

Northwest Florida Water Management District

Consolidated Annual Report



March 1, 2006

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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Executive Summary

Chapter 2005-36, Laws of Florida, enacted through 2005 House Bill 727, implements 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 with this report, and annually by March 1 of each year thereafter, each water management district is required to submit a consolidated annual report to the Department of Environmental Protection (DEP), the Governor, the President of the Senate, and the Speaker of the House. 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 county entities having jurisdiction or deriving any 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, 2006, Northwest Florida Water Management District (NFWFMD or "District") consolidated annual report includes seven required reports, as specified in Section 373.037(7)(b), Florida Statutes (F.S.). These are:

- The District Water Management Plan annual report;
- 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 final annual 5-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.

- Progress continued in the implementation of water resource development projects under the Regional Water Supply Plan for Region II (Santa Rosa, Okaloosa, and Walton counties). Three projects are substantially complete, and an update to the RWSP is in progress. **(Water Supply – Water Resource Development Work Program Annual Report)**
- An estimated 15.6 million gallons per day of water are anticipated to be provided through alternative water supply development and water resource development projects in five counties. **(Water Supply – Alternative Water Supplies Annual Report)**

- To date, over 206,000 acres of land have been protected for water resource purposes through the land acquisition efforts of the District either in fee simple or through conservation easements. During the coming year, emphasis is expected to be placed on inholdings and additions within existing water management areas. The Econfina Creek and Choctawhatchee River WMAs in particular are expected to be high priority areas for these types of acquisitions. **(Florida Forever Work Plan Annual Report – Land Acquisition Five Year Work Plan)**
- Approximately 30 Florida Forever capital improvement projects encompassing regional priority water resource protection and restoration activities are currently underway. These include a number of grant projects to help local governments meet local water resource challenges that also help accomplish priorities of District plans. **(Florida Forever Work Plan Annual Report – Florida Forever Capital Improvement Projects)**
- Under the framework of the Surface Water Improvement and Management (SWIM) Program, priority watershed restoration activities are in progress across the District. These include 51 projects implemented across seven watersheds through SWIM and other complementary programs and in cooperation with local governments and state and federal agencies. The current projects continue long-term watershed restoration efforts that have thus far provided urban stormwater retrofit for over 2,800 acres and hydrologic and habitat restoration for over 28,000 acres District-wide. **(SWIM Program and Watershed Restoration Summary Report)**

This consolidated annual report is available through the District's web site at <http://www.nfwmd.state.fl.us/rmd/rmd.htm>.

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I. Introduction

Overview

With this document, several legislatively-required reports are for the first time combined in one consolidated annual report. Chapter 2005-36, Laws of Florida, as enacted through 2005 House Bill 727, implements 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 to be submitted to the Department of Environmental Protection (DEP), the Governor, the Senate President, and the House Speaker. 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 county entities having jurisdiction or deriving any funds for operations of the district. Copies of 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 of the consolidated report, 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 and as such provides the planning context for identifying, prioritizing, and implementing cooperative watershed protection and restoration projects.

Together, these reports provide a current status of a number Northwest Florida Water Management District programs, including land acquisition and management, watershed restoration, water resource development, and alternative water supply development.

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. Final Minimum Flows and Levels Annual Priority List
- Chapter IV. Annual 5-Year Capital Improvement Plan
- Chapter V. Water Supply
 - 5.1 Final Annual 5-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

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 incorporates a number of new District programs and activities, 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 interrelated areas of responsibility: 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. This chapter fulfills the annual progress report requirement. The chapter is structured to report accomplishments and priorities under the four areas of responsibility. Action tasks are also compiled into a comprehensive table (Table 2.1) under the sub-heading District-Wide Activities. The table contains tasks, accomplishments and status during fiscal year 2004-2005. Tasks are further subdivided to illustrate the major program areas responsible for each. Appendix A provides updated values and trends applicable to standardized statewide performance measures.

