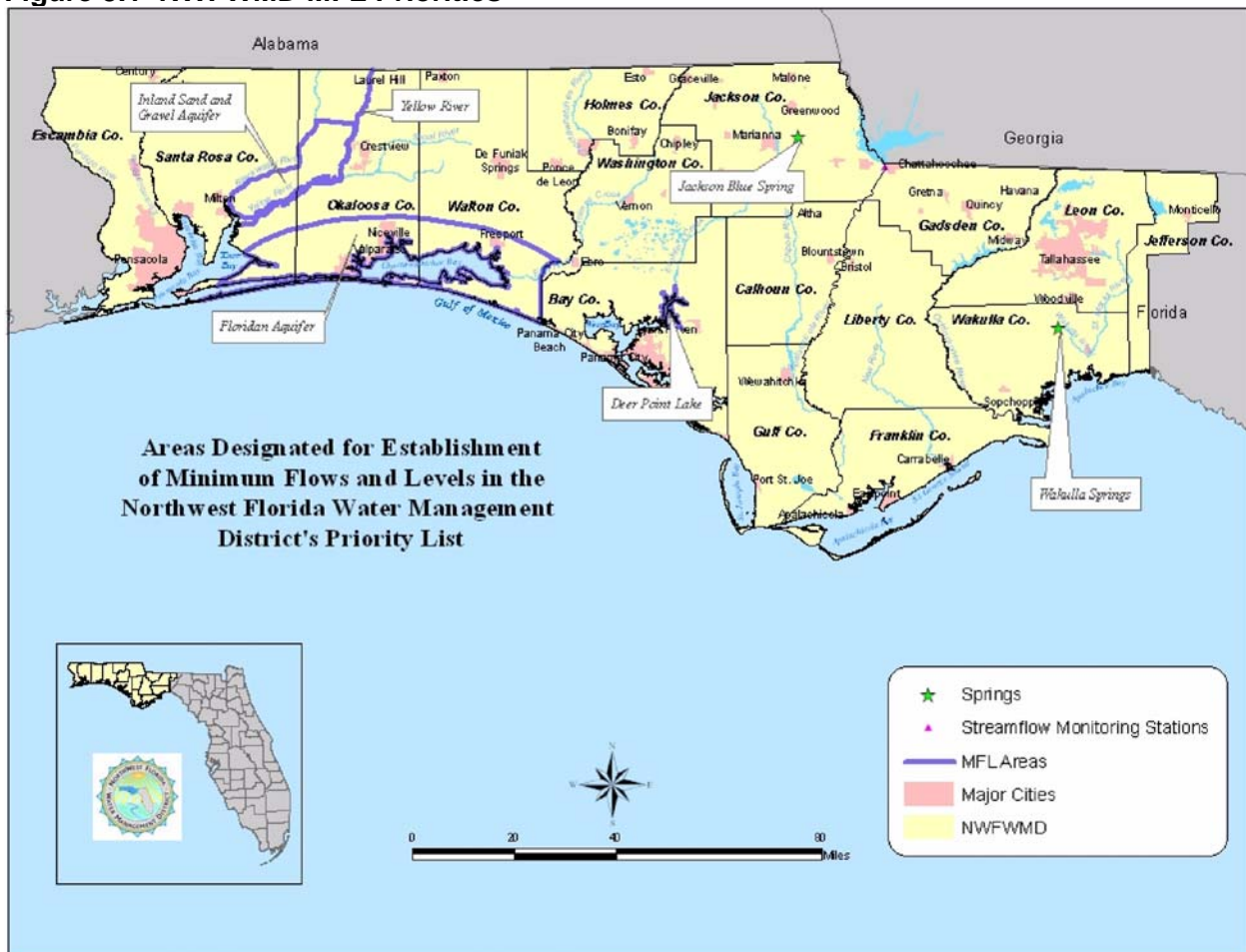


Table 3.1 Northwest Florida Water Management District MFL Priority List (2007)

#	Waterbody	WB Type	County	2006 List	2007 List	Date Estab.	Peer Rev.	Reason for Schedule Change	Existence of or Potential for Significant Harm
1	Floridan Aquifer	A	Coastal Portions of Santa Rosa, Okaloosa, Walton	2007	2010		N	Need for additional model analysis and data to quantify uncertainty.	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	2007	2010		N	Need for additional model analysis and data to quantify uncertainty.	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 Springs	S	Wakulla	2008	2008		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	2008	2008		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	2010		N		Monitoring and Technical analyses to determine consumptive demands, hydrology and aquatic ecosystem needs are ongoing.

WB Type: A=Aquifer, FI=Floridan, E=Estuary, L=Lake, R=River, S=Spring, W=Wetland; 2007 List=anticipated MFL establishment date proposed in 2007; Peer Rev.=voluntary peer review of MFL; * MFL in rule making; ** MFL rule challenged.

IV. Annual Five-Year Capital Improvements Plan

Introduction

The five-year capital improvements plan (CIP) includes projected revenues and expenditures for capital improvements from fiscal years 2007-2008 through 2011-2012. 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.

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.

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 Acquisition, Restoration and Public Works or under program heading Operation and Maintenance of Lands and Works.

The 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 Plan, Land Acquisition Plan, 5-year Water Resource Development Plan, Land Management Plan and DOT Mitigation Plan may also provide valuable insight to the District's long range capital improvements plan.

Table 4.1 NFWFMD Five Year Capital Improvements Plan, Fiscal Years 2008-2012

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS

2.1 LAND ACQUISITION

REVENUES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Water Management Lands Trust Fund	385,433	400,000	400,000	200,000	200,000
Florida Forever	8,209,742	2,937,500	2,937,500	0	0
District Land Acquisition Reserve	3,840,359	4,032,377	4,233,999	4,445,699	4,667,984
TOTAL	12,435,534	7,369,877	7,571,499	4,645,699	4,867,984

EXPENDITURES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Florida Forever - Land Acquisitions	9,602,019	2,437,500	2,437,500	0	0
Land Acquisition	1,948,082	4,032,377	4,233,999	4,445,699	4,667,984
BluePrint 2000	500,000	500,000	500,000	0	0
Water Management Lands Trust Fund	385,433	400,000	400,000	200,000	200,000
TOTAL	12,435,534	7,369,877	7,571,499	4,645,699	4,867,984

Table 4.1 NFWMD Five Year Capital Improvements Plan, Fiscal Years 2008-2012
2.2 WATER RESOURCE DEVELOPMENT

REVENUES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Florida Forever	795,000	1,000,000	1,000,000	0	0
TOTAL	795,000	1,000,000	1,000,000	0	0

EXPENDITURES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Florida Forever - Land Acquisitions	795,000	1,000,000	1,000,000	0	0
TOTAL	795,000	1,000,000	1,000,000	0	0

2.3 SURFACE WATER PROJECTS

REVENUES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
DOT Mitigation Funds	11,021,664	7,200,000	7,200,000	7,200,000	7,200,000
TOTAL	11,021,664	7,200,000	7,200,000	7,200,000	7,200,000

EXPENDITURES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
DOT Mitigation Funds	11,021,664	7,200,000	7,200,000	7,200,000	7,200,000
TOTAL	11,021,664	7,200,000	7,200,000	7,200,000	7,200,000

2.5 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

REVENUES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Water Management Lands Trust Fund	250,000	0	50,000	0	0
TOTAL	250,000	0	50,000	0	0

EXPENDITURES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Land Management Field Office – Western Region	250,000	0	50,000	0	0
TOTAL	250,000	0	50,000	0	0

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 LAND MANAGEMENT

REVENUES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Water Management Lands Trust Fund	1,450,000	550,000	550,000	550,000	550,000
Florida Forever	145,000	0	0	0	0
TOTAL	1,595,000	550,000	550,000	550,000	550,000

EXPENDITURES (\$)	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011	FY 2011-2012
Public/Land Management Access Bridges	1,245,000	200,000	300,000	350,000	350,000
Canoe/Small Boat Launch	50,000	50,000	50,000	50,000	50,000
Spring Restoration	250,000	250,000	150,000	100,000	100,000
Water Control Structure	50,000	0	0	0	0
Creek Bank and Solution Hole Stabilization	0	50,000	50,000	50,000	50,000
TOTAL	1,595,000	550,000	550,000	550,000	550,000

TOTAL CAPITAL EXPENDITURES (\$)	26,097,198	16,119,877	16,371,499	12,395,699	12,617,984
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Project Descriptions

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

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 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: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 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: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 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: Regional Mitigation Plan, District's five-year land management plan, SWIM plans.

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

Alternative(s): Upon agreement of all three parties (District, DEP 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: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridge

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

Physical Location: Westville & Lafayette Creek Public Access – Choctawhatchee River Water Management Area

Square Footage/Physical Description: Two proposed single-lane steel bridges utilizing refurbished Bailey bridge sections (12.5 x 45 feet), subject to engineering design.

Expected Completion Date: September 30, 2008

Historical Background/Need for Project: To provide public/land management access to approximately 2,500 acres (Westville) and 1,000 acres of District property, respectively in the Choctawhatchee 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): In the Westville area, road fill was placed across sloughs for logging access. The District intends to restore natural hydrologic function to the slough/floodplain system by removing logging road fill and installing one or more bridges annually, subject to site conditions. At Lafayette Creek, heavy equipment access for land management purposes is blocked by a County owned and maintained wooden bridge that has a load rating of less than 40 tons. The District proposes to enter into a cooperative agreement with Walton County to supply the bridge and other necessary materials with the County supplying equipment and labor. NFWFMD could delay the projects, 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.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at \$75,000 for both bridges.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at \$25,000 for engineering design services.

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

Anticipated Additional Operating Costs/Continuing: \$500 annually

PROGRAM: OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridge

Type: AASHTO Type II Beam concrete Bridge design (75 to 100 year life)

Physical Location: Florida River Island Bridge – Apalachicola River Water Management Area

Square Footage/Physical Description: Proposed single-lane concrete bridge (15 feet x 165 feet).

Expected Completion Date: On or before February 29, 2008

Historical Background/Need for Project: To provide public/land management access to approximately 6,000 acres of District property in the Apalachicola 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): Bridge construction will be completed on or before February 29, 2008.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): \$920,000

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Construction oversight estimated at \$42,000 per latest engineering fee quote.

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

Anticipated Additional Operating Costs/Continuing: \$1,000 annually

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 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, 2008

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. NFWFMD 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 underway and will be completed in late spring, 2008.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at \$100,000 for two bridges.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Actual engineering design services are \$37,810.

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

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

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

Project Title: Econfina Springs Complex – Restoration and Protection

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. Final design process is underway. Restricted access measures for canoeists may be proposed for Williford Spring (2nd Magnitude), subject to Board of Trustees (BOT) sovereign land exception. Design concepts and design sketches are complete as of March, 2007. Site surveying is also under way. Review/approval of concepts/sketches by the SRC/Public/Governing Board was completed in late 2007. Final design process is underway.

Expected Completion Date: September 30, 2008

Historical Background/Need for Project: Project will prevent erosion/sedimentation/water quality impacts to one significant 2nd Magnitude spring and two 3rd Magnitude springs.

Plan Linkages: District's Florida Forever Work Plan

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

Alternative(s): NFWFMD 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): \$250,000, subject to final architecture/engineering design/permit.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Initially estimated at \$142,000 for final architectural/engineering design/construction services.

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

Anticipated Additional Operating Costs/Continuing: \$2,000 annually

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridges

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

Physical Location: Northern Econfina Creek Land Management Access (Trapp Pond Area) – Econfina Creek Water Management Area

Square Footage/Physical Description: Three or four proposed single-lane steel bridges utilizing refurbished Bailey bridge sections (12.5 x 45 feet), subject to engineering design.

Expected Completion Date: September 30, 2008

Historical Background/Need for Project: To provide critical land management access to approximately 3,000+ acres of District property in the northern Econfina Creek River Water Management Area in the vicinity of Trapp Pond.

Plan Linkages: District's Florida Forever Work Plan

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

Alternative(s): The District does not have legal access to several thousand acres in the vicinity of Trapp Pond. District proposes to bridge at least three (possibly four) major perennial stream drainages to provide critical access to District lands. NFWFMD could delay the project, which would prevent vehicular access by land management staff to conduct habitat restoration, erosion control, prescribed burning, etc. activities, prevent law enforcement/emergency vehicles from accessing the property to suppress wildfire and enforce FWC rules and regulations.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Three to four bridges estimated at \$25,000 to \$33,000 each or \$100,000 for up to three to four bridges.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): \$25,000 for engineering designs.

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

Anticipated Additional Operating Costs/Continuing: \$1,000 annually

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Black Pond Water Control Structure

Type: Water Control Structure

Physical Location: Sand Hill Lakes Mitigation Bank – Econfina Creek Water Management Area

Square Footage/Physical Description: One proposed sheet pile water control structure, subject to engineering design.

Expected Completion Date: On or before February 29, 2008

Historical Background/Need for Project: Replace collapsed and obsolete wooden & concrete water control structure with new sheet pile structure to restore natural hydrologic regime and control potential floods.

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 endanger public safety, especially private downstream landowners and public recreational users of the property in the event of floods. Natural lake/swamp levels are also being adversely impacted due to excessive drawdown of the natural lake/swamp ecosystem which adversely impacts fish and wildlife populations.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at \$50,000, subject to engineering design.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at \$25,000 for engineering design services.

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

Anticipated Additional Operating Costs/Continuing: \$1,000 annually

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Fillingim Landing Canoe/Small Boat Launch

Type: Canoe/Small Boat Launch Structure

Physical Location: Fillingim Landing – Perdido River Water Management Area

Square Footage/Physical Description: One proposed wooden or concrete canoe/small boat launch, subject to engineering design.

Expected Completion Date: September 30, 2008

Historical Background/Need for Project: Until acquired by the District in 2006, the Perdido River had been historically closed to public access for at least two decades. The project will provide vital public/recreational access to the northern Perdido 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 would prevent the public from accessing the river for recreational activities.

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

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridge

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

Physical Location: Sand Landing – Perdido River Water Management Area

Square Footage/Physical Description: One proposed single-lane steel bridge utilizing refurbished Bailey bridge sections (12.5 x 45 feet), subject to engineering design.

Expected Completion Date: September 30, 2008

Historical Background/Need for Project: To provide critical public/land management access to approximately 1,500+ acres of District property north of Hwy. 90 along the Perdido River Water Management Area in the vicinity of Sand Landing.

Plan Linkages: District's Florida Forever Work Plan

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

Alternative(s): The District proposes to bridge one perennial stream crossing to provide enhanced access to District lands from the south via Hwy. 90. NFWFMD could delay the project, which would hinder vehicular access by the public/land management staff to conduct habitat restoration, erosion control, prescribed burning, etc. activities, prevent law enforcement/emergency vehicles from accessing the property to suppress wildfire and enforce FWC rules and regulations.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): One bridge estimated at \$50,000.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): \$25,000 for engineering designs.

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

Anticipated Additional Operating Costs/Continuing: \$1,000 annually

Chapter IV 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.

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V. Water Supply

5.1 Five-Year Water Resource Development Work Program: Fiscal Year 2007-2008 Update

Introduction

In 1997, the Florida Legislature amended the Florida Water Resources Act (Chapter 373, F.S.) to provide direction to the state's five water management districts regarding 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 problems.

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 373.0361, 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."

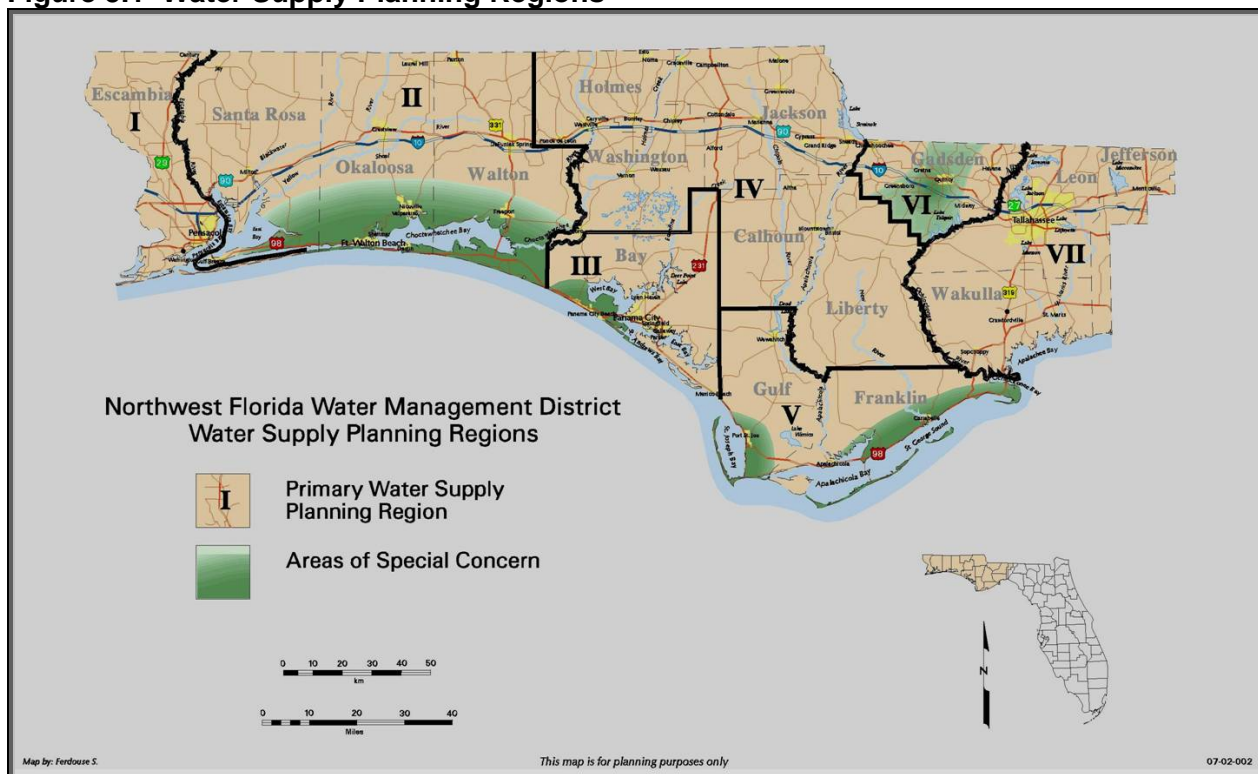
The Northwest Florida Water Management District completed an update to the Region II RWSP on October 26, 2006, and a new plan for Region V on January 25, 2007. The water resource development components incorporated within these plans include projects that support sustainable water supply development. This Fiscal Year (FY) 2007-2008 update to the District's Five Year Water Resource Development Work Program document describes the current strategies for implementing the water resource development components of each approved plan. Following DEP review and incorporation of any subsequent revisions, if applicable, the final Five Year Water Resource Development Work Program will be incorporated into the March 1 Consolidated Annual Report in accordance with Sections 373.536 and 373.036, F.S.

Regional Water Supply Planning in Northwest Florida

The Northwest Florida Water Management District (NFWFMD or District) established seven water supply planning regions (Figure 5.1) and completed the District Water Supply Assessment (WSA) in 1998 (NFWFMD 1998). Based on the WSA and subsequent action by the NFWFMD Governing Board, it was initially determined that only Region II (Santa Rosa, Okaloosa, and Walton counties) required a regional water supply plan. The primary resource concern in Region II is in 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, the demand projections from the WSA were updated through 2025. In 2006, the NFWFMD Governing Board determined that issues affecting the adequacy and sustainability of traditional water supplies for

coastal Franklin County, as well as the need for planning alternative surface water development in Gulf County, warranted development of a regional water supply plan for Region V. Funding has been budgeted for resource assessment, alternatives analysis, and plan development and implementation for Regions II and V.

Figure 5.1 Water Supply Planning Regions



The District-wide Water Supply Assessment (NFWFMD 1998; 2003) is in the process of being updated to include water demands through 2030. Completion of the updated assessment is expected in 2008.

Virtually all water supply issues in Region II are attributable to demands for potable water by public supply water utilities withdrawing water from the Floridan Aquifer along the coastal fringe of Santa Rosa, Okaloosa, and Walton counties. Long-term pumping of local Floridan Aquifer wells to supply demands along the coastal fringe has caused formation of a substantial cone of depression in the aquifer. Public supply water use in the region is projected to increase 59 percent from 48.87 million gallons per day (MGD) in 2005, to 77.70 MGD in 2025. Roughly two-thirds of this increased demand is projected to occur in the region’s coastal areas. Public supply is the use category of paramount concern as it represents nearly three-fourths of the total projected demand for 2025. Water supply planning and resource management activities have focused on this issue during the past two decades, and the District has developed a close working relationship with local governments and utilities in the region to monitor water resources and develop solutions to meet future demands.

The first regional water supply plan developed in northwest Florida under Section 373.0361, F.S., was approved for Santa Rosa, Okaloosa and Walton counties in February 2001 (NFWFMD 2001). The RWSP was developed to address the regional water supply planning requirements over a 20-year planning horizon, extending through the year 2020. It describes the region's water supply needs, identifies existing and alternative water source options and analyzes the ability of these sources to meet future demands. The RWSP also discusses alternatives to address unmet demands and to sustain the water resources and related natural systems.

Within Region V, the primary concern identified is saltwater intrusion into the upper Floridan Aquifer within the coastal Area of Special Concern. This has implications for the long-term sustainability of coastal ground water supplies within both Franklin and Gulf counties. As a result, focus has been placed on identification of a sustainable inland ground water source within Franklin County and development of a surface water source for Port St. Joe and the surrounding area.

An update to the Region II RWSP was developed during FY 2005-2006, and it was approved by the Governing Board in October 2006. This update was developed in an open public process in accordance with Section 373.0361, F.S., including technical and public workshops with local governments, utilities, and the public. The plan incorporates updated and revised water resource development and water supply development components, specific alternative water supply development projects, and other elements as described in the statute. The Region V RWSP was developed concurrently in a similar manner, and it was approved by the Governing Board in January 2007.

As required by Section 373.0361(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 upon 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 District's 2003 report detailing updated water demand projections for 2005-2025 (NFWFMD 2003). An overall objective of the District is to drought proof its communities through development of alternative water supplies and to develop water supply options such as utility interconnects where available.

As described below, implementation of the strategies detailed in the Water Resource Development Work Program (WRDWP) has resulted in identification of quantities of water that will be available for reasonable-beneficial uses through the planning period. Sources of water include the Sand-and-Gravel aquifer, the inland Floridan Aquifer, increased reuse and conservation, and surface water sources. It should also be noted that all future water demands, including considering 1-in-10 year drought and seasonal water demand fluctuations, are addressed through the consumptive use permitting program.

Work Program Implementation

The July 2000 RWSP (approved February 2001) for Region II included ten water resource development (WRD) projects. Through the approval of the current plan update, implementation of these projects can be summarized as indicated in Table 5.1.

Table 5.1 Region II WRD Projects - 2000 RWSP

Project	Accomplishments	Status
Floridan Aquifer Sustainability Analysis	Model development completed and further applications initiated. Reference (1)	Model applications carried forward into Plan update
Inland Sand and Gravel Aquifer Development	Groundwater flow model developed; application initiated.	Model applications and sustainability analysis carried forward into plan update
Coastal Sand and Gravel Aquifer	Analysis of coastal sand and gravel water availability complete. Reference (2)	Completed analysis to determine additional small quantities are available
Development of Regional Strategies and RWSP Updates	Plan update complete; implementation ongoing. Reference (3)	Implementing plan update
Water Reuse Coordination	Ongoing implementation (project description below).	Carried forward into plan update
Water Conservation	Ongoing implementation (project description below).	Carried forward into plan update
Surface Water Monitoring for Water Supply Feasibility	Initial feasibility and cost analysis complete. Reference (4)	Implementing Recommendations of feasibility analysis
Hydrologic Data Collection and Analysis	Ongoing implementation (project description below). Reference (5)	Collection of monitoring data continuing
Abandoned Well Plugging	Ongoing implementation; 3,089 wells plugged within the region.	Carried forward into plan update
Aquifer Storage and Recovery	Project maintained pending future opportunities or needs.	On hold
Associated references:		
<p>(1) Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Western Domain Model Final Report. www.nfwfmd.state.fl.us/pubs/hgl_western_domain/hgl_western_domain.html.</p> <p>(2) Availability of Ground Water from the Sand-and-Gravel Aquifer in Coastal Okaloosa County, Florida. Water Resources Technical File Report 04-01. www.nfwfmd.state.fl.us/pubs/wrtfr04-01/wrtfr04-01.htm.</p> <p>(3) Regional Water Supply Plan for Santa Rosa, Okaloosa, and Walton Counties – Plan Update. Water Resources Assessment 06-01. www.nfwfmd.state.fl.us/pubs/2006Rwsp/rwsp.htm.</p> <p>(4) Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates. www.nfwfmd.state.fl.us/pubs/final_%20water_Report/Final%20Water%20Supply%20Study%20Report.pdf.</p> <p>(5) Results of the Floridan Aquifer Drilling Program in Santa Rosa, Okaloosa, and Walton Counties, Florida. Technical File Report 01-1. www.nfwfmd.state.fl.us/pubs/tfr01-1/tfr01-1.htm.</p>		

As indicated in the table, considerable progress toward implementing water resource development priorities has been made since completion of the initial RWSP for Region II. Model development and calibration were completed for the Inland Sand and Gravel Aquifer project and Floridan Aquifer Sustainability Model, analysis was completed for an area of the coastal Sand and Gravel Aquifer, and a major surface water sources feasibility assessment was completed for water resources in Okaloosa County. Other strategies, including Water Reuse Coordination, Water Conservation, and Hydrologic Data Collection and Analysis, are implemented on an ongoing basis. Current activities and plans for water resource development projects carried forward through the Region II RWSP update are described below.

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

1. Applications and Support of the Floridan Aquifer Sustainability Model;
2. Inland Sand-and-Gravel Aquifer Sustainability Analysis;
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.

The Water Resource Development component of the new Region V Regional Water Supply Plan consists of four basic projects that support the development of sustainable alternative water supplies for Franklin and Gulf counties. The four projects of the WRD plan component are:

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.

Separate descriptions of these projects and anticipated funding requirements are provided by region below.

Funding for Water Resource Development

Since the state constitution limits the NFWFMD to only 1/20th of the *ad valorem* taxing authority afforded the other four districts, legislative mandates for water supply planning and water resource development have required the NFWFMD 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 water resource development and supply development from numerous sources, including the following:

- Water Management Lands Trust Fund;
- Florida Forever (limited water reuse construction only);
- District General Fund;
- Legislative Special Appropriations;
- 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) established by the 2005 Florida Legislature provides a significant, dedicated source of revenue for alternative water supply development and water resource development projects. This funding source allows the District to provide cost-share funding for construction of alternative water supply development projects that may have otherwise been delayed or placed in competition with other projects for limited funds. Additionally, priority water resource development 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. Additional water resource development activities and other support functions will continue to be funded with 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 water resource development efforts and water supply assistance, including possible funding for other regions in future years. Additional District expenditures for acquisition and protection of important recharge lands should also be recognized.

The District also assists with priority water resource development projects in other regions when those projects help to prevent or address emerging water supply and water resource problems. Current projects include ground water model development and aquifer testing in Bay County (Region III) and public access reuse projects for the cities of Chipley and Tallahassee. Given the need for alternative water supply development in Bay County, it is anticipated that staff will recommend that the Governing Board approve the development of a RWSP for Region III. Also, the District will continue to assist the Emerald Coast Utilities Authority (ECUA) (Region I) in developing an updated model of the Sand-and-Gravel Aquifer in Escambia County to support water supply development and protection.

Funding budgeted for water resource development is listed within the project descriptions below and in summary tables for regions II and V (Tables 5.11 and 5.16, respectively). The total fiscal year 2007-2008 WRDWP budget of \$816,265 is that portion of the District's funds budgeted specifically for water resource development within region's II and V. This amount will adequately fund the planned water resource development programs for both regions for the year. Additional WRD funds included in the District's budget are those that have been reserved to provide financial assistance for water resource development or water supply development projects in other regions, or for future projects.

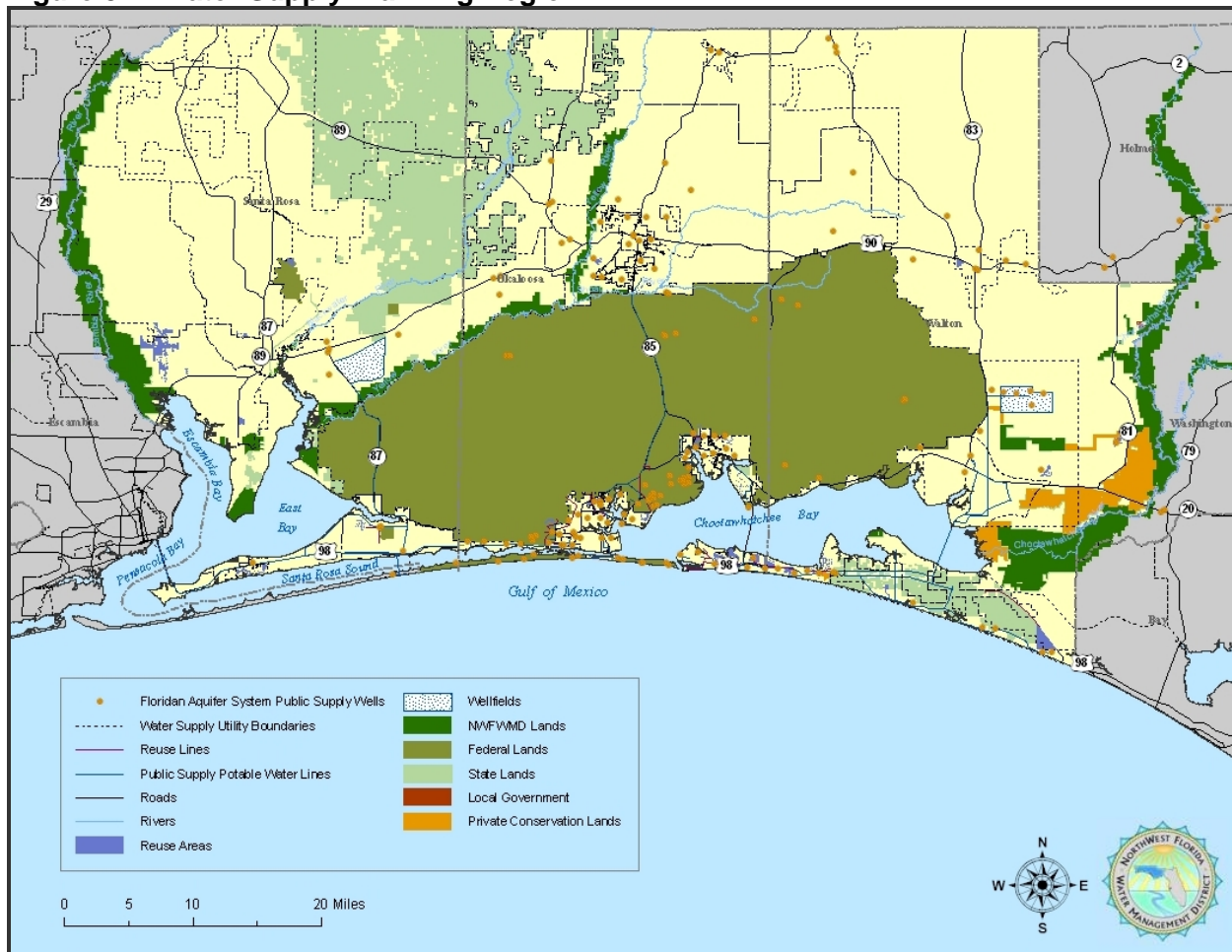
Water Supply Development Project Assistance

While this report is focused on the water resource development 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 objective of water resource development is to support and facilitate future alternative water supply development. The District is, by statutory definition, primarily responsible for water resource development 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 water resource development projects are typically regional and broad in scope, while water supply projects are more localized and deal with treatment, storage, and delivery to end users.

The Water Protection and Sustainability Program provided substantial new funding resources for alternative water supply development within regional water supply plan areas. Significant alternative water supply development assistance projects to date 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. Implementation of reuse projects is also helping reduce the use of potable-quality water for landscape irrigation. Within Region V, development of an alternative surface water source in Gulf County has been funded in part through the Water Protection and Sustainability Program. Current projects funded through the WPSPTF are listed in Table 5.17. All of these efforts complement dedicated regulatory efforts to ensure the long-term sustainability of water resources. Within the coastal Water Resource Caution Area 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 5.2 Water Supply Planning Region II



Strategy 1.0 Floridan Aquifer Sustainability Model Applications and Support

The solute transport model required for analysis of saltwater intrusion into the Region II Floridan Aquifer was developed with two distinct domains, western and eastern, to more accurately portray hydrogeologic characteristics and to make the massive, complex data sets manageable.

Model results for the western domain have applicability to the major coastal utilities in Santa Rosa and western Okaloosa counties. These utilities include Holley-Navarre Water System (WS), Midway WS, Santa Rosa County (Navarre Beach), Okaloosa County West WS, Hurlburt Field, City of Mary Esther, City of Fort Walton Beach, Okaloosa County Garnier WS, and Eglin AFB Main and Housing WS. Results from the western 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

report has been distributed to interested utilities and is available from the District or via the District website.¹

The eastern domain sub-region model has applicability to the major coastal utilities in Walton and eastern Okaloosa counties. These include Destin Water Users, South Walton Utility System, 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. 2007). The report will be made available in the near future.

The overall results indicate that saltwater intrusion into potable portions of the Floridan Aquifer is occurring at a very slow and manageable rate. 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 from the lower to the upper portion of the Floridan Aquifer where the Bucatunna Clay confining unit is not present and saline water occurs in the lower portion of the Floridan Aquifer (easternmost Choctawhatchee Bay area), and downward vertical leakage through the intermediate system.

Future applications of these models will be useful for analysis of sustainable aquifer levels, further supply planning strategies, analysis of water supply alternatives, cumulative impact analysis, uncertainty analysis, and consumptive use permitting decisions. Project funding will be provided by the WMLTF. Current funding expectations are listed in Table 2.

Table 5.2 Floridan Aquifer Sustainability Model Applications and Support

Implementing Agency:	NFWFMD
Proposed FY Expense (FY 07-08):	\$ 235,445
Estimated 5-Year Cost (FY 07-12):	\$ 425,445
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	30 MGD
Project Status:	Ongoing

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 model application through additional resource assessments, model uncertainty analysis, consumptive use permit application evaluation, withdrawal scenario development, and investigating alternative approaches to establishment of minimum aquifer levels or water reservations.

¹ www.nfwfmd.state.fl.us/pubs/hgl_western_domain/hgl_western_domain.html

Strategy 2.0 Inland Sand-and-Gravel Aquifer Sustainability Model

Due to its high recharge rate, the Inland Sand-and-Gravel Aquifer in Santa Rosa County 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 collection was accomplished. This involved constructing project-specific monitoring wells, determining aquifer hydraulic properties, mapping aquifer unit thicknesses, and measuring ground-water levels and stream discharge. Model development and calibration was accomplished subsequent to data collection. The model is being used to determine the potential yield from this aquifer as an alternative source of supply.

Since the pipeline from the inland Sand-and-Gravel Aquifer wellfield to the coastal area was completed late in 2003, withdrawals from the wellfield have increased to over 4 MGD. This water is being conveyed south to alleviate pumping demand from the Floridan Aquifer along the coast. Based on this work and continuing development of the inland wellfield, it is anticipated that Santa Rosa County utilities will continue to increase withdrawals from the Sand-and-Gravel Aquifer thereby limiting coastal Floridan Aquifer withdrawals.

Table 5.3 Inland Sand-and-Gravel Aquifer Sustainability Model

Implementing Agency:	NFWFMD
Proposed FY Expense (FY 07-08):	\$109,512
Estimated 5-Year Cost (FY 07-12):	\$209,512
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 applied to development of the inland wellfield.

Strategy 3.0 Development of Feasible Surface Water Sources

Surface water has been identified as a potentially viable source of alternative water supply 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 properly analyze the viability of potential surface water sources. In 2006, the District's 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).² This report lays the groundwork for several potential alternative water supply development projects. The alternatives considered technically and economically feasible include direct river withdrawal, potentially with offline tributary surface impoundments, and riverbank filtration. In the process of the analysis, the District also conducted an evaluation of the county's Yellow River Reservoir proposal. The resulting report indicated that this proposal is not economically feasible, and its implementation would result in significant environmental impacts and mitigation requirements.

² www.nfwfmd.state.fl.us/pubs/final_%20water_Report/Final%20Water%20Supply%20Study%20Report.pdf

It is anticipated that District and county staff will continue to pursue alternative surface water supply sources, to include direct withdrawal and riverbank filtration options as presented in the report. Future water resource development project activities will include continuing technical assistance to Okaloosa County, including 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 may evaluate watershed resource protection and restoration needs and opportunities, including land acquisition and restoration.

Table 5.4 Development of Feasible Surface Water Sources

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$ 76,457
Estimated 5-Year Cost (FY 07-12):	\$476,457
Potential Funding Sources:	WMLTF, WPSPTF, Local Governments, Utilities
Quantity of Water Made Available:	25 MGD
Project Status:	Ongoing

The District estimates FY 2007-2008 expenses at \$76,457 with funding provided through the WMLTF. Implementation of surface water alternative water supply development projects may be funded through the WPSPTF, local governments, and utilities.

Strategy 4.0 Aquifer Storage and Recovery (ASR) Feasibility

Large-scale District-funded ASR operations have not been implemented to date due to economic feasibility, water quality, and other technical considerations. A primary and recent water quality consideration elsewhere in the state exists over arsenic contamination. There is some potential, however, for this option to be explored further by utilities within the region. The District's interests and efforts in this regard would be aimed at working cooperatively with interested parties wherever viable ASR opportunities exist and would possibly include technical, financial, and educational assistance. Associated activities would 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 future 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.

In future years, in coordination with increasing activities to evaluate surface water supply alternatives, the District may conduct preliminary ground water model analyses of the potential for and feasibility of ASR within Region II. The District will also coordinate with the DEP regarding any proposed ASR permitting activities as they may relate to Region II or elsewhere in the District.

Table 5.5 Aquifer Storage and Recovery (ASR) Feasibility

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$ 0
Estimated 5-Year Cost (FY 07-12):	\$15,000
Potential Funding Sources:	NWFWMD, Utilities, local governments
Quantity of Water Made Available:	TBD
Project Status:	On hold

Strategy 5.0 Water Reuse Coordination

Currently, an estimated 9.4 MGD of reclaimed water is used for public access reuse purposes in Region II (FDEP 2007). This includes irrigation of an estimated 966 residences, 20 golf courses, five parks, and one cemetery. The total area irrigated for public access reuse is estimated at over 3,500 acres (FDEP 2007).

Reuse projects under construction in the region include expansion of the Okaloosa County Bob Sikes Water Reclamation Facility, which will provide an estimated 1 MGD of reuse water for public access irrigation, and the city of Freeport's Wastewater Reuse Program, which will provide an estimated 0.4 MGD of public access reuse water. Additionally, South Walton Utility Company, in cooperation with the District, is preparing to construct a new reuse system to supply water for two subdivisions and a condominium in southern Walton County. This project will directly reduce the use of Floridan Aquifer water for nonpotable uses in the WRCA. The city of Fort Walton Beach is in the process of developing a reuse water system in cooperation with Hurlburt Field. This project would initially provide approximately 30,000 gallons per day for irrigation of a cemetery (now irrigated with Floridan Aquifer water), as well as water for various uses on Hurlburt Field. The system will likely be expanded to area schools and additional uses within an industrial park. Ultimately, the project is expected to provide for reuse of up to 1.0 MGD of reclaimed wastewater, treated to advanced wastewater, public access standards. This project will also provide benefits for the Gap Creek, Cinco Bayou basin (Choctawhatchee Bay), which now receives the wastewater discharge.

Also noteworthy is an ongoing water reuse initiative of the Niceville, Valparaiso, Okaloosa County Regional Sewer Board (NVOC). The NVOC owns and operates a 3.5 MGD wastewater treatment plant that is located on Highway 85 in Niceville. The NVOC has just completed improvements that have tripled the reclaimed water capacity from 1 to 3 MGD. The improvements also included construction of a 19 million gallon holding basin on Eglin AFB, as well as a new high volume pumping station. The reclaimed water system supplies water to the Rocky Bayou Golf Course, Heritage Gardens Cemetery, the Rocky Bayou Christian School, and the Swift Creek residential subdivision. Plans include supplying reclaimed water to two new residential apartment complexes in the near future.

District staff continue work with utilities and local governments to identify additional potential new projects or project additions that would be eligible for funding consideration through the Water Protection and Sustainability Program. Funding assistance is also made available on a competitive basis through the Florida Forever Capital Improvement grant program for construction of eligible reuse facilities. These efforts complement incentives and requirements provided through the District's Regulatory program, particularly within the WRCA.

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 in coastal areas.

Table 5.6 Water Reuse Coordination

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$ 19,114
Estimated 5-Year Cost (FY 07-12):	\$ 79,114
Potential Funding Sources:	WMLTF, Local Governments, Utilities
Quantity of Water Made Available:	5 MGD
Project Status:	Ongoing

The estimated cost for coordination of this effort, including working cooperatively with local governments and utilities to plan and implement new projects, is \$19,114 in FY 2007-2008. Additional construction funding assistance has been made available through the WPSPTF and may also be provided on a competitive basis through Florida Forever. Coordination 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, due particularly 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 high 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 16,240 brochures distributed over the last two years. These numbers do not reflect continued distribution of *WaterWise Florida Landscapes*, a four-color, 64-page statewide publication distributed to county extension offices, utilities, and the public District-wide. It should be noted that other District-wide support activities are ongoing through the Water Resource Education program. For example, the District participates in a number of public events where water conservation and other water resource information is distributed.