Water Supply

Major Accomplishments

Major efforts during 2005 toward implementing the water supply planning components of the *District Water Management Plan* included the following:

- District staff continued to implement Water Resource Development (WRD) projects outlined in the Regional Water Supply Plan for Region II (Santa Rosa, Okaloosa, and Walton Counties). Of the ten WRD projects identified, three have been substantially completed, six are ongoing, and one is identified for future implementation. Further information is provided in Section 5.1 of the Consolidated Annual Report.
- District staff and contractors completed calibration of the Floridan Aquifer sustainability model for coastal Santa Rosa, Okaloosa, and Walton counties. The model is being used to assess the rate and extent of saltwater intrusion resulting from groundwater withdrawals for water supply and to predict the potential long-term effects of groundwater pumping on water quality. Additionally, the model is being applied to determine long-term sustainability of the coastal portions of the aquifer under current rates of pumping.
- Planning efforts continued to focus on identification of potential cooperative alternative water supply development projects in Region II. The District also continues to collect and analyze basic hydrologic data, particularly as it relates to development of alternative water supplies.
- The District continued to provide water conservation educational brochures and guidance documents to utilities, local governments, utility authorities, and interested citizens. Over 34,000 such brochures and documents were distributed to Region II utilities and local governments during this past year alone. Six major hotels agreed to participate in the

Conservation Hotel and Motel Program (CHAMP). The program conserves water and energy by requesting that guests 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.

- The evaluation model of the inland Sand-and-Gravel Aquifer between the Blackwater and Yellow Rivers in Santa Rosa and Okaloosa Counties was completed. Wellfield development has resulted in 6.5 MGD of additional alternative supply available to coastal areas of Santa Rosa County. Expansion of the inland sand and gravel aquifer is expected to result in an additional 1.4 MGD being made available.
- Development of a hydrologic model and estuary hydrodynamic model was completed for North Bay and Deer Point Lake Reservoir. The models will be used to determine the water budget for the contributing drainage basin and rates of fresh water discharge to North Bay and the greater St. Andrew Bay estuary. This information will identify rates of water consumption that would be allowable without resulting in impacts on estuarine resources.
- Test well development and aquifer properties testing continued on inland wells with the potential to serve the coastal area of Franklin County. Additional well development and testing are needed to develop an alternative water supply for the coastal area, where saltwater encroachment may threaten traditional supplies.
- 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.
- Work was initiated to update the Regional Water Supply Plan for Region II.

Future Emphasis and Priorities for FY 2005-2006

- Complete the Region II Regional Water Supply Plan update. The update will identify water resource development activities and water supply development projects, including alternative water supply projects. The plan update provides the context for implementing changes to Chapter 373 associated with the Alternative Water Supply Development component of the Water Sustainability and Protection Program created by the 2005 Florida Legislature (2005 Senate Bill 444).
- Provide alternative water supply development assistance and implement water resource development projects pursuant to the Water Protection and Sustainability Program.
- Provide alternative water supply development assistance to Walton County for development of the inland Floridan Aquifer for water supply.
- Continue development of the inland Sand-and-Gravel Aquifer between the Blackwater and Yellow Rivers in Santa Rosa and Okaloosa counties as an alternative water source.
- Fully 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.
- In cooperation with Bay County, continue operating the monitoring network for streamflow and rainfall within the Deer Point Lake Reservoir watershed.
- Continue cooperative efforts to aid local governments and utilities in the collection and analysis of basic hydrologic data on alternative water supplies. This activity will help

implement the Water Sustainability and Protection Program by supporting identification of potential alternative water supply projects that qualify for District funding assistance.

- Complete a preliminary analysis of potential surface water sources and in-bank filtration in cooperation with Okaloosa County.
- Maintain and, where necessary, expand the surface water flow and quality and groundwater level and quality monitoring network to provide increased coverage to support water supply planning in critical areas.
- Complete the groundwater study in Franklin County to determine the feasibility of alternative inland water supply development to alleviate demand on the coastal aquifer. Additional work is anticipated to coordinate among the public supply utilities of coastal Franklin County.
- 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 continued in Region II (described above) as a pilot project for potential expansion to other areas of the District with a considerable seasonal or tourist population (e.g., coastal areas outside Region II).

Flood Protection and Floodplain Management

Major Accomplishments

- The District continued efforts with the Federal Emergency Management Agency (FEMA) to implement a long-term floodplain map modernization program through a CTP (Cooperating Technical Partner) agreement with FEMA. The agreement allows the District to receive and administer federal funding for the development of modern digital flood insurance rate maps (DFIRMs) for all counties within its jurisdiction. In FY 2005, preliminary DFIRMs and associated water resource databases were completed for Escambia and Santa Rosa Counties. The preliminary maps are moving through the FEMA required community adoption process. The District also implemented related outreach tasks funded by FEMA, including development of a website providing information on the NFWFMD's map modernization program and floodplain management. During 2005, map development was also initiated for Bay, Gulf, and Walton counties. Scoping work began for Wakulla, Franklin, Leon, and Gadsden