During FY 2004-2005, the District initiated the Water Conservation Hotel and Motel Program (Water CHAMP) program, 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 2007, 13 hotels are participating in the program, including six in Region II. Electronic newsletters are regularly distributed to recognize participants and encourage new participation. Participating hotels are providing positive feedback on the program.

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 NFWFMD coordinates distribution of the associated water rates model in cooperation with the author. Since FY 2006-2007, requests for the model have been sent on to Dr. Whitcomb for 26 utilities.

As with water reuse, District staff emphasize water conservation measures in both resource regulation and in reviewing proposed comprehensive plan amendments and DRIs District-wide. In response to consistent emphasis by the District and other state and regional agencies, most large comprehensive plan amendments and DRIs proposed, particularly within Region II, incorporate broad measures to conserve water. These typically include requirements for 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.

These efforts complement measures established under the District's Regulatory program for the coastal Water Resource Caution Area. 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 5.7 Water Conservation Coordination

Implementing Agency:	NFWFMD
Proposed FY Expense (FY 07-08):	\$ 9,557
Estimated 5-Year Cost (FY 07-12):	\$ 49,557
Potential Funding Sources:	WMLTF, Local Governments, Utilities
Quantity of Water Made Available:	2.5 MGD
Project Status:	Ongoing

Funding for water conservation efforts is provided through the WMLTF. Ongoing activities will help ensure that conservation efforts will continue through and beyond the RWSP's 20-year planning horizon. As other projects are determined to be viable and cost-effective, increased funding may be made available for implementation as necessary.

Strategy 7.0 Regional Water Supply Planning Strategies

This project provides an essential component of plan implementation by supporting project development and oversight and the development and update of the RWSP. General activities include coordination and technical support for project implementation and continuing refinement of regional strategies. Related coordination with local governments helps to ensure a regional focus in the planning and development of alternative water supply projects. This may include assistance to utilities and local governments with hydrogeology and related engineering work for development of unused or underused water sources, including the inland Floridan Aquifer, Sand-and-Gravel Aquifer, and potential surface water sources. Associated administrative

activities include project and funding management, coordination with DEP and other agencies, progress reporting, and technical assistance to local governments and utilities.

Activities and accomplishments over the past year included completion of the RWSP update, continuing evaluation of implementation progress, project planning, coordination of the Water Protection and Sustainability Program within Region II, and updating the WRDWP Annual Report. The RWSP update was approved by the Governing Board in a public hearing in October 2006. Prior to this, technical and public workshops were held within the region in May and August 2006, respectively. Additionally, District staff provided requested regional water supply planning and alternative water supply development presentations for the Regional Utility Authority and Okaloosa County Board of County Commissioners. An update of the District-wide Water Supply Assessment required under Section 373.036, F.S., was also initiated over the past year. It is anticipated that the update will be completed in summer 2008.

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. As part of and following the RWSP update process, District staff worked with DEP, the Florida Department of Community Affairs (DCA), and local governments to develop and distribute updated guidelines for preparing water supply comprehensive plan amendments and water supply facilities work plans.

Table 5.8 Regional Water Supply Planning Strategies

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$ 86,014
Estimated 5-Year Cost (FY 07-12):	\$ 376,014
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

It is possible that additional funding may be needed for further investigation into alternative water supply options, including hydrogeologic data collection and analysis and preliminary engineering feasibility analyses. Such further investigations lead to additional alternative water supply development assistance or water resource development projects that support dependable and sustainable supplies of water.

Strategy 8.0 Hydrologic Data Collection and Analysis

The NWFWMD has a limited long-term hydrologic data collection network of 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 continued monitoring operations in cooperation with the U.S. Geological Survey surface water gauging network and installation and operation of a station on the Yellow River. Additionally, District staff have collected and evaluated surficial ground water data from within the Yellow River floodplain. The District will continue to deploy gauging stations on tributaries in the region, including within the Yellow and Choctawhatchee river basins. The expanded monitoring network will continue to be useful for long-term water supply planning, refining ground water models used to make management decisions, and developing water management strategies.

Table 5.9 Hydrologic Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$109,512
Estimated 5-Year Cost (FY 07-12):	\$509,512
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, with an estimated cost of \$109,512 in FY 2007-2008 to provide for annual maintenance, operation, and data analysis costs. Funding is primarily expected from the WMLTF, as well as potentially water resource development funding through the WPSPTF. Other possible sources include the District's General Fund, federal funding, and local governments.

Strategy 9.0 Abandoned Well Plugging

Through September 2007, District efforts have resulted in the plugging of approximately 3,089 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 06-07, the District permitted the proper plugging of 386 abandoned 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 as necessary to assist utilities in the plugging of abandoned wells identified as having the potential to adversely affect ground water quality. Since this is an ongoing project, it is likely that many more wells will be identified for plugging in the future. The District intends to implement this project through regulatory programs to the extent possible.

Table 5.10 Abandoned Well Plugging

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$ 30,000
Estimated 5-Year Cost (FY 07-12):	\$150,000
Potential Funding Sources:	NWFWMD, 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.

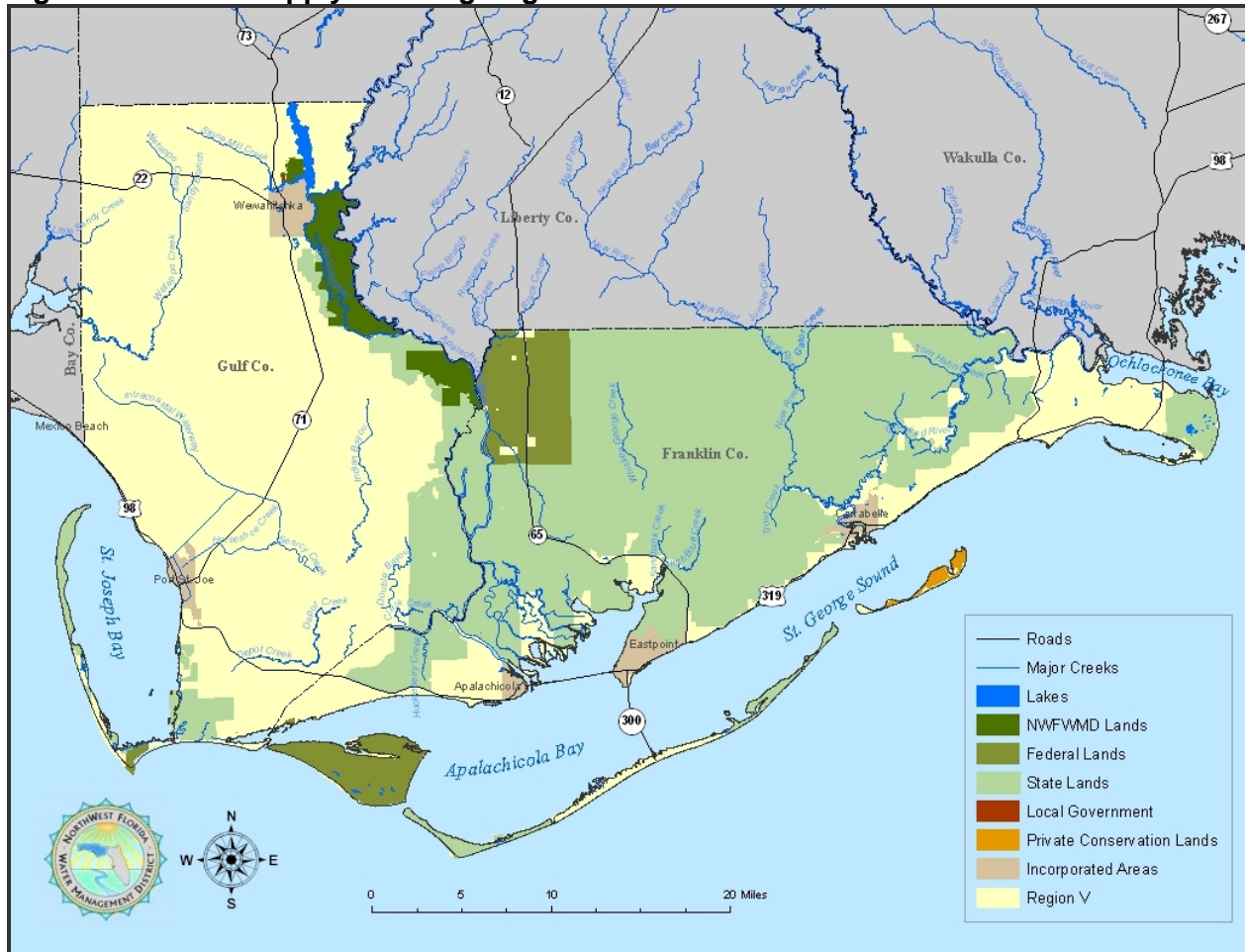
Table 5.11 2007-2012 Region II WRDWP Project Funding

Region II Water Resource Development Projects	RWSP Page #	FY 06-07* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 07/08 – FY 11/12)
			FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	
1 Floridan Aquifer Sustainability Model	21	\$147,802	\$235,445	\$100,000	\$50,000	\$20,000	\$20,000	\$425,445
2 Inland Sand-and-Gravel Aquifer Sustainability Model	21	\$33,863	\$109,512	\$50,000	\$30,000	\$10,000	\$10,000	\$209,512
3 Development of Feasible Surface Water Sources	22	\$58,801	\$76,457	\$100,000	\$100,000	\$100,000	\$100,000	\$476,457
4 Aquifer Storage and Recovery Feasibility	23	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000	\$15,000
5 Water Reuse Coordination	24	\$3,039	\$19,114	\$15,000	\$15,000	\$15,000	\$15,000	\$79,114
6 Water Conservation Coordination	24	\$5,044	\$9,557	\$10,000	\$10,000	\$10,000	\$10,000	\$49,557
7 Regional Water Supply Planning Strategies	25	\$55,550	\$86,014	\$50,000	\$20,000	\$70,000	\$150,000	\$376,014
8 Hydrologic Data Collection & Analysis	26	\$85,424	\$109,512	\$100,000	\$100,000	\$100,000	\$100,000	\$509,512
9 Abandoned Well Plugging	27	\$2,076	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000
TOTAL		\$391,599	\$675,611	\$455,000	\$360,000	\$360,000	\$440,000	\$2,290,611

* Preliminary cost figures; final cost distribution information was unavailable at the time this report was prepared. Figures do not include Water Resource Development expenses funded through the Water Protection Sustainability Program Trust Fund.

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

Figure 5.3 Water Supply Planning Region V



Strategy 1.0 Hydrologic and Water Quality Data Collection and Analysis

This activity provides for essential water resource data, analysis, and modeling as necessary to determine the location, distribution, and physical characteristics of 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 groundwater modeling, water quality sampling and analysis, hydrologic monitoring and analysis, and preliminary well and facility design for regional alternative water supply development. Longer-term monitoring tasks over the next five years may also include water quality and hydrologic monitoring to manage and protect water resources, including protection of groundwater quality from saltwater encroachment and protection of surface and groundwater quality from the effects of land use change.

The District has conducted significant data collection and analysis activities to facilitate long-term development of an inland ground water source for Franklin County. Construction of four test wells has been completed, and water quality analysis and aquifer testing have been conducted. A District consultant has completed development of a ground water model to support this project. Additionally, the District provided assistance to the Eastpoint Water and Sewer District in construction of a ten-inch test well, three monitoring wells, water quality analysis, and analysis of an aquifer performance test at one site in Eastpoint. Future work may include additional analysis of the Franklin County inland ground water source.

Table 5.12 Hydrologic and Water Quality Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$110,491
Estimated 5-Year Cost (FY 07-12):	\$610,491
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 this project, inclusive of inland ground water source development. Funding is provided from the WMLTF. Additional water resource development funding has also been provided through the WPSPTF (Tables 5.17 and 5.18). District general funds could also be used for this purpose.

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

District staff will continue to coordinate with local governments and utilities, to include providing technical assistance for required water supply-related comprehensive planning activities, source protection, and project design and engineering. This may include assistance in the development and review of Water Supply Facility Work Plans and review of water supply portions of Evaluation and Appraisal Reports. Additionally, the District will help support regional coordination and planning on the part of regional water supply entities and local governments. Other 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.

Table 5.13 Source Protection, Coordination, and Engineering and Technical Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$12,065
Estimated 5-Year Cost (FY 07-12):	\$52,065
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 and protection of alternative water supply 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 source constructed with assistance from the WPSPTF (Tables 5.17 and 5.18).

Strategy 3.0 Water Reuse and Conservation Coordination and 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 quality water. The District's role in developing public access beneficial reuse includes coordinating among local utilities, inventorying existing and potential beneficial reuse sources and demands, and providing technical and financial assistance for specific reuse projects. District staff also review local comprehensive plan amendments and development proposals to assist in local reuse and conservation planning, provide normal 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.

In Region V, reuse projects are under development or in preliminary planning for the cities of Apalachicola and Wewahitchka. Over the past year, approximately 2,500 water conservation brochures were distributed to local governments and utilities in Region V. Additionally, the water rates model (Whitcomb 2005) has been distributed to several utilities in the region.

Table 5.14 Water Reuse and Conservation Coordination and Assistance

Implementing Agency:	NWFWMD, Local governments, Utilities
Proposed FY Expense (FY 07-08):	\$ 6,033
Estimated 5-Year Cost (FY 07-12):	\$26,033
Potential Funding Sources:	WMLTF, WPSPTF
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Funding may be provided from the WMLTF and, for construction of approved reuse facilities, the WPSPTF. The city of Wewahitchka, in cooperation with the District, is currently evaluating opportunities and funding needs for developing a public access reuse system. Funding assistance is also made available on a competitive basis through the Florida Forever Capital Improvement grant program for construction of eligible reuse facilities.

Strategy 4.0 Regional Water Supply Plan Implementation

Coordinating implementation activities, project and program management, completing administrative tasks related to plan implementation and tracking, fulfilling statutory reporting requirements, and related activities are all part of implementing the RWSP for Region V. This activity also provides for technical assistance to local governments and water suppliers. Indirectly, coordination activities encompassed within this project help the District to work cooperatively with utilities and local governments to attain the up to nine MGD of alternative water supply estimated as being available during the planning period.

Activities and accomplishments of the past year have included completion of the RWSP, evaluation of initial implementation progress, project planning, coordination of the Water Protection and Sustainability Program to further implementation of the plan, and updating this WRDWP Annual Report. The RWSP was approved by the Governing Board in January 2007. Plan implementation has also included coordinating funding assistance through the WPSPTF to the City of Port St. Joe for construction of its surface water facility.

As discussed in the reuse and conservation sections, District staff also work with local governments and state and regional agencies to improve coordination of land use and water supply planning. As part of and following the RWSP update process, District staff worked with DEP, DCA, and local governments to develop and distribute updated guidelines for preparing water supply comprehensive plan amendments and water supply facilities work plans.

Table 5.15 RWSP Implementation

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 07-08):	\$12,065
Estimated 5-Year Cost (FY 07-12):	\$67,065
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 alternative water supply 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 5.16 2007-2012 Region V WRDWP Project Funding

Region V Water Resource Development Projects	RWSP Page #	FY 06-07* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 07/08 – FY 11/12)
			FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	
1 Hydrologic and Water Quality Data Collection and Analysis	10	\$49,699	\$110,491	\$125,000	\$125,000	\$125,000	\$125,000	\$660,190
2 Source Protection, Coordination, and Engineering and Technical Assistance	11	\$30,821	\$12,065	\$10,000	\$10,000	\$10,000	\$10,000	\$82,887
3 Water Reuse and Conservation Coordination and Assistance	11	\$2,659	\$6,033	\$5,000	\$5,000	\$5,000	\$5,000	\$28,691
4 Regional Water Supply Plan Implementation	11	\$27,501	\$12,065	\$10,000	\$10,000	\$10,000	\$25,000	\$94,566
TOTAL		\$110,680	\$140,654	\$150,000	\$150,000	\$150,000	\$165,000	\$866,334

* Preliminary cost figures; final cost distribution information was unavailable at the time this report was prepared. Figures do not include Water Resource Development expenses funded through the Water Protection Sustainability Program Trust Fund.

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5.2 Alternative Water Supplies Annual Report

Each water management district is required under Section 373.1961(3)(n), F.S., to submit as part of the consolidated annual report a chapter or section that:

- Accounts for the disbursement of all budgeted amounts pursuant to Section 373.1961, 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 funded through the Water Protection and Sustainability Program Trust Fund (WPSPTF). A number of these projects help implement past, 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 includes 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 development and implementation of a series of Alternative Water Supply Development and Water Resource Development projects pursuant to the Water Protection and Sustainability Program, the Region II RWSP, and the Region V RWSP. Table 5.17 provides summary information on these projects.

Table 5.17 NFWFMD Water Protection and Sustainability Program Trust Fund Projects

Project	Local Sponsor	Activity	Status	WPSPTF Fiscal Year Appropriation	Estimated Quantity of Water	WPSPTF Contribution	Local Contribution	Total	Local %
Area-wide Alternative Water Supply Source Expansion	Regional Utilities, South Walton Utility Co., City of Freeport	Inland wellfield expansion	Under construction	FY 2006	9.0	\$6,500,000	\$11,172,750	\$17,672,750	63%
Tram Road Public Access Reuse Facility	City of Tallahassee	Water Reuse/ spring protection	Under construction	FY 2006; FY 2007	1.2	\$1,350,000	\$4,000,000	\$5,350,000	75%
Okaloosa County/Bob Sikes Reuse Project	Okaloosa County	Water Reuse	Engineering; Bidding	FY 2006	1.0	\$2,000,000	\$4,000,000	\$6,000,000	67%
Inland Floridan Aquifer Source - WRD	NFWFMD; Franklin County Utilities	Inland source evaluation	In progress	FY 2006	3.0	\$300,000	\$0	\$300,000	0%
Ground Water Modeling & Aquifer Testing - WRD	Bay County	Inland source evaluation	In progress	FY 2006; FY 2007	tbd	\$350,000	\$800,000	\$1,150,000	70%
Surface Water Treatment Plant	Port St. Joe	Surface Water	Under construction	FY 2007	6.0	\$4,000,000	\$16,000,000	\$20,000,000	80%
City of Chipley Reuse Project	Chipley	Water Reuse	Under construction	FY 2007	1.0-3.8	\$500,000	\$4,500,000	\$5,000,000	90%
Wakulla County Reuse Project	Wakulla County	Water Reuse	Engineering	FY 2007	0.35	\$500,000	\$750,000	\$1,250,000	60%
SWU Reclaimed Water Project	South Walton Utility Company, Inc.	Water Reuse	Engineering	FY 2007	0.03	\$500,000	\$750,000	\$1,250,000	60%
Total					21.6-24.4	\$16,000,000	\$41,972,750	\$57,972,750	72%

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

VI. Florida Forever Water Management District Work Plan Annual Report

6.1 Land Acquisition Five Year Work Plan

Introduction

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 216,000 acres have been protected for water resource purposes through the land acquisition efforts of the District either in fee simple or through conservation easements.

In 1981 the Florida Legislature established the Water Management Lands Trust Fund (“Save Our Rivers”) to provide funds to the state’s five water management districts to acquire the fee or other “less-than-fee” interests in lands needed for water management, water supply or conservation and protection of water resources. Revenues for this program are derived from a statewide documentary stamp tax on real estate sales.

In 1990 the Florida Legislature began the Preservation 2000 program. For 10 years, Preservation 2000 focused on accelerating the purchase of unspoiled lands needed to maintain the state’s quality of life. Under these two programs the District acquired thousands of acres of valuable wetlands.

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). Together, the WMDs receive up to \$105 million annually as outlined in the table below.

Water Management District	Percent to Each WMD	Estimated Amount
South Florida	35.0%	\$36,750,000
Southwest Florida	25.0%	\$26,250,000
St. Johns River	25.0%	\$26,250,000
Suwannee River	7.5%	\$7,875,000
Northwest Florida	7.5%	\$7,875,000

While the 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.

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.

This year the District's acquisition efforts will focus on the purchase of inholdings and additions within the existing water management areas (WMAs) as well as Conservation Easements in each of the existing WMAs. 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).

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.

Rivers & Creeks Originating In Florida	Rivers and Creeks Originating Outside Florida	Springs	Lakes & Ponds
Wakulla River	Apalachicola River	St. Marks River near Natural Bridge	Lake Jackson
St. Marks River	Lower Apalachicola River Wetland	Spring Lake/Spring Group Area	Sand Hill Lakes
Econfina Creek and others flowing into Deer Point Lake	Chipola River	Waddell Springs	
Lafayette Creek	Choctawhatchee River including Holmes Creek	Bosel Springs	
	Escambia River	Hays Springs	
	Blackwater River including Juniper, Big Coldwater & Coldwater creeks	Morrison Springs	
	Ochlockonee River & its major tributaries	Gainer Springs	
	Yellow & Shoal Rivers		
	Perdido River		

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 there 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.

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 6.1 2008 Proposed Land Acquisition Areas (West Region)

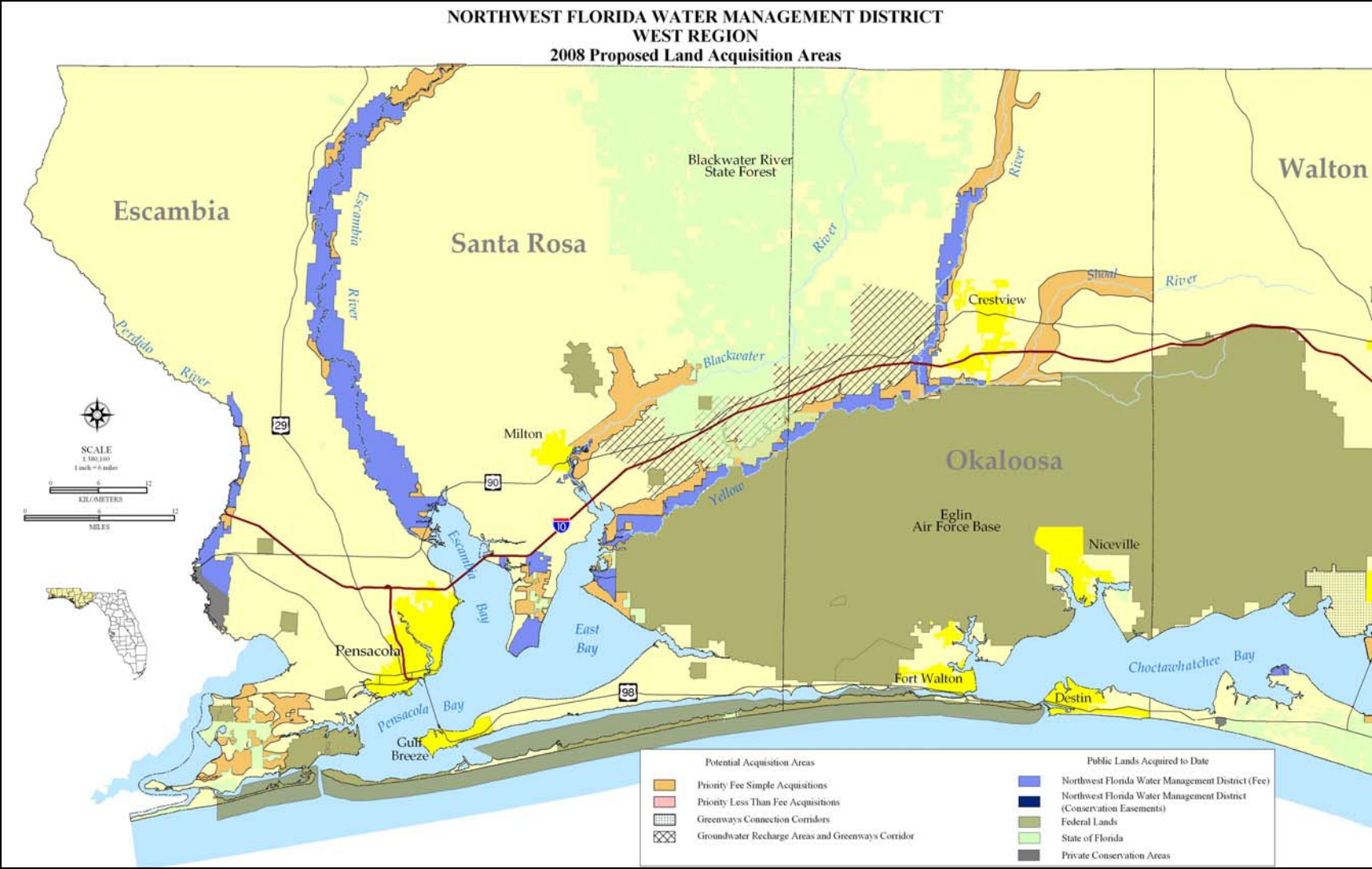


Figure 6.2 2008 Proposed Land Acquisition Areas (Central Region)

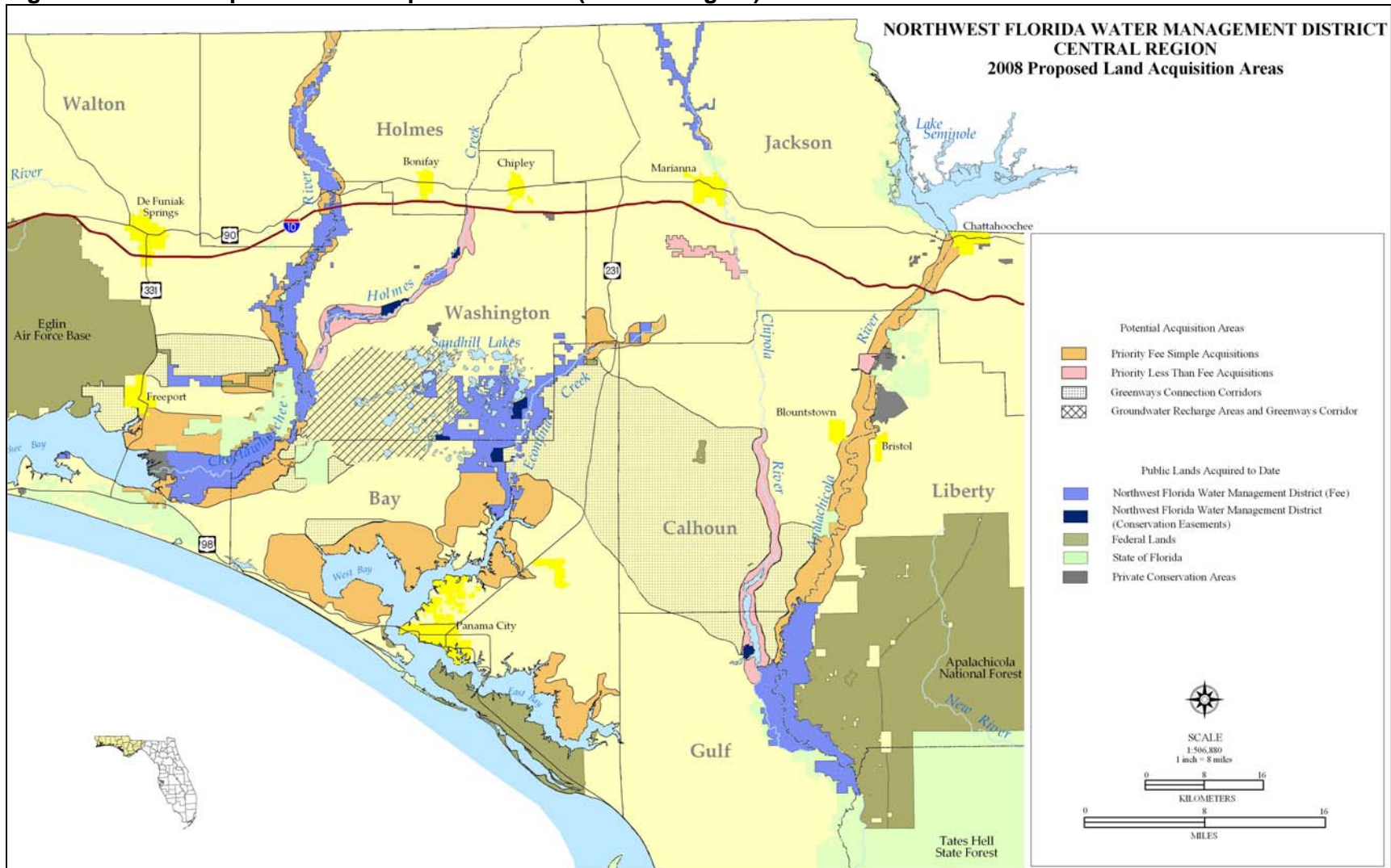
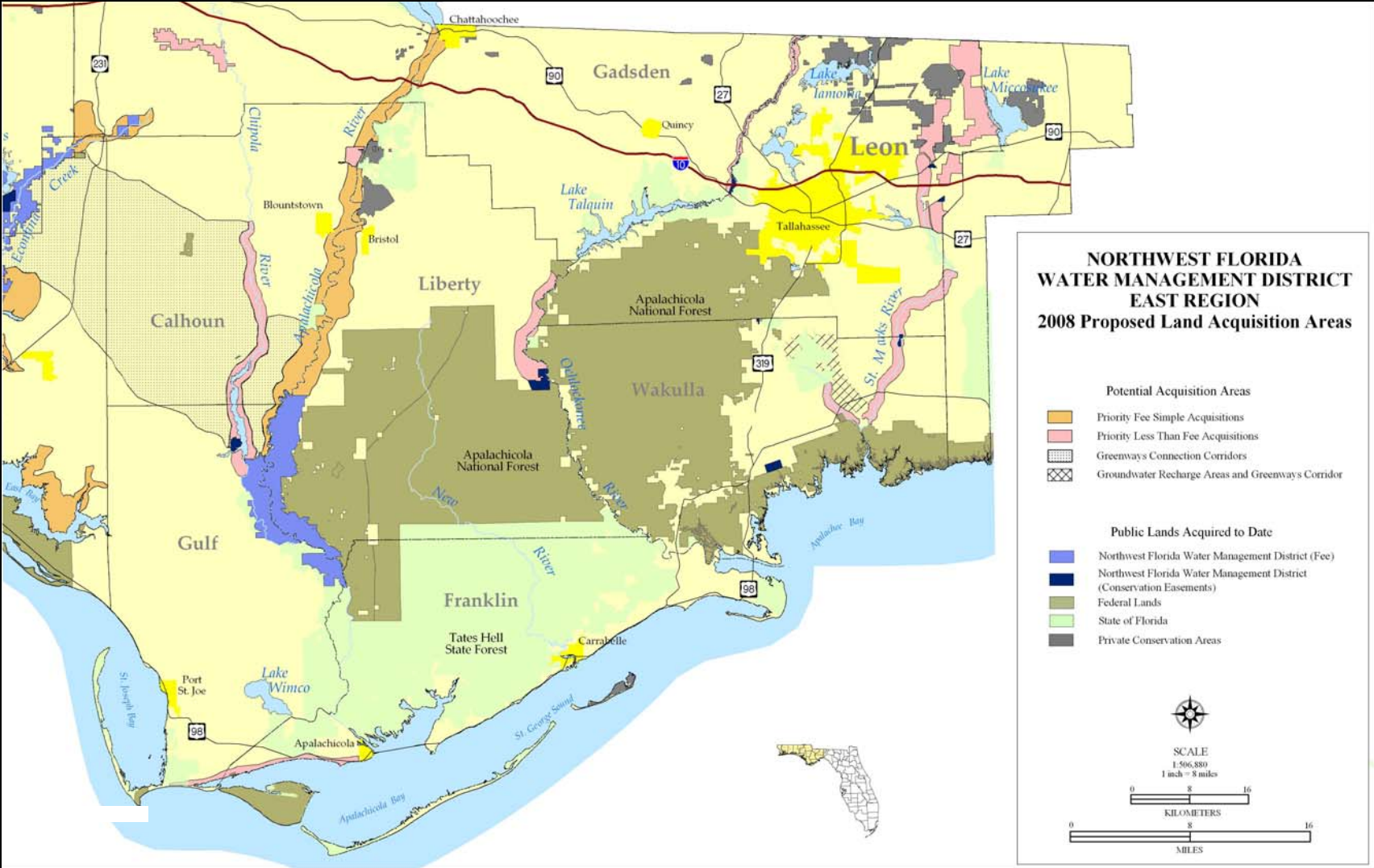


Figure 6.3 2008 Proposed Land Acquisition Areas (East Region)



Florida Forever Land Acquisition Project

Perdido River

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 5,454 acres.

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.

The District owns approximately 5,454 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 637 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 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 34,919 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 7,138 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 and 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 Alabama Conecuh National Forest, 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 380 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 Alabama's Conecuh National Forest 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 would protect recharge areas that are particularly important for future water supply sources.

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.

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 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 Gar and the Gulf Sturgeon. The District currently owns over 62,000 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.

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 56,150 acres have been identified for fee simple acquisition on the Choctawhatchee River, 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.

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 48,000 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.

Florida Forever Land Acquisition Project

Econfina Creek

Econfina Creek is the major contributor to the 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 43,600 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 39,900 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.

Florida Forever Land Acquisition Project

Chipola River Basin

Two 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. The District owns 7,377 acres of river floodplain and holds a conservation easement on 810 acres.

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 26,525 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 NFWFMD, 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 Piedmont hills 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 1,841 acres under less-than-fee acquisition 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 13,600 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 1,181 acres under less-than-fee acquisition in the area.

BluePrint 2000

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 in December 2003, to work cooperatively to acquire property to protect and preserve the water resources of the St. Marks River basin in Leon County. Each agency has dedicated \$500,000 per year for land acquisition purposes, subject to the availability of funds. The District will endeavor to acquire "less-than-fee" or conservation easements with willing sellers within the basin. Nearly 28,000 acres (Priority 1 and 2 areas) have been identified for possible "less-than-fee simple" acquisition. To date, the District and BluePrint 2000 have purchased a conservation easement on a 132.62-acre tract in Leon County.

Land Acquisition

Approximately 45,650 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.

6.2 Land Management and Acquisitions – 2007

Northwest Florida Water Management District
Table 6.1 Acquisitions Completed in 2007

Property Name	Date Purchased	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Fee Simple Acquisitions						
Fraoli	02/08/07	10.02	\$ 0	\$ 0	Donation	Econfina Creek
Libby	05/25/07	8.06	\$26,240.00	\$3,255.58	District Land Acquisition Reserve	Econfina Creek
West	06/04/07	17.70	\$25,526.00	\$1,495.37	District Land Acquisition Reserve	Yellow River
SUB-TOTAL		35.78	\$51,766.00			

Property Name	Date Purchased	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Less-Than-Fee Acquisitions						
Davidson/Hosford	11/23/07	1,528.9	\$1,951,197.47	\$1,276.21	Florida Forever	Ochlockonee River
Trammell	12/21/07	1,544.0	\$2,985,107.84	\$1,933.36	Florida Forever	Apalachicola River
SUB-TOTAL		3,072.9	\$4,936,305.31			
GRAND TOTAL		3,108.68	\$4,988,071.31			

Northwest Florida Water Management District
Table 6.2 Projected Funding, Staffing and Resource Management for Fiscal Year 2007-2008

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	34,938		\$ 480,385	\$ 447,854
	Garcon Point	3,245		\$ 148,764	\$ 135,594
	Yellow/Escribano	17,742		\$ 509,212	\$ 440,296
	Blackwater	380		\$ 23,309	\$ 16,437
	Perdido	5,454		\$ 767,244	\$ 716,536
	Region Total	61,759	2	\$1,928,914	\$ 1,756,717
Central	Choctawhatchee	60,636		\$ 1,155,774	\$ 1,062,284
	Choctawhatchee/ Holmes Conservation Easements	1,444		\$ 28,113	\$ 26,847
	Econfina	39,026		\$2,216,810	\$ 2,075,570
	St. Andrews/ Econfina Conservation Easements	2,433		\$ 3,113	\$ 1,847
	Carter Restoration	2,155		\$ 484,493	\$ 434,104
	Region Total	105,694	5	\$3,888,303	\$ 3,600,652

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Eastern	Upper Chipola	7,377		\$ 90,341	\$ 72,709
	Apalachicola	35,506		\$ 238,367	\$ 205,128
	Apalachicola/Chipola Conservation Easements	2,360		\$ 3,113	\$ 1,847
	Lake Jackson	516		\$ 107,714	\$ 77,913
	St. Marks Conservation Easements	1,181		\$ 3,363	\$ 2,097
	Ochlocknee Conservation Easements	1,841		\$ 2,329	\$ 1,442
	Region Total	48,781	1	\$ 445,227	\$ 361,136
	Regional Totals	216,221	8	\$ 5,380,383	\$ 4,553,892
	Management Administration		4	\$ 669,680	\$ 524,217
	Grand Total	216,221	12	\$6,050,063	\$ 5,078,109

**Northwest Florida Water Management District
Table 6.3 Land Management Activity During 2007
Habitat Restoration, Enhancement and Maintenance**

Water Management Area	Acres Burned					Acres Planted				Acres Harvested				Acres Treated	
	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	24			24											28
Garcon Point	267		60		207										3
Blackwater River															
Yellow River	186	113		73											3
Choctawhatchee River	237		237			537	271	266			94		94		47
Perdido River	12		12			190		177	13						43
Econfina Creek	2846	706	430	1685	25	513	83	430			197		197		3
St. Andrews															
Carter Restoration	486	69	417								442	319	18	105	
Devils Swamp Restoration	134	134									74			74	
Upper Chipola River															
Apalachicola River	48	48													
Lake Jackson	474	248	226												28
Totals	4714	1318	1382	1782	232	1,240	354	873	13		807	319	112	376	155

**Northwest Florida Water Management District
Table 6.4 Land Management Activity During 2007
Access and Recreation Management**

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	6			1	2		27	8				50	2
Garcon Point				3						3			3			5,000		20	
Blackwater River						1												10	
Yellow River	9	2	6	6		4	2		50				47					30	
Perdido River		2	2	3		2	2	3	9				31					250	
Choctawhatchee River	8	9	12	11		10	8		15				38					80	4
Econfina Creek	10	13	8	17	4	3	12	40	22	18	2		23	168				276	8
Upper Chipola River	1		1	1		1		2	10	2	1	2	3						
Apalachicola River	2	1	1	2		2	1				4		4						
Lake Jackson			1	2				9		5	1	9	4	4					
Totals	43	36	39	54	5	31	31	54	106	29	10	11	180	180		5,000		716	14

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6.3 Florida Forever Capital Improvement Projects

Introduction

This section describes restoration, stormwater retrofit, and water resource development projects funded pursuant to the Florida Forever Five Year Work Plan, as referenced in section 373.199(7), F.S. The District's Five Year Work Plan was initially approved in 2001 (NFWFMD 2001), and it is updated annually through this report. As required by section 373.199(2), F.S., the five-year work plan includes projects that further the goals of the Florida Forever Act (section 259.105, F.S.). In so doing, the plan integrates activities encompassed within SWIM plans; stormwater management projects; water resource development projects; waterbody restoration projects; and capital improvement projects that promote reclamation, storage, or recovery of water.

Plan Components

In accordance with s. 373.199(3)(a), F.S., the NFWFMD Florida Forever Capital Improvements Five Year Work Plan incorporates:

- Watershed resource restoration and protection projects addressing priorities identified in approved SWIM plans, as identified in Chapter 8 of this Consolidated Annual Report;
- Water resource development projects addressing priorities identified in regional water supply plans, as identified in Chapter 5 of this Consolidated Annual Report;
- Wetland resource restoration and enhancement projects that assist in implementation of priority projects identified in the NFWFMD Umbrella, Watershed-Based Regional Mitigation Plan (UWRMP) (www.nfwfmdwetlands.com);
- Capital improvement grant projects, as approved by the Governing Board, through implementation of the District's Florida Forever Capital Improvement Grant Program; and
- Other improvements to District lands and facilities, as approved by the Governing Board.

Priority waterbody and water resource descriptions are as outlined in NFWFMD (2001) and approved SWIM and RWSP plans, as identified in chapters 5 and 8 respectively. Watershed descriptions District-wide were updated by NFWFMD (2005). Performance measures for capital improvement projects are as outlined in NFWFMD (2001), as well as within the plan components listed above.

Capital Improvement Grant Program

The Governing Board has directed the implementation of a competitive grant program for local governments and other government entities in northwest Florida as a means of identifying and implementing capital improvements, with emphasis on those that help implement the District's SWIM and Regional Water Supply plans. Projects may also be approved to implement stormwater master plans and waterbody restoration projects, and reuse projects per s. 373.199(3)(a), F.S. To date, 57 projects (totaling over \$24 million) have been funded under the program. These grants have leveraged very significant additional funding for regional priorities, with over \$48 million in local and other match funding being allocated to the approved projects. Facility ownership, permitting, and long-term maintenance are the responsibilities of the entities receiving grant funds, as provided through cooperative grant agreements.

The capital improvement grant program is implemented annually, as directed by the Governing Board. The current Board-approved grant criteria are provided in Table 6.7 below. Prior to implementation, approved projects are submitted to the Department of Environmental Protection for review to ensure the eligibility of each project for Florida Forever capital improvement funding. Additional information may be found at www.nfwmd.state.fl.us/rmd/swim/fla_forever_grants/fla_forever_grants.htm.

Implementation of the 2006-2007 Work Plan

The FY 2006-2007 NFWMD work plan listed five District capital improvement projects for implementation. These projects are eligible for capital improvement funding from Florida Forever, SWIM, legislative special appropriation, federal grants, local government funding, and other sources. The plan also included the District's Florida Forever Capital Improvement Grant program and specified project activities approved for funding under this program.

Capital improvement projects completed during fiscal year 2006-2007 include the following:

- St. Joe Lake Stormwater Treatment. With a \$350,000 grant from the District, the City of Port St. Joe constructed a stormwater treatment pond to improve water quality in St. Joseph Bay. As the pond is located adjacent to a city-owned park, this project also enhanced recreational opportunities of local residents. The City contributed \$131,765 towards completion of this project.
- Okeehoopkee Stormwater Retrofit. This project provided for the construction of a stormwater management facility to treat 232 acres of an urbanized area that drains to Lake Jackson, a SWIM priority waterbody. The District provided \$500,000 in funding and Leon County contributed \$1,094,602 towards this project.
- Call & Cadiz Stormwater Improvements. The District provided funding to assist the City of Tallahassee in constructing an urban stormwater retrofit including the creation of a dry-detention stormwater facility for water quality improvement and flood protection in the St. Marks River watershed. The project was accomplished with a \$500,000 Florida Forever grant together with \$2,461,484 in local funding.
- Port of Panama City Stormwater II. Through this project, the Panama City Port Authority installed a pollutant separator unit to treat stormwater prior to discharging into St. Andrew Bay. The District provided \$86,974.50 while local sources provided \$25,000 towards the project.
- Stormwater Drainage Improvements (Gulf Breeze). This City of Gulf Breeze installed a stormwater exfiltration system to treat approximately 372 acres within an urbanized area to improve water quality entering Pensacola Bay. The District provided a grant for \$1,000,000 and the city contributed nearly \$814,490 towards the project.
- City of Freeport Reuse. The District provided grant funding in the amount of \$1,450,000 to construct a 750,000 gallon reuse water storage tank for the City of Freeport. This capital improvement is part of a larger project to construct a beneficial reuse system to residential and commercial users, reducing the potable water demand in a District Regional Water Supply Planning area and improving water quality in the Choctawhatchee River and Bay watershed.

Fiscal Year 2007-2008 Capital Improvement Project Plan

Table 6.5 provides anticipated Florida Forever capital improvement expenditures through the end of the program. These funding estimates will be updated annually. Current project allocations are provided below.

	FY 07-08	FY 08-09	FY 09-10
Capital Improvement Grant Program	\$8,729,358	\$7,531,494	\$8,335,358
Other Capital Improvements	\$575,000	\$995,000	\$400,000
Total	\$9,304,358	\$8,526,494	\$8,735,358

Table 6.6 lists capital improvement projects proposed for funding during FY 2007-2008. Basic project descriptions are provided, and progress and modifications from the previous year's project plans are described as proposed.

Project	Description	Progress/Modification from Previous Year	Estimated Funding
Stormwater and Environmental Restoration	Construction of stormwater retrofit and restoration habitats. May include Lake Jackson stormwater retrofit project with Leon County, restoration of Apalachicola River floodplain resources and functions, and other projects as approved by the Governing Board.	May be partially funded through other state appropriations and used as federal match.	\$1,075,000
Florida River Island Bridge Replacement	Replacement of public access bridge.	Continuing project.	\$145,000
Florida Forever Competitive Grant Program	Competitive grants for cooperative grant projects. Approved projects described below.	Funding includes ongoing projects and 11 new projects approved by the Governing Board in January 2008.	\$16,518,472
Ecological Restoration	Restoration of wetland, riparian, and associated watershed habitats. May include Live Oak Point and other SWIM watershed priorities.	Continuation of long-term SWIM program priority. May also be funded through other state or federal funding sources.	\$350,000
West Bay Hydrologic Restoration	Restoration of impacts caused by extensive silviculture operations and artificial drainage.	Ongoing St. Andrew Bay SWIM and FDOT priority. Ward Creek tract acquisition nearing completion. May be funded through other state or federal funding sources.	\$400,000
Total			\$18,691,210

In January 2008, the District's Governing Board approved additional capital improvement grant projects for funding under the Florida Forever program. Current and previously approved projects are listed in Table 6.7. Implementation of these projects will substantially assist in overall implementation of approved NFWFMD SWIM plans for the Apalachicola, Choctawhatchee, Pensacola, St. Andrew, and St. Marks watersheds.

Table 6.7 NFWFMD Local Government Florida Forever Capital Improvement Grant Projects					
Recipient	Project	Watershed	Description	Year Approved	Grant Amount
City of Pensacola	Carpenter Creek Basin 5-16 Improvements	Pensacola Bay	Retrofit Bayou Texar basin stormwater system	2003	\$250,000
Santa Rosa Island Authority	Little Sabine Bay Circulation Project	Pensacola Bay/Santa Rosa Sound	May include construction of circulation facility, stormwater treatment systems, and sediment removal	2003	\$375,000
Walton County	Oyster Lake Restoration	Choctawhatchee River and Bay/Oyster Lake	Restore lake and wetland habitat and associated hydrology	2003	\$487,500
Blueprint 2000 Intergovernmental Agency	Gibby Pond Regional Stormwater Facility	St. Marks River/Lake Munson	Construct retrofit regional stormwater treatment facility	2004	\$732,160
Leon County	Killearn Lakes Restoration Project	Ochlockonee River/Lake Iamonia	Water quality and habitat improvement	2004	\$332,000
Bay County	Deer Point Lake Dirt Road Stabilization Phase III	St. Andrew Bay/Deer Point Lake Reservoir	Stabilize unpaved roads to reduce sedimentation and improve water quality	2005	\$500,000
Calhoun County	Lamb Eddy Road Stabilization	Apalachicola River and Bay System	Sedimentation abatement for Chipola River water quality improvement	2005	\$451,198
City of Pensacola	Long Hollow Stormwater Retrofit	Pensacola Bay System	Stormwater retrofit for water quality and flood protection	2005	\$600,000
Escambia County	East Ten Mile Creek Stream Restoration	Ten Mile Creek/Perdido Bay	Stream restoration of second reach of Ten Mile Creek	2005	\$500,000
Escambia County	Blue Pit Ecosystem Enhancement and Water Quality Improvement	Ten Mile Creek/Perdido Bay	Ecological restoration and water quality improvement	2005	\$500,000
Franklin County	Sawyer Street Stabilization	Apalachicola Bay	Shoreline restoration and sedimentation control	2005	\$366,000
Leon County	Harbinwood Estates Storm-water Retrofit	Lake Jackson/Ochlockonee River and Bay	Stormwater retrofit and basin stabilization	2005	\$1,000,000

Table 6.7 NFWFMD Local Government Florida Forever Capital Improvement Grant Projects					
Recipient	Project	Watershed	Description	Year Approved	Grant Amount
Walton County	Choctawhatchee Bay Stormwater Phase I	Choctawhatchee Bay	Stormwater retrofit and road sedimentation abatement	2005	\$500,000
Washington County	Rolling Pines Road Stabilization	St. Andrew Bay Watershed; Econfina Recharge Area	Sedimentation abatement; stormwater retrofit	2005	\$440,500
Calhoun County	John Redd Road Stormwater Improvements	Apalachicola River	Sediment abatement and stabilization for Apalachicola River and floodplain	2006-07	\$793,109
Choctawhatchee Basin Alliance	Santa Rosa Sound Ecosystem Restoration	Santa Rosa Sound Choctawhatchee Bay	Stream restoration and stormwater enhancement	2006-07	\$199,000
City of Destin	Destin Harbor Water Quality Improvements	Choctawhatchee River and Bay	Stormwater retrofit for water quality improvements	2006-07	\$201,950
City of Fort Walton Beach	Lower Choctawhatchee Bay Stormwater Initiative	Santa Rosa Sound/ Choctawhatchee Bay	Stormwater retrofit for four sites discharging to Choctawhatchee Bay and Santa Rosa Sound	2006-07	\$306,435
City of Panama City	St. Andrews Bay Yacht Club Stormwater Improvements	St. Andrews Bay	Stormwater retrofit for water quality improvements	2006-07	\$81,000
City of Port St. Joe	Fourth Street Stormwater Pond	St. Joseph Bay	Construct urban stormwater retrofit	2006-07	\$300,000
City of Springfield	Robindale Subdivision Stormwater Improvements	Martin Lake/ St. Andrews Bay	Construct urban stormwater retrofit	2006-07	\$500,000
City of Tallahassee	Sharer Road Stormwater Improvements	Meginnis Creek/ Lake Jackson	Construct retrofit for urban stormwater facility	2006-07	\$500,000
City of Vernon	Vernon Stormwater Retrofit	Holmes Creek/ Choctawhatchee River and Bay	Stormwater retrofit for water quality improvements to Holmes Creek	2006-07	\$200,000
Escambia County	Jones Swamp Ecosystem Restoration	Jones Swamp/ Pensacola Bay	Wetland and stream restoration	2006-07	\$500,000
Orange Hill Soil and Water Conservation District	Lower Choctawhatchee Stream Crossing Stabilization	Choctawhatchee River and Bay	Unpaved road/ stream crossing stabilization and sediment removal at ten sites	2006-07	\$495,000

Table 6.7 NFWFMD Local Government Florida Forever Capital Improvement Grant Projects					
Recipient	Project	Watershed	Description	Year Approved	Grant Amount
Walton County	Morrison Springs Stormwater Improvements	Choctawhatchee River and Bay	Stormwater improvements to a second magnitude spring	2006-07	\$500,000
Washington County	Chain Lake Road Stabilization	Pine Log Creek/ Choctawhatchee River and Bay	Unpaved road/ stream crossing stabilization and sediment removal	2006-07	\$262,500
Washington County	River Road Stabilization	Choctawhatchee River and Bay	Sediment abatement and stabilization for adjacent wetlands	2006-07	\$450,000
City of Apalachicola	Water Street & Avenue G Stormwater Improvements	Apalachicola River and Bay	Stormwater retrofit for water quality improvements	2007-08	\$500,000
City of Port St. Joe	Sand Hills Pond Stormwater Improvement	St. Andrew Bay/ St. Joe Bay	Regional stormwater retrofit facility to benefit St. Joseph Bay	2007-08	\$300,000
Florida DEP, NWD	Project Green-shores Site 2	Pensacola Bay	Ecological restoration of Pensacola Bay	2007-08	\$150,000
City of Carrabelle	10 th Street Stormwater Improvements	Apalachicola/ St. George Sound	Stormwater treatment facility for water quality and flood control.	2007-08	\$662,582
City of Fort Walton Beach	Eglin Parkway Stormwater Initiative	Choctawhatchee River and Bay	Construct urban stormwater retrofit	2007-08	\$150,000
Gulf County	Iola Road Stabilization and Erosion Control	Apalachicola River and Bay	Sediment abatement and stabilization for Apalachicola River and floodplain	2007-08	\$950,000
Bay County	Deer Point Lake Dirt Road Stabilization Phase IV	St. Andrew Bay/ Deer Point Lake Reservoir	Stabilize unpaved roads to reduce sedimentation and improve water quality	2007-08	\$726,176
Okaloosa County	Mainsail Drive Stormwater Retrofit	Choctawhatchee Bay/Rocky Bayou	Stormwater retrofit for water quality improvements	2007-08	\$33,800
Escambia County	Second & Sunset Wetland Water Quality Improvement	Pensacola Bay/ Davenport Bayou	Urban stormwater wetland retrofit & restoration	2007-08	\$350,000

Table 6.7 NFWMD Local Government Florida Forever Capital Improvement Grant Projects					
Recipient	Project	Watershed	Description	Year Approved	Grant Amount
Okaloosa County	Rocky Drive Stormwater Retrofit	Choctawhatchee Bay/Rocky Bayou	Stormwater retrofit for water quality improvements	2007-08	\$75,300
City of Gulf Breeze	Gulf Breeze Stormwater Improvements	Pensacola Bay System	Stormwater retrofit for water quality and flood protection	2007-08	\$500,000
Total					\$16,721,210

The current Governing Board approved local government capital improvement grant criteria are provided below in Table 6.8. The distribution of approved Florida Forever Capital Improvement Grant projects, along with other District capital improvement projects, is presented in Figure 8.2, within Chapter 8.

Table 6.8 NFWFMD Local Government Florida Forever Grant Review Criteria

Item	Criterion	Maximum Points	Explanation Of Criterion	Scoring Approach	Guidelines for Point Distribution
1.	Support of District's mission	30	How well does the project correspond to the mission, goals, priorities and strategies as specified in the District Water Management Plan, SWIM Plans, Regional Water Supply Plan?	<i>Objectively link points to District's mission and identified goals.</i>	<ul style="list-style-type: none"> • 10 points if project can be considered part of a District watershed plan, SWIM Plan, Water Supply Plan, Florida Forever Work Plan, or similar. • 5 points for each of the following areas for which benefits are expected: Flood Protection, Water Supply, Natural Systems, Water Quality (20 points maximum). • 5 points if project will directly enhance or add to an ongoing District project; or for project specified within another appropriate plan consistent with the DWMP. • Reject project if zero points earned from this criteria.
2.	Type and extent of existing problem	15	Is there a documented problem? What is the significance of this problem regarding water resources?	<i>Objectively link points to extent and type of existing problem to be addressed.</i>	<ul style="list-style-type: none"> • 15 points for a significant problem affecting a large area or population. • 10 points for localized problem that contributes significantly to adverse cumulative impacts on watershed conditions. • 5 points for a local problem affecting a small part of a watershed or population. • 0 points if problem is not well-defined or the problem can be solved without the proposed project. • Reject project if zero points earned from this criteria.
3.	Effectiveness of Proposed Solution	10	How well does the project address the specific problems and needs identified?	<i>Objectively link points to effectiveness of approach to addressing identified problem.</i>	<ul style="list-style-type: none"> • 1-10 points awarded based on percentage of project's improvements that address identified problems (i.e., 100 percent, 10 points; 50 percent, 5 points). • Reject project if proposed solution will not effectively address the problem.

Item	Criterion	Maximum Points	Explanation Of Criterion	Scoring Approach	Guidelines for Point Distribution
4.	Recognized significance of site or affected waterbody.	15	What is the classification and/or designated importance of the receiving waterbody? Would important and/or sensitive resources be protected or restored?	<i>Objectively link points to recognized priority water resources and significant ecosystems and features.</i>	<ul style="list-style-type: none"> • 15 points for OFW, Class I, or other priority area identified by the District. • 5-10 points awarded for project that benefits public waterbody with documented regionally important habitats or water resource functions. • 1-5 points awarded for project with potential for indirect benefits for public waterbody with regionally important habitats or functions. • 0 points if no known ecosystem benefits would be provided or affected water resources are not otherwise public resources of regional significance.
5.	Ability to implement and maintain the project	15	Does the applicant have the ability to see the project through to completion and provide long-term ownership, operation and maintenance? Has the applicant established a stable, dedicated funding source to maintain the project? Does the applicant propose to share in the cost of the project? If so, at what level?	<i>Scale permitting and cost-share arrangements.</i>	<ul style="list-style-type: none"> • 1 to 5 points based on projected ease of obtaining permits. • 0 to 5 points based on availability and level of completion of detailed designs. • 5 points for entities having some direct match from a 3rd party source (e.g. federal grant, stormwater utility, private partner). • 0 to 10 points based on ability and commitment of applicant to provide for long-term maintenance. • Reject project if zero points earned from this criteria.
6.	Financial need of applicant	15	What financial resources are available? Would the project be completed without funding assistance?	<i>Provide framework linking points to community size and funding levels.</i>	<ul style="list-style-type: none"> • 15 points awarded to financially disadvantaged small communities with insufficient financial resources to complete the project. • 5 points for larger entities with some direct match but which cannot complete the project without the proposed grant. • 0 points if project could be completed without funding assistance.
	TOTAL	100			

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VII. Mitigation Donation Annual Report

Section 373.414(1)(b)2 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).

Because the Northwest Florida Water Management District does not yet implement Phase II (wetland resource permitting) of the District's Environmental Resource Permitting (ERP) program, and because section 373.4137, F.S. (FDOT Mitigation) is specifically excluded from this report, this annual requirement is fulfilled separately by DEP. It is anticipated that wetland resource protection aspects of ERP will be implemented within the Northwest Florida Water Management District, jointly by the District and DEP, during 2008. After that time, this report will be revised to include a report on any cash donations accepted as mitigation, as regulated by the District. The District may also receive funds in the future 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.

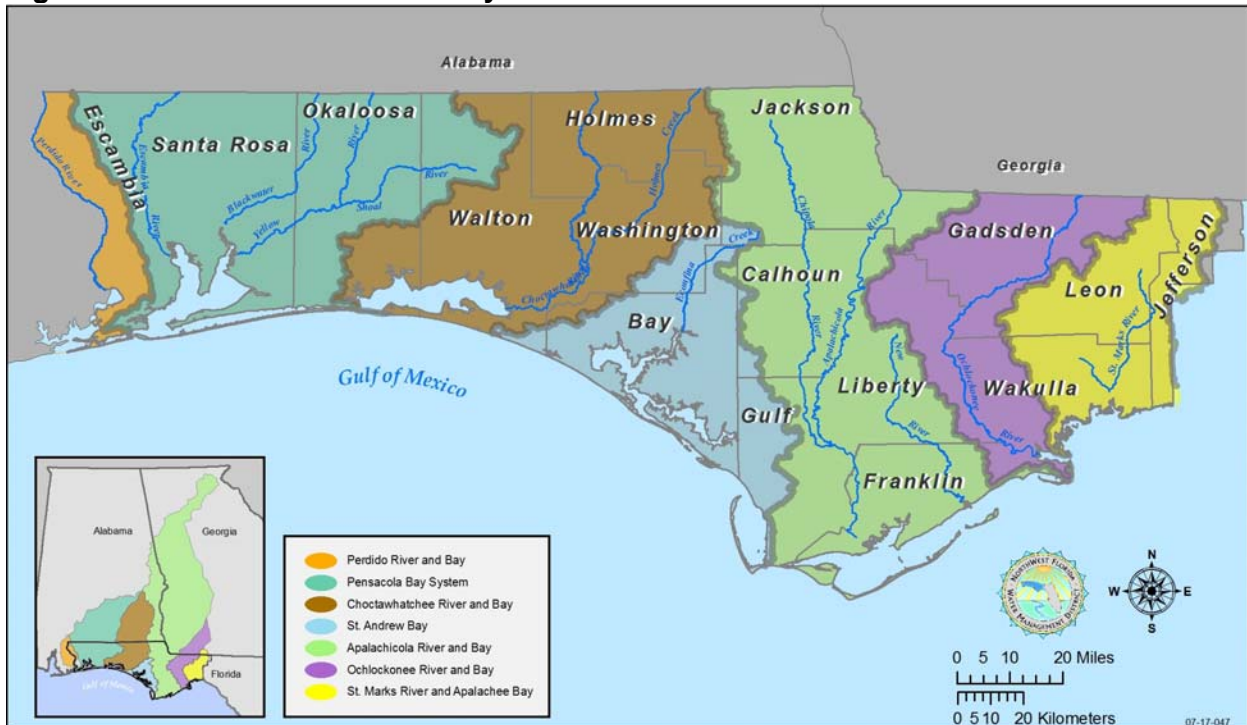
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VIII. Surface Water Improvement and Management Program and Watershed Restoration Summary Report

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 District-wide. The planning framework for this program is the Surface Water Improvement and Management (SWIM) program, through which watershed and project planning are accomplished for major riverine-estuarine watersheds as indicated below (Figure 8.1).

Figure 8.1 NFWMD SWIM Priority Watersheds



Status of Watershed Planning

The Northwest Florida Water Management District's SWIM Priority list was updated in 2006 (NFWMD 2006a). The District's designated priority waterbodies are listed in Table 8.1. In addition to respective watersheds, the list identifies major tributaries and waterbodies. All other tributaries, sub-embayments, and contributing watershed areas are also considered as being within the listed priority waterbodies.

Table 8.1 NFWFMD SWIM Priority List

Apalachicola River and Bay Watershed	
Apalachicola River	New River
Apalachicola Bay	Lake Seminole
Chipola River	
Pensacola Bay Watershed	
Escambia River	Escambia Bay
Blackwater River	East Bay
Yellow River	Blackwater Bay
Shoal River	Western and Central Santa Rosa Sound
East Bay River	Big Lagoon
Pensacola Bay	
Choctawhatchee River and Bay Watershed	
Choctawhatchee River	Eastern Santa Rosa Sound
Holmes Creek	Choctawhatchee Bay
St. Andrew Bay Watershed	
St. Andrew Bay	St. Joseph Bay
North Bay	Deer Point Lake Reservoir
West Bay	Econfina Creek
East Bay	
St. Marks River and Apalachee Bay Watershed	
St. Marks River	Lake Lafayette
Wakulla River & Wakulla Springs	Lake Munson
Lake Miccosukee	Apalachee Bay
Ochlockonee River and Bay Watershed	
Ochlockonee Bay	Lake Jackson
Ochlockonee River	Lake Iamonia
Perdido River and Bay Watershed	
Perdido River	Perdido Bay

Currently approved SWIM plans include the following:

- Apalachicola River and Bay Management Plan
- Pensacola Bay System SWIM Plan
- Lake Jackson Management Plan
- Choctawhatchee River and Bay System SWIM Plan
- St. Andrew Bay Watershed SWIM Plan
- St. Marks River and Apalachee Bay Watershed SWIM Plan

Related Programs

The SWIM program supports associated District programs, including regional wetland mitigation, Florida Forever capital improvements, land acquisition, flood map modernization, and ETDM. Plan implementation is accomplished through a variety of activities, including stormwater retrofit for water quality improvement and flood protection, wetland and aquatic habitat restoration, resource assessments, floodplain mapping, public outreach and awareness initiatives, 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 capital improvement funding (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. Additionally, regional mitigation projects funded by Florida Department of Transportation (FDOT) and implemented by the District are planned on a watershed basis and complement SWIM and other watershed protection and restoration efforts. Cumulatively, the overall effort results in significant protection and improvement of watershed resources district-wide.

SWIM Activities and Program Implementation Update

Table 8.2 provides a planning-level update of anticipated SWIM project funding for fiscal year 2007- 2008. Funding amounts indicated are inclusive of SWIM funding, Water Management Land Trust Fund, anticipated legislative appropriations, and other state and federal grant sources. Additional local and state match funding amounts are not included in the figures provided. Related Florida Forever Capital Improvement funding is discussed in Chapter VI.

Table 8.2 SWIM Activities and Program Funding – FY 07/08

SWIM Program Activities	Purpose	Estimated FY 07/08 Funding
Apalachicola River and Bay System		
Tates Hell Swamp Hydrologic Restoration Plan	Hydrologic restoration planning	\$160,000
East Bay/Tates Hill Swamp Restoration	Hydrologic and habitat restoration	\$410,000
Apalachicola River and Floodplain Restoration	Floodplain and riverine habitat restoration	\$2,450,000
Eastpoint Stormwater Plan	Stormwater plan development for community of Eastpoint	\$178,000
Eastpoint Stormwater Retrofit	Stormwater retrofit for 205 acre treatment area	\$251,000
IFAS No-Till Study	Agricultural BMP validation	\$35,000
Pensacola Bay System		
Urban Stormwater Retrofit	Basin-wide Urban Stormwater Planning and Retrofit	\$175,000
Bayou Chico Restoration	Estuarine Restoration, including sediment removal	\$560,000
Choctawhatchee River and Bay Watershed		
Urban Stormwater Retrofit	Basin-wide Urban Stormwater Planning and Retrofit	\$1,000,000
Ecological Restoration	Wetland and riparian habitat restoration	\$300,000

Table 8.2 SWIM Activities and Program Funding – FY 07/08

SWIM Program Activities	Purpose	Estimated FY 07/08 Funding
St. Andrew Bay Watershed		
Urban Stormwater Retrofit	Basin-wide Urban Stormwater Planning and Retrofit. Includes retrofit projects for Henry Davis Park and other sites, as well as basin-wide stormwater planning.	\$2,600,000
RMA Baywatch Program	Long-term Water Quality Monitoring	\$100,000
West Bay Hydrologic Restoration	Wetland hydrologic restoration	\$400,000
Ecological Restoration	Planning and implementation of shoreline, wetland, and watershed restoration	\$114,000
St. Marks River/Apalachee Bay Watershed		
Watershed Planning	SWIM plan update and project planning	\$100,000
District-Wide Activities		
Research, Data Collection, and Monitoring	Water resource data collection and monitoring; detailed elevation data collection	\$1,260,000
Minimum Flows and Levels	Fresh water need determinations	\$300,335
Water Resource Education	Public outreach for water resource education	\$127,576
Florida Forever Program Administration	Administration of District-wide grant program	\$90,000

Watershed Resource Restoration Capital Improvement Summary Table

Summary information on watershed restoration projects ongoing during fiscal year 2006-2007 is presented in Table 8.3. The table compiles information concerning projects implemented through the SWIM, regional wetland mitigation, and Florida Forever capital improvement grant programs. These projects are implemented in cooperation with numerous local governments, as well as state and federal agencies. The current projects represent long-term watershed resource restoration and wetland mitigation efforts encompassing over 40,000 acres District-wide.

Table 8.3 NFWFMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Apalachicola River and Bay System				
Apalachicola River Restoration	Restoration of floodplain resources, including removal of approximately 337,000 cubic yards of dredge spoil and additional slough restoration.	Gulf County	SWIM; Florida Forever	Implementation
Eastpoint Stormwater Retrofit	Stormwater retrofit encompassing 205 acres within coastal community along Apalachicola Bay.	Eastpoint W&SD; U.S. EPA	SWIM; U.S. EPA 319	Engineering/Design
Tates Hell Swamp Restoration	Hydrologic restoration of approximately 20,000 acres of Tates Hell Swamp, including Gator Creek Gully Branch, Big Slough, and Sand Beach Branch.	FDACS DOF, NFWFMD, FDOT	SWIM; FDOT Mitigation	Implementation
Doyle Creek Basin Restoration	Additional hydrologic and vegetation restoration for 2,000 acre basin within Tates Hell Swamp.	FDOT	FDOT Mitigation	Monitoring
Unpaved roads/stream crossing BMPs	Stabilization of an unpaved road stream crossing and removal of direct sediment discharges into tributary stream.	Orange Hill SWCD	Florida Forever	Complete
Lamb Eddy Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharge into the Chipola River.	Calhoun County	Florida Forever	Complete
Sawyer Lane Drainage Improvement	NPS/sedimentation abatement; shoreline habitat protection and restoration on Apalachicola Bay.	Franklin County	Florida Forever	Implementation
John Redd Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharge into the Apalachicola River.	Calhoun County	Florida Forever	Implementation
Water St. & Ave. G Stormwater	Stormwater retrofit of eight-acre portion of downtown Apalachicola that discharges to lower Apalachicola River.	City of Apalachicola	Florida Forever	Engineering/ Design
10 th Street Stormwater	Stormwater retrofit for approximately 145 acres discharging into St. George Sound.	City of Carrabelle	Florida Forever	Engineering/ Design

Table 8.3 NFWWMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Pensacola Bay System				
Carpenter Creek Basin Retrofit	Stormwater retrofit for 108-acre basin discharging to Bayou Texar.	Pensacola	Florida Forever	Complete
19 th & Brainerd Streets Stormwater	Regional stormwater retrofit 160-acre basin discharging to Bayou Texar.	Pensacola	SWIM	Implementation
Palafox Basin Alum Injection System	Regional stormwater retrofit for 266-acre basin discharging into Pensacola Bay; includes L-Street Pond Alum injection system within downtown Pensacola.	Pensacola	SWIM: U.S. EPA (319)	Implementation
Long Hollow Stormwater Retrofit	Regional stormwater retrofit for 745-acre portion of downtown Pensacola discharging to Pensacola Bay.	Pensacola	Florida Forever	Permitting
Gulf Breeze Stormwater Improvement	Regional stormwater retrofit for 355-acre area discharging into Pensacola Bay and Santa Rosa Sound.	Gulf Breeze	Florida Forever	Complete
17 th Avenue Stormwater Pond	Stormwater retrofit for 60-acre area discharging to Bayou Texar.	U.S. EPA, DEP, DCA, Pensacola	SWIM	Complete
Little Sabine Bay Circulation Project	Circulation facility construction, stormwater retrofit for about five-acre area, and sediment removal/habitat restoration	Santa Rosa Island Authority	Florida Forever	Permitting
Rogers Tract Mitigation	Mitigation preservation and enhancement for 40 acres within the Blackwater River watershed.	FDOT	FDOT Mitigation	Implementation; monitoring
Bluff Springs Mitigation	Mitigation preservation and enhancement encompassing 322 acres within the Escambia River watershed.	FDOT	FDOT Mitigation	Monitoring; preservation
Yellow River Ranch	Mitigation restoration project for 275 acres within the Yellow River watershed.	FDOT	FDOT Mitigation	Implementation

Table 8.3 NFWFMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Brewer Tract Mitigation	Mitigation preservation and enhancement encompassing 89 acres within the Blackwater River watershed.	FDOT	FDOT Mitigation	Complete; monitoring
Jones Swamp Wetland & Floodplain Restoration	Wetland restoration project for four-acre area within Jones Swamp.	Escambia County	Florida Forever	Implementation
Project Greenshores, Site 2	Establishment of approximately 15 acres of salt marsh/oyster reef along Bayfront Parkway in Pensacola Bay.	FDEP	Florida Forever	Implementation
Second & Sunset Wetland Water Quality Improvement	Stormwater retrofit for 33-acre area discharging to Davenport Bayou and Pensacola Bay.	Escambia County	Florida Forever	Planning
Gulf Breeze Stormwater Improvement, Phase II	Additional regional stormwater retrofit for 46-acre area discharging into Pensacola Bay and Santa Rosa Sound.	Gulf Breeze	Florida Forever	Planning
Choctawhatchee River and Bay Watershed				
Lower Turkey Creek Stormwater Retrofit	Construct stormwater treatment facilities treating approximately 25 acres discharging into Turkey Creek.	City of Niceville	SWIM	Complete
Oyster Lake Restoration	Wetland restoration project to re-establish hydrologic flow patterns within 60-acre portion of a coastal dune lake system.	Walton County	Florida Forever	Implementation
Freeport Public Access Reuse Project	Development of 53-acre public access reuse capability, including storage and ancillary facilities, to reduce pollutant loading to Choctawhatchee Bay.	City of Freeport	SWIM, Florida Forever	Implementation
Clement Taylor Park Retrofit and Ecological Restoration	Stormwater retrofit and habitat restoration within Destin city park. Encompasses 43-acre treatment area.	Choctawhatchee Basin Alliance; Destin	SWIM	Implementation

Table 8.3 NFWWMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Lafayette Creek Mitigation	Mitigation wetland protection and enhancement encompassing 3,160 acres within the Lafayette Creek basin.	FDOT Mitigation	FDOT Mitigation	Implementation
Live Oak Point/ Hogtown Bayou Mitigation	Wetland enhancement for major salt marsh on Choctawhatchee Bay.	FDOT Mitigation	FDOT Mitigation; SWIM	Implementation
Sand Hill Lakes Mitigation Bank	Ecological restoration and public access, encompassing approximately 2,155 acres of wetland mitigation. Also includes recharge area for Econfina Creek and Deer Point Lake Reservoir.	NFWWMD	FDOT Mitigation	Implementation
Unpaved roads/stream crossing BMPs	Stabilization of seven unpaved road stream crossings and removal of direct sediment discharges into tributary streams.	Orange Hill SWCD	Florida Forever	Complete
Choctawhatchee Bay Stormwater Phase I	NPS pollution abatement and removal of direct sediment discharges from Choctawhatchee Bay.	Walton County	Florida Forever	Implementation
Lower Choctawhatchee Stream Crossing Stabilization	Stabilization of ten unpaved road stream crossings and removal of direct sediment discharges into tributary streams.	Orange Hill SWCD	Florida Forever	Implementation
Morrison Springs Stormwater Improvement	NPS pollution abatement and stormwater improvements at a second magnitude spring. Encompasses about 15 acres of stormwater retrofit.	Walton County	Florida Forever	Implementation
Santa Rosa Sound Ecosystem Restoration	Stream restoration and stormwater enhancement for a portion of Fort Walton Beach discharging to Santa Rosa Sound. Includes 63 acres of stormwater retrofit.	Choctawhatchee Basin Alliance	Florida Forever	Implementation
Destin Harbor Water Quality Improvement	Stormwater retrofit for 31-acre urban watershed discharging to Destin Harbor.	Destin	Florida Forever	Implementation
Lower Choctawhatchee Bay Stormwater Initiative	Stormwater retrofit treating four sites and 283 acres discharging into Choctawhatchee Bay.	Fort Walton Beach	Florida Forever	Implementation

Table 8.3 NFWFMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Chain Lake Road Stabilization	NPS pollution abatement and sediment removal of an unpaved stream crossing on Pine Log Creek.	Washington County	Florida Forever	Implementation
River Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharges into adjacent wetlands.	Washington County	Florida Forever	Implementation
Vernon Stormwater Retrofit	Stormwater retrofit for 15 acre area directly discharging to Holmes Creek.	Vernon	Florida Forever	Implementation
Eglin Parkway Stormwater Initiative	Stormwater retrofit treating 62 acre urbanized area in the Choctawhatchee Bay watershed.	City of Fort Walton Beach	Florida Forever	Planning
Mainsail Drive Stormwater Retrofit	Stormwater retrofit treating four acres discharging to Rocky Bayou and Choctawhatchee Bay.	Okaloosa County	Florida Forever	Planning
Rocky Drive Stormwater Retrofit	Stormwater retrofit treating six acres discharging to Rocky Bayou and Choctawhatchee Bay.	Okaloosa County	Florida Forever	Planning
St. Andrew Bay Watershed				
Lake Powell Stormwater Retrofit	Construction of demonstration stormwater retrofit; exfiltration system treating about four acres discharging to Lake Powell.	Bay County	SWIM	Implementation
Henry Davis Park Stormwater Retrofit	Construction of stormwater retrofit treating about 137 acres within Panama City	Panama City	SWIM	Implementation
Deer Point Lake Unpaved Roads Phases III & IV	Unpaved road stabilization to remove sediment discharges from Deer Point Lake Reservoir.	Bay County	Florida Forever	Implementation
11th Street Stormwater Retrofit	Stormwater retrofit for urban development discharging into Watson Bayou.	Bay County	SWIM, Florida Forever	Planning
Port of Panama City Stormwater Improvements I & II	Stormwater retrofit for 12 acres of industrial port area discharging into St. Andrew Bay.	Panama City Port Authority	Florida Forever	Complete

Table 8.3 NFWWMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Ward Creek West Hydrologic Restoration	Hydrologic and wetland restoration for 724 acres in the West Bay watershed.	NFWWMD	FDOT Mitigation	Acquisition in progress
St. Joseph Lake Stormwater Improvement	Stormwater retrofit for portion of Port St. Joe discharging in to St. Joseph Bay.	City of Port St. Joe	Florida Forever	Complete
Lynn Haven Breakwater and Retrofit	Stormwater retrofit and shoreline wetland habitat restoration along St. Andrew Bay.	Lynn Haven; FDOT	SWIM; Florida Forever; FDOT Mitigation	Monitoring
Rolling Pines Road Stabilization	Unpaved road stabilization to eliminate sedimentation within the Econfina Recharge Area.	Washington County	Florida Forever	Implementation
WMA Habitat Restoration	Environmental forest restoration for 744 acres in the Econfina Recharge Area		Land Management	Implementation
Fourth Street Stormwater Pond	Stormwater retrofit treating 17 acre urban watershed discharging to St. Joseph Bay.	City of Port St. Joe	Florida Forever	Implementation
Robindale Subdivision Stormwater Improvement	Stormwater retrofit treating 53 acres that discharge to Martin Lake and St. Andrew Bay.	Springfield	Florida Forever	Implementation
St. Andrews Bay Yacht Club Stormwater Improvement	Stormwater retrofit treating 25 acres discharging to St. Andrew Bay and affecting approximately 28,000 square feet of seagrass.	Panama City	Florida Forever	Implementation
Sand Hills Stormwater Pond	Stormwater retrofit treating 29 acres of Port St. Joe discharging to St. Joseph Bay.	City of Port St. Joe	Florida Forever	Planning
Iola Road Stabilization & Erosion Control	Unpaved road stabilization to eliminate sedimentation to the Apalachicola River and adjacent wetlands.	Gulf County	Florida Forever	Planning

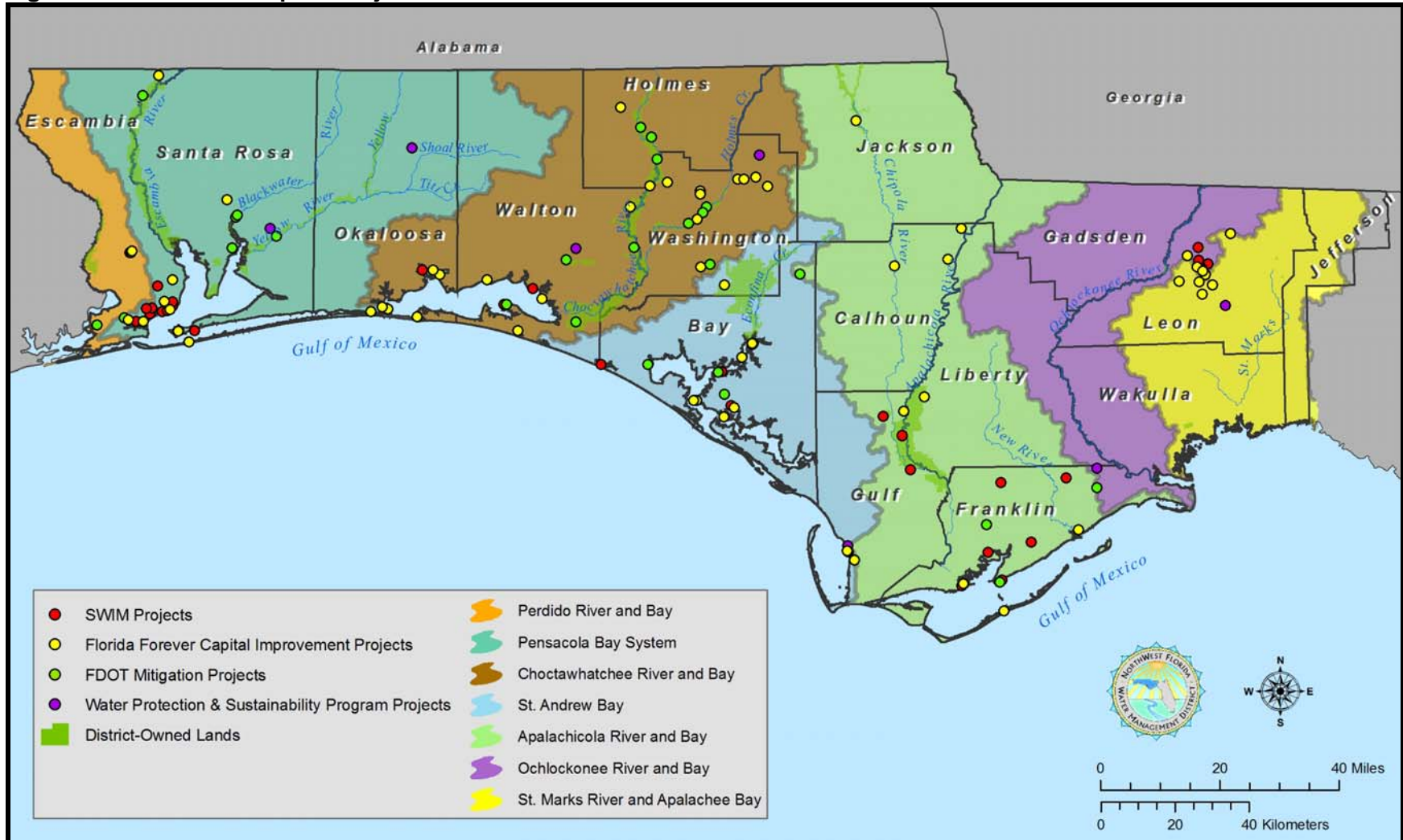
Table 8.3 NFWFMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Ochlockonee River and Bay Watershed/Lake Jackson				
Fuller Road RSTF	Regional stormwater retrofit for area of Tallahassee discharging into Lake Jackson.	Leon County	Florida Forever	Permitting
Okeeheepkee Basin Retrofit	Regional stormwater retrofit for 232 acres of Tallahassee discharging into Lake Jackson.	Leon County	Florida Forever	Complete
Harbinwood Estates Retrofit	Stormwater retrofit and erosion control to retrofit 200 acre residential and commercial area discharging into Lake Jackson.	Leon County	Florida Forever	Implementation
Meginnis Arm Shoreline	Shoreline restoration for 17 acres on Lake Jackson for wetland mitigation.	FDOT	FDOT Mitigation	Planning
Womack Creek Restoration	Hydrologic and vegetation restoration for 70 acres within Tates Hell Swamp.	FDOT	FDOT Mitigation	Complete; monitoring
Tom Hahn Creek Restoration	Hydrologic and vegetation restoration for 6,000 acre area of Tates Hell Swamp.	FDOT	FDOT Mitigation	Planning; Implementation
Killearn Lakes Restoration	Habitat restoration and water quality improvement for approximately 73 acres in the Lake Iamonia and Ochlockonee River watershed.	Leon County	Florida Forever	Implementation
Sharer Road Stormwater Improvement	Stormwater retrofit for 1,500 acres discharging to Meginnis Creek tributary and Lake Jackson.	Tallahassee	Florida Forever	Implementation

Table 8.3 NFWFMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
St. Marks River/Apalachee Bay Watershed				
Gibby Pond Retrofit	Regional stormwater retrofit for 327 acres within the St. Marks River and Apalachee Bay watershed.	Blueprint 2000; FDOT	Florida Forever	Implementation
Call & Cadiz St. Stormwater	Regional stormwater retrofit for 90 acres in the St. Marks River and Apalachee Bay watershed.	Tallahassee	Florida Forever	Complete
Perdido River and Bay Watershed				
Ten Mile Creek Restoration	Major environmental stream restoration encompassing approximately 237 acres and one mile of Ten Mile Creek (East Ten Mile Creek).	Escambia County	Florida Forever	Implementation
Blue Pit Ecosystem Enhancement and Water Quality Improvement	Stormwater retrofit and restoration of about ten acres in the Ten Mile Creek basin.	Escambia County	Florida Forever	Implementation

Figure 8.2 NFWMD Capital Project Distribution



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Appendix A. District Water Management Plan Annual Performance Measures

The water management districts, DEP, and the Executive Office of the Governor developed core annual performance measures for the district water management plans. These measures are intended as a means of evaluating programs and budgets on an annual basis. While individual districts are free to develop additional strategies and measures specific to the needs of their region, these core measures are intended to reflect statewide priorities. A number of measures are provided for each area of responsibility, as is a category called “Common Measures.” This latter category reflects measures that apply to more than one responsibility and are therefore grouped as a common set. It should be noted that a number of the statewide performance measures apply to programs not implemented by the Northwest Florida Water Management District. Values and trends reported in these cases reflect values and results provided by DEP staff.

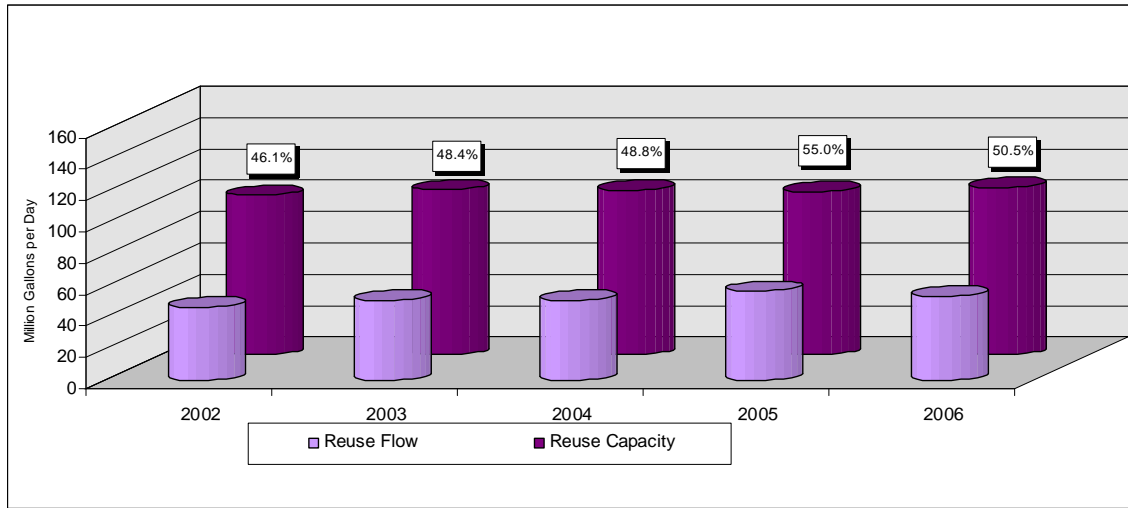
Water Supply

Water Supply Objective 1: Increase available water supplies and maximize overall water use efficiency.

WS 1(a) Percentage of Domestic Wastewater Reuse

The state and water management districts continue to emphasize wastewater reuse. This resource as a result has become an important alternative to the use of potable supplies for such beneficial uses as landscape irrigation, industrial processing, and power generation. This measure is intended to identify on an annual basis the wastewater reuse capacity of facilities within the NFWMD and the proportion of wastewater effluent actually reused. In 2006, there were 54 reuse facilities in the District. Of the 107 MGD of domestic wastewater reuse capacity, 54 MGD were used, or about 51 percent. Of this, approximately 21.4 percent was allocated to beneficial public access irrigation.

Figure A.1 Percent of Reuse Capacity Used in NFWMD



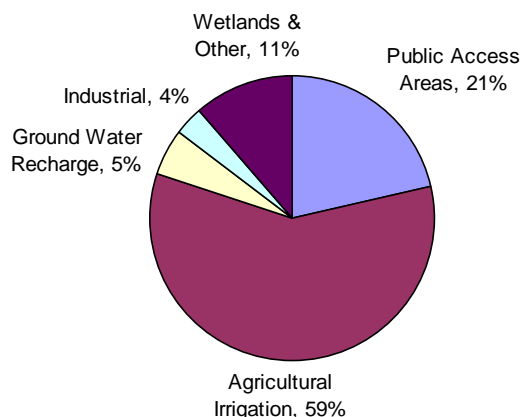
Source: FDEP, Division of Water Resource Management, Annual Reuse Inventories.

Table A.1 Percent of Reuse Capacity Used by County

County	Reuse Capacity (MGD)	Reuse Flow (MGD)	Percent of reuse capacity used	Percent change in reuse capacity 2005-2006
Bay	9.26	2.7	29.16%	28.79%
Escambia	13.48	6.08	45.10%	0.82%
Franklin	0.71	0.34	47.89%	0%
Gadsden	1.42	0.58	40.85%	0%
Gulf	0.35	0.29	82.86%	0%
Jackson	1.64	0.79	48.17%	0%
Jefferson	1.35	0.71	52.59%	3.85%
Leon	25.34	18.01	71.07%	-11.55%
Liberty	0.2	0.16	80.00%	0%
Okaloosa	30.31	16.19	53.41%	4.27%
Santa Rosa	5.56	2.77	49.82%	-0.36%
Wakulla	1.1	0.57	51.82%	11.11%
Walton	15.91	4.6	28.91%	19.00%
Washington	0.27	0.2	74.07%	0%
Totals	106.9	53.99	50.51%	2.68%

Source: FDEP, Division of Water Resource Management, Water Reuse Program, 2006 Reuse Inventory. [Holmes and Calhoun County omitted as reuse capacity is negligible in both locations.]

Figure A.2 Reuse Allocation



Source: FDEP, Division of Water Resource Management, Water Reuse Program, 2006 Reuse Inventory.

WS 1(b) Gross Per Capita Water Use (Public Supply) by District and Water Supply Planning Regions

Public supply represents one of the two primary water use sectors (along with commercial-industrial), and it is experiencing the greatest growth in use levels District-wide. This measure is intended to show the trend of such use, recognizing that water conservation can serve as a significant source of “new water” to meet public needs. Gross per capita public supply use is calculated by dividing the total publicly supplied water used (in gallons per day) by the population served.

The most recent data available for per capita water use by water supply region is from 2000. The table below illustrates the differences in current water use and the forecasted water use for regions within the District. The projections indicate that each region will see an increase in the amount of water required for average daily use. The District is working to update its water supply assessment, and an updated table will be available in next year’s consolidated annual report.

Table A.2. Water Supply Planning Region Summary by County

	Total Average Water Use (MGD)		2000 Public Supply Per Capita (gal/d)	Primary Water Source
	2000	2025		
Region I				
Escambia	83.93	112.34	156	Sand & Gravel Aquifer
Region II				
Santa Rosa	22.80	39.88	132	Floridan/Sand-and-Gravel aquifers
Okaloosa	32.56	50.31	145	
Walton	8.89	17.11	188	
Region III				
Bay	55.71	79.51	206	Deer Point Lake Reservoir
Region IV				
Holmes	2.99	3.89	235	Floridan Aquifer
Washington	4.18	5.42	153	
Jackson	20.74	23.30	150	
Calhoun	4.99	7.49	178	
Liberty	1.62	2.03	141	
Region V				
Gulf	3.47	3.19	142	Floridan Aquifer/St. Joe Canal
Franklin	2.08	2.86	207	
Region VI				
Gadsden	13.68	15.28	157	Floridan Aquifer
Region VII				
Leon	43.41	64.93	179	Floridan Aquifer
Wakulla	5.22	8.72	235	
Jefferson	5.61	7.08	143	
Total	311.88	443.34	164 (Avg.)*	

Source: NFWFMD Water Supply Projections 2005-2025.

*Public Supply water use includes water distributed by most public water systems and private water utilities.

WS 1(c) Within each water supply planning region:

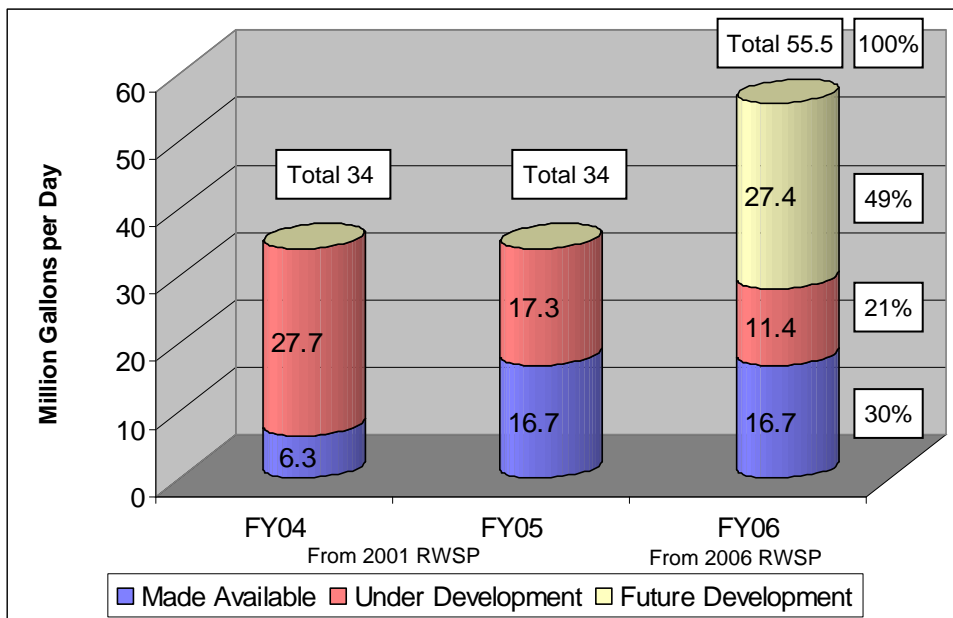
- 1) The estimated amount of water supply to be made available through the water resource development component of the regional water supply plan (RWSP);
- 2) Percent of estimated amount under development; and
- 3) Percent of estimated amount of water actually made available.

The districts are charged with expanding the “water pie” to assure future water supply availability. This is to be accomplished through water resource development, or regional projects designed to create, from traditional or alternative sources, an identifiable, quantifiable supply of water for existing and/or future reasonable and beneficial uses. The estimated quantity of water needed and the water resource development activities of the District are included in Regional Water Supply Plans.

The Regional Water Supply Plan (RWSP) for Region II was updated in 2006. It estimates an additional 55.5 MGD of alternative supplies that can be made available through implementation of the Water Resources Development component of the plan (Figure A.3). This figure does not

include 25 MGD of alternative surface water sources that are identified for needs beyond the 2025 planning horizon. Approximately 16.7 MGD or 30% have already been made available to coastal utilities in Region II and another 11.4 MGD or 21% are under development. Thus, approximately 51% of the total alternative sources identified in the WRD component are either under development or have already been developed; the remaining 49% are for future development as determined by future demand through 2025.

Figure A.3 Water Resources Development in Region II



Source: NFWFMD Staff, 2008

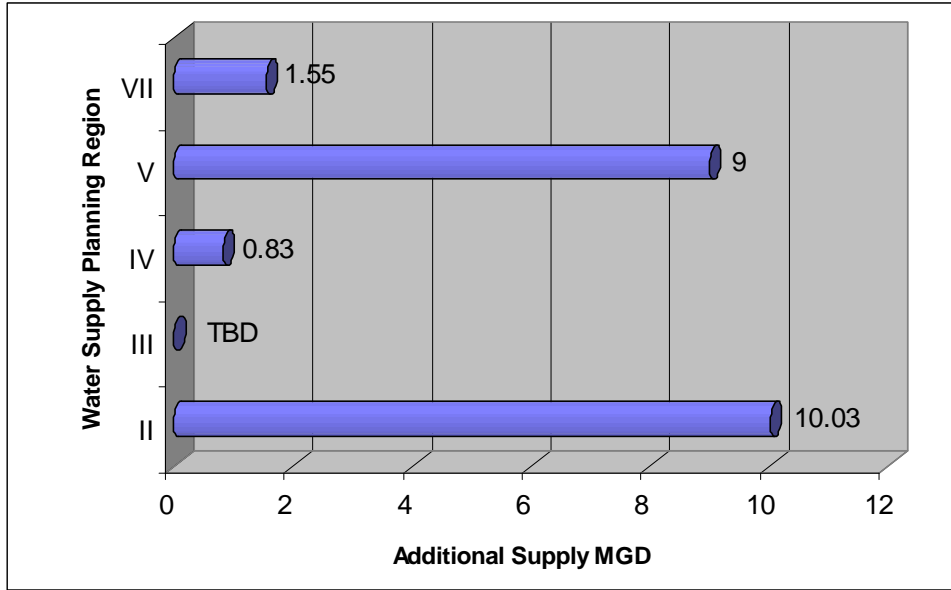
For Region V, the estimated amount of alternative supplies that can be made available through the Water Resource Development component of the plan is 9 MGD. This includes 3.0 MGD for an alternative inland groundwater source for eastern Franklin County and 6.0 MGD for an alternative surface water source for Port St. Joe via the Gulf County Fresh Water Supply Canal. The Port St. Joe alternative water source is currently under construction.

WS 1(d) Within each water supply planning region, the estimated additional quantities of water supply made available through District water supply development assistance

“Water Supply Development” is defined as the planning, design, construction, operation and maintenance of public or private facilities for water collection, production, treatment, transmission or distribution for sale, resale or end use. Although this is primarily the responsibility of local and regional water supply providers, this measure is intended to identify the extent to which the District assists water suppliers in developing additional capacity.

During fiscal year 2006-2007, the District provided water supply development assistance in Regions II, III, IV, V, and VII through the Water Protection and Sustainability Program. It is anticipated that over 21.4 MGD will be made available within these regions. Specific water resource and water supply development projects are described in Chapter 5.2 of the Consolidated Annual Report.

Figure A.4 District-Assisted Water Supply Development per Planning Region



Source: NFWFMD Staff, 2008

Water Supply Objective 2: Prevent contamination of water supplies.

WS 2(a) Percentage of surface water supply sources for which water quality fully attains the designated use

Under Florida’s water quality monitoring and reporting program developed pursuant to the federal Clean Water Act, surface waterbodies are regularly assessed for a variety of water quality parameters. Surface waters supply drinking water to about 13 percent of Florida’s population (DEP 2006). Of the approximately 7,200 public drinking-water systems in the state, only 19 systems utilize surface water. In the Northwest Florida Water Management District, Bay County relies on surface water for its water supply, and the City of Port St. Joe is transitioning to a surface water source.

The following discussion relates to waters designated as Class I for potable water supply. Bayou George and Creek (tributary of the Deer Point Lake Reservoir supplying water to Panama City) is listed as meeting planning list criteria as potentially impaired for dissolved oxygen in the DEP 2006 Water Quality Assessment Report, Choctawhatchee–St. Andrew. No other of the eight segments or tributaries of Deer Point Lake Reservoir are listed as impaired.

The City of Port St. Joe diverts water from the Chipola River to the city via the Port St. Joe fresh water canal. The city is outside of the Apalachicola watershed so the canal is not included in the water quality assessment, however the source for this fresh water, the Chipola River, is a Class III waterbody listed as impaired due to fecal coliform in the DEP 2005 Water Quality Assessment Report Apalachicola–Chipola. Mosquito Creek, a tributary of the Apalachicola River in Gadsden County, is listed as impaired; however it is not currently used for public water supply.

Within the Ochlockonee watershed Quincy Creek, which used to provide water supply for the City of Quincy, was listed as meeting planning list criteria and potentially impaired for total and fecal coliforms in the DEP 2003 Water Quality Assessment Report Ochlockonee and St. Marks. Holman Branch, a tributary of Quincy Creek, was not listed for lack of data.

Of 8 Class I segments currently providing surface water supply within the NFWMD, one is potentially impaired and seven are not listed. Therefore, 87.5% can be considered as attaining their designated use.

Flood Protection and Floodplain Management

Flood Protection/Floodplain Management Objective 1: Minimize damage from flooding.

FP 1(a) Percentage of District works maintained on schedule

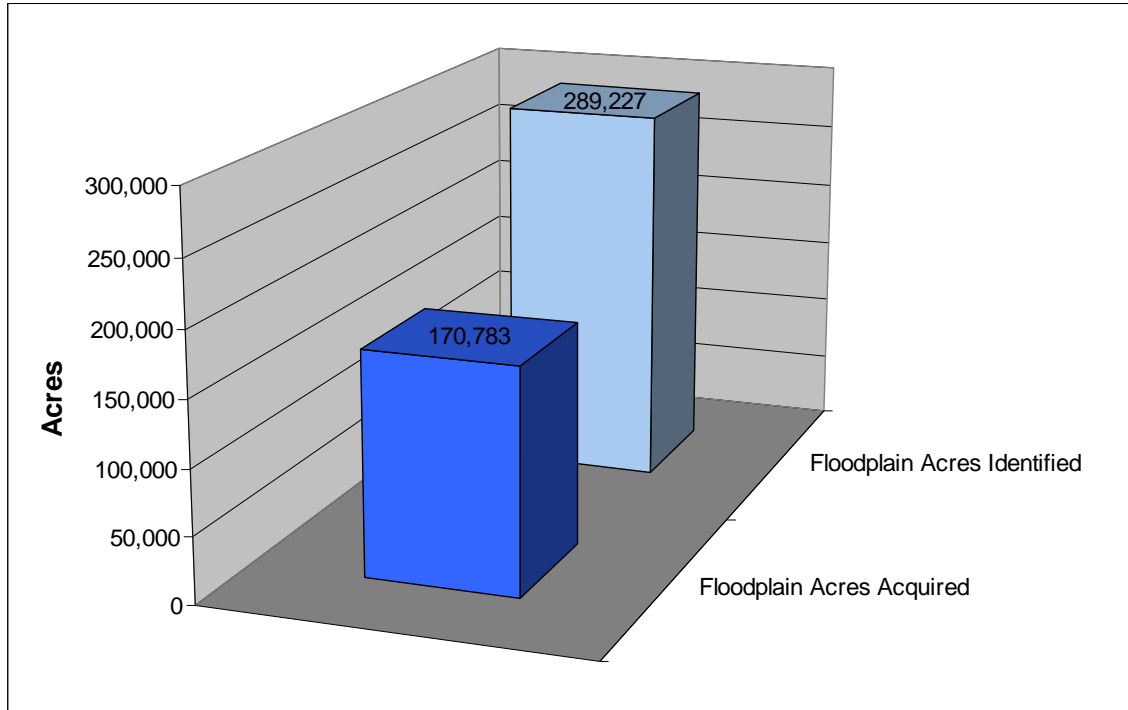
The District does not own or operate any facilities that provide flood protection. Since the structural approach tends to be more expensive, less effective, and involve greater risks, a nonstructural approach is preferred for flood protection and floodplain management.

Flood Protection/Floodplain Management Objective 2: Promote non-structural approaches to achieve flood protection and to protect and restore the natural features and functions of the 100-year floodplain.

FP 2(a) Number of acres identified for acquisition to minimize damage from flooding and the percentage of those acquired

The majority of lands purchased by the District encompass important natural flood storage areas. By protecting these areas, the District ensures that floodplain functions will be sustained. These land purchases help reduce risks to humans located in downstream locations where flood levels could potentially increase due to the loss of natural water storage areas. Less-than-fee acquisitions (e.g., conservation easements) are often useful for flood protection purposes. Through the end of fiscal year 2007, the District has acquired 213,148 acres through donation, fee and less-than-fee purchases of the 382,649 acres identified through the District's 2007 Florida Forever Land Acquisition Work Plan. Of this, 170,783 acres of floodplain have been acquired of 289,227 floodplain acres identified. This comprises 59 percent of the acres identified as vulnerable to flooding and represents significant progress by the District in floodplain protection.

Figure A.5 Land Acquisition to Minimize Flood Damage



Source: NFWFMD Staff, January 2008. GIS was used to calculate acres within the 100-year floodplain.

Water Quality

Water Quality Objective 1: Protect and improve surface water quality.

WQ 1(a) Percentage of water segments that fully meet, partially meet, and do not meet their designated uses under the TMDL program

Under Florida’s water quality protection programs, waters are classified for uses, including drinking water, shellfish harvesting, fish and wildlife maintenance, agriculture, and navigation, utility and industrial use. This performance measure indicates the extent to which the water quality needed to support the designated use(s) is being attained. The TMDL program is implemented in northwest Florida by DEP. For more information on the TMDL program, visit www.dep.state.fl.us/water/tmdl/index.htm. The 2006 Integrated Assessment 305(b) report and 303(d) List Update can be accessed at www.dep.state.fl.us/water/tmdl/docs/2006_Integrated_Report.pdf.

Water Quality Objective 2: Protect and improve groundwater quality.

WQ 2(a) Improving, degrading, and stable trends in groundwater quality

Groundwater is a major source of potable water for the NFWFMD and the state as a whole. Close attention to changes and trends in quality is critical to the maintenance of public health and safety, as well as the protection of the natural systems that are dependent upon these

water resources. Under Florida’s water quality monitoring programs, groundwater aquifers are regularly assessed for a variety of water quality criteria. Ground water quality monitoring is also required by the District’s consumptive use permitting program. These measures are intended to identify groundwater quality trends in order to assure protection of water resources. The data necessary to report trends are not currently available. The collection of this data is ongoing and the District will provide such analysis in the future within priority areas.

WQ 2(b) Improving, degrading, and stable trends in nitrate concentrations in springs

Increasing levels of nitrates have been documented to affect spring water clarity and the composition of the aquatic plant community. Under Florida’s water quality monitoring programs, groundwater aquifers are regularly assessed for a variety of water quality parameters. This measure is intended to identify groundwater trends as measured in spring flow quality to assure protection of water resources.

Insufficient data are available to establish nitrate levels and trends for the majority of northwest Florida springs. However, existing data indicate a long-term increasing nitrate concentration in Jackson Blue Springs and a stable trend for St. Marks Rise. Wakulla Springs previously showed an increasing trend, though over the past ten years there has been a decline and subsequent stabilization of nitrate concentrations to about 0.6 to 0.8 mg/L. The District’s 1999-2000 study on nitrate sources in the Wakulla Spring basin helped bring awareness to the problem, influenced changes in the City of Tallahassee’s sprayfield management, and provided the basis for further study by the USGS that led to the City’s investment in advanced wastewater treatment. The District participates in working groups for both Wakulla and Jackson Blue with the goal of increasing awareness and communication between interests in the spring basins, monitoring water quality and spring flow, and providing a forum for cooperation between agencies.

Table A.3. Nitrate Trends at Selected NFWFMD Springs

Spring	Nitrate Trend
Jackson Blue Springs	30 year degrading trend
Wakulla Springs	10 year stable trend
St. Marks Rise	30 year stable trend

Sources: NFWFMD Water Resources Special Report 02-1; 05-1; 06-1; NFWFMD staff, January 2008.

Natural Systems

Natural Systems Objective 1: Maintain the integrity and functions of water resources and related natural systems.

NS 1(a) Number and percentage of established minimum flows and levels (MFLs) being maintained consistently with established recovery or prevention strategies

Minimum Flows and Levels can be set for streams, rivers, and other flowing watercourses; lake and wetland levels; aquifers; and springs. This measure is aimed at identifying the MFLs that, once established, are being maintained. No MFLs have been established in northwest Florida. The District Governing Board declared a reservation on the water resources of the Apalachicola River, including the Chipola River, in January 2006.

NS 1(b) Percentage of MFLs established in accordance with the previous year's schedule

The District's MFL Priority List and Schedule identifies those lakes/wetlands, rivers/streams and aquifers for which MFLs are to be established over time. The schedule is updated annually and submitted to DEP for approval. This measure compares the scheduled waterbodies with those actually established to track progress in implementing MFLs. No MFLs have been established in northwest Florida. The District Governing Board declared a reservation on the water resources of the Apalachicola River, including the Chipola River, in January 2006.

NS 1(c) For the previous fiscal year, the total acres of wetlands or other surface waters authorized by Environmental Resource Permit to be impacted and the number of acres required to be created, enhanced, restored and preserved

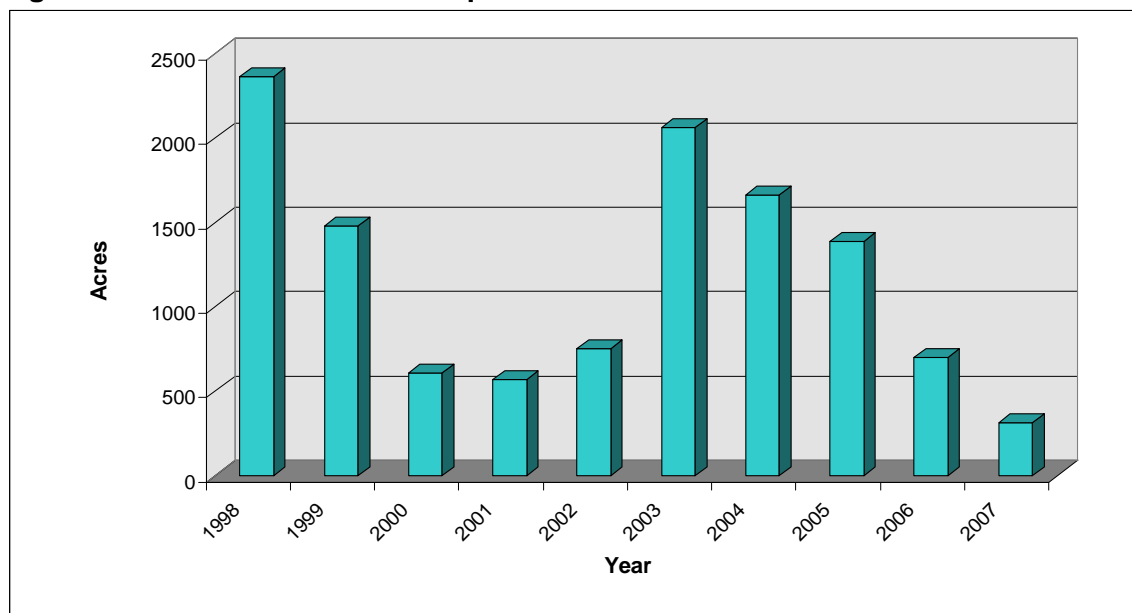
The Northwest Florida Water Management District began implementing the Environmental Resource Permitting program for stormwater permits on October 1, 2007. Wetlands permitting is scheduled to begin in the summer of 2008.

Natural Systems Objective 2: Restore degraded water resources and related natural systems to a naturally functioning condition.

NS 2(a) Acres of invasive non-native aquatic plants in inventoried public waters

Protection and management of natural surface waters cannot be accomplished without effectively managing invasive exotic aquatic plant species that can reduce the abundance and diversity of native plant populations, hinder navigation and recreational use, degrade water quality, impact fish and wildlife habitat, and impede water flow. Aquatic plant management operations conducted on publicly accessible natural waters in northwest Florida are funded and coordinated primarily by DEP, the Florida Fish and Wildlife Conservation Commission, and local governments. This performance measure is intended to monitor how well the responsible agencies are doing in managing invasive aquatic plants. The District does not have a program to manage invasive aquatic plants, so this measure actually monitors DEP aquatic plant management efforts. Among the invasive nonnative aquatic plants of concern in northwest Florida waters are hydrilla (*Hydrilla verticillata*), torpedo grass (*Panicum repens*), wild taro (*Colocasia esculenta*), water-hyacinth (*Eichhornia crassipes*), and popcorn tree or Chinese tallow tree (*Sapium sebiferum*). In 2007, DEP's annual aquatic plant survey inventoried 313 acres of invasive aquatic plants in public waters (Figure A.6). Plants included are in the Florida Exotic Pest Plant Council's Category I and II lists.

Figure A.6 Invasive Nonnative Aquatic Plants in District Waters



Source: DEP; Bureau of Invasive Plant Management Annual Aquatic Plant Surveys

NS 2(b) Acres of District managed lands infested with invasive non-native upland plants

Exotic plant infestations have the potential to significantly impact the biological integrity of areas the District has acquired for protection and preservation. This problem is recognized as a major threat to the remaining natural areas in Florida. As a major public landholder and manager of natural lands, the District cooperates with state, federal, and local government agencies to develop and implement effective invasive plant control and management strategies. This measure is intended to monitor how well the District manages invasive terrestrial plants.

Due to funding limitations, the District has not completed a survey to specifically identify the spatial distribution of invasive exotic plant infestation on District lands. It is known, however, that invasive plant problems exist at varying levels on some District lands, including at Phipps Park (Lake Jackson watershed) and within the floodplains of the Apalachicola, Chipola, Choctawhatchee, Escambia, and Perdido rivers. Species of concern include Japanese climbing fern (*Lygodium japonicum*), cogon grass (*Imperata cylindrica*), Coral ardisia (*Ardisia crenata*), Chinese tallow (*Sapium sebiferum*), and Chinese privet (*Ligustrum sinense*).

In 2007, the District obtained a \$23,000 grant from DEP to treat Chinese tallow, Japanese climbing fern and cogon grass on approximately 130 acres of the recently acquired Perdido River Water Management Area. This work will be accomplished in 2008. Other upland exotic plant control activities on District lands consists of field staff spot treating numerous small infestations on an as-needed basis. The total amount of area to be treated is estimated at less than 25 acres and most of the areas to be treated are smaller than 1/8 acre.

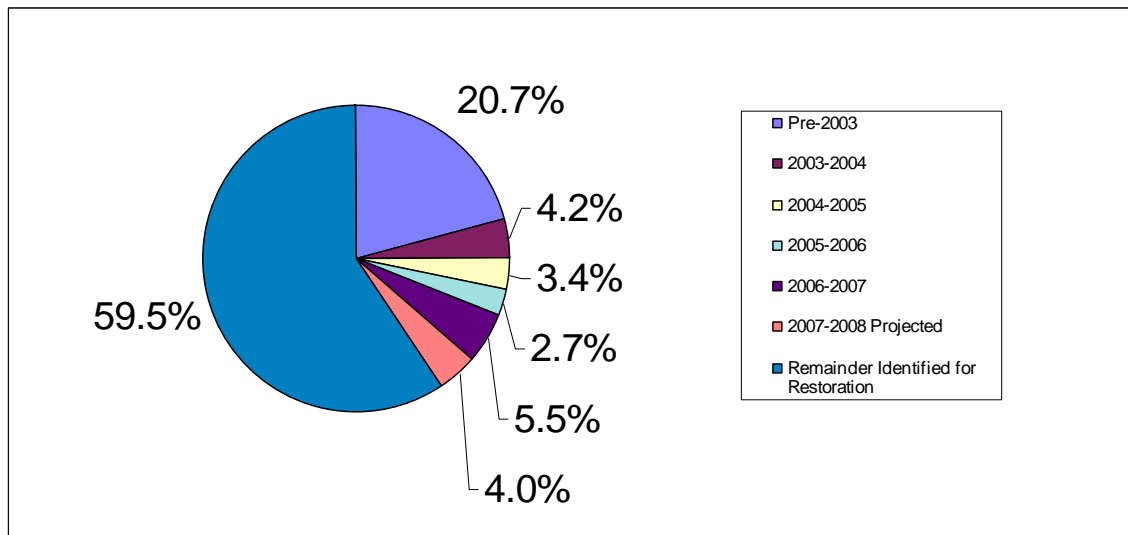
NS 2(c) Acres of District-owned lands identified in land management plans as needing restoration, acres undergoing restoration, and acres with restoration activities completed

The primary goal of the District's restoration program is to reestablish natural plant and animal communities on District managed lands that have been disturbed or impacted by past land uses such as silviculture and agriculture. This parameter is intended to measure whether progress is being made toward accomplishing planned restoration activities.

In 2007, 1,550 acres were restored out of the 28,271 acres identified as needing restoration District-wide. An estimated 10,321 acres have been restored on District lands to date, or 36.5 percent.

Last year the District reforested 1,550 acres in Walton, Washington, and Escambia counties. The Walton and Washington county sites, including the Econfina Recharge Area, are xeric uplands being restored with longleaf pines after clearcut harvest of off-site sand pines. A portion of this was also a cleared sod farm operation. The Escambia County sites are recently acquired areas that were clearcut by the former owner prior to District purchase of the land in May 2006; they were replanted with longleaf and slash pines. Wiregrass planting occurred on 27 acres of the Lafayette Creek tract of the Choctawhatchee River/Holmes Creek Water Management Area in a site that was a previously cleared sod farm operation. (Source: E-mail from Tyler Macmillan, January 2008.)

Figure A.7 Percent of District-Owned Lands Restored by Year



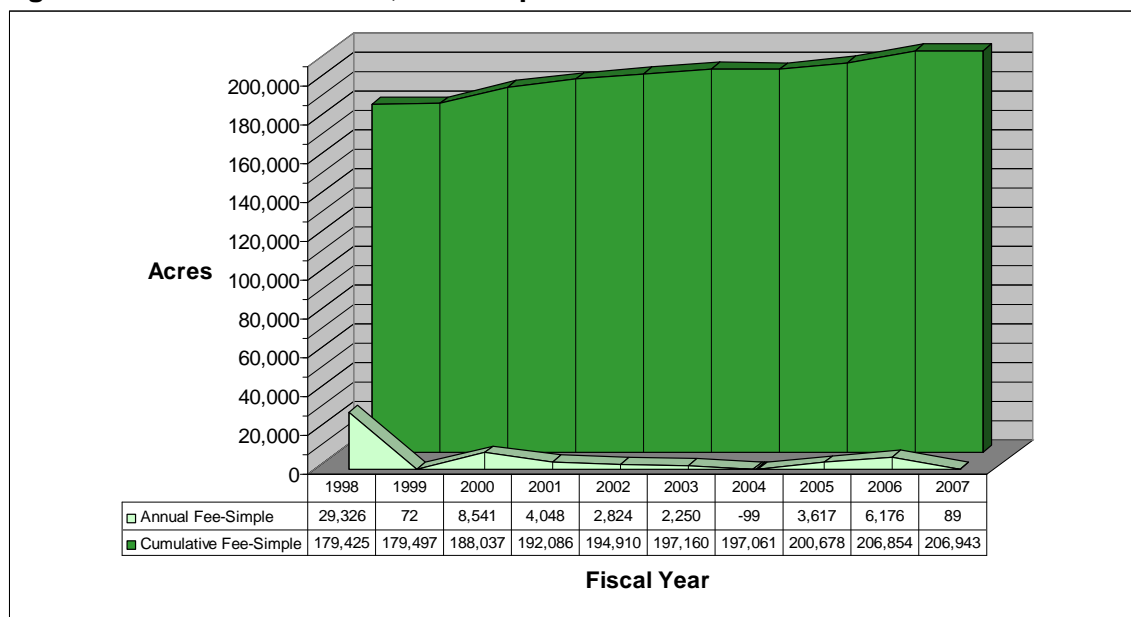
Source: NFWFMD Staff, January 2008.

Common Measures

CM (a) Acres of land acquired through fee simple and less than fee simple, respectively, on an annual and cumulative basis

Acquisition of land, or specific interests in such land, provide significant water resource benefits and is often the most effective way to protect water and related natural resources in the future. Annual acquisitions vary widely, due in large part to specific opportunities for land acquisition in any given year. In 2007, the District acquired 89 acres through purchase, donation and exchange.

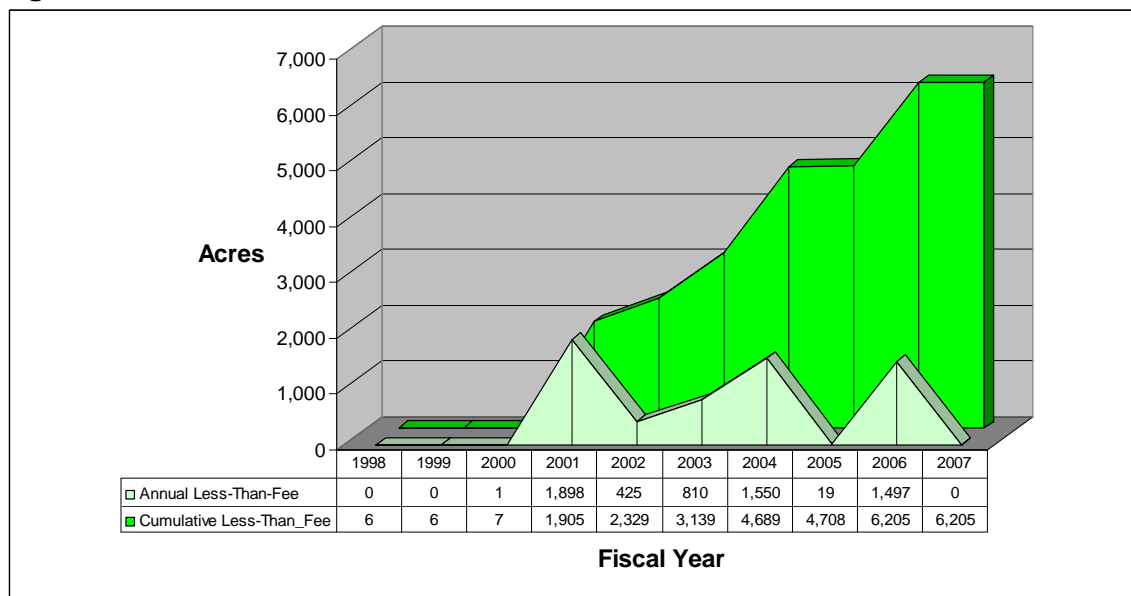
Figure A.8 NFWFMD Acres, Fee Simple



Source: NFWFMD Staff, January 2008.

“Less-than-fee” refers to a group of techniques (e.g. conservation easements) that involve acquisition of limited interests in property, as opposed to outright, or fee simple, purchase (e.g. conservation easements). Generally, less-than-fee methods should be used when resource protection benefits can be obtained without fee simple ownership, when intensive land management or restoration is not necessary, and when the cost to the public is reasonable.

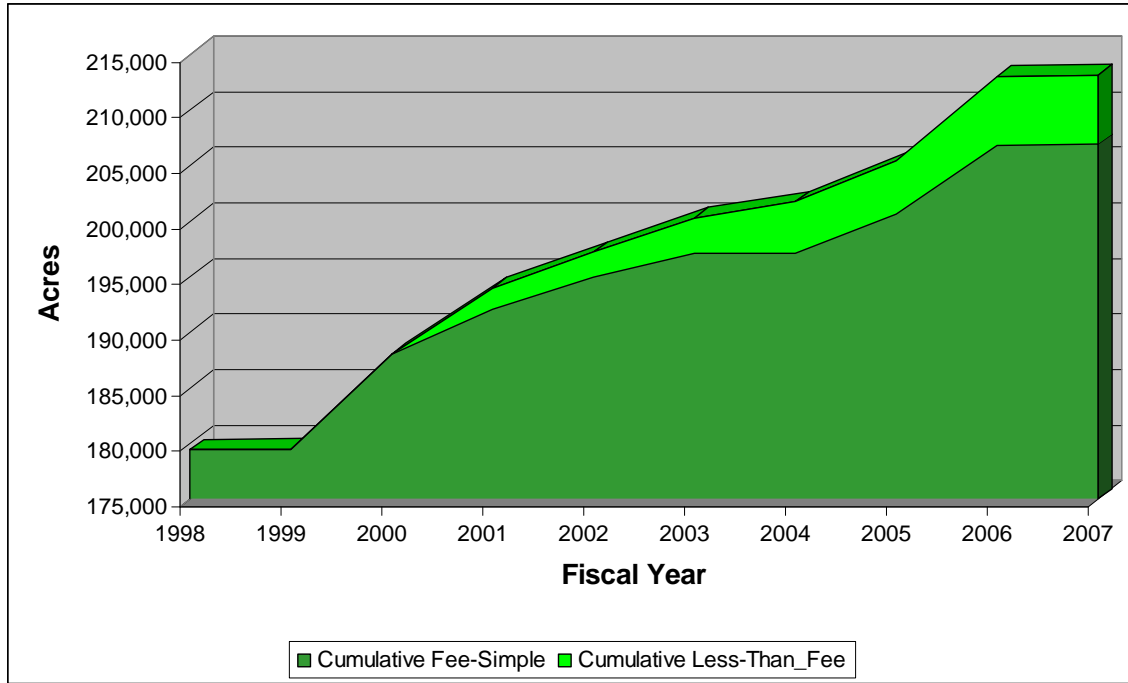
Figure A.9 NFWFMD Acres, Less-Than-Fee



Source: NFWFMD Staff, January 2008.

To date, the District has acquired a total of 213,148 acres.

Figure A.10 NFWWMD Acquisition Acres



Source: NFWWMD Staff, January 2008.

CM (b) Number and percent of land management plan activities being implemented according to plan schedules

Water management districts and state agencies are given the responsibility to develop management plans for lands on which they are lead managers. Water management districts are not required to complete such plans within a specific time horizon. No management plans were required for FY 2006-2007.

Site-specific land use and management activities are typically focused on such aspects as public recreation, prescribed burning, exotic vegetation control, restoration, timber and wildlife management and resource monitoring. Any activities undertaken must meet the statutory charge to manage lands in such a way as to ensure a balance between public access, general public recreational purposes, and restoration, as well as protection of their natural state and condition. Virtually all District-owned lands are open for appropriate public recreation uses. Due to the open nature of the lands, the District does not currently have data to report specific activities and schedules of use.

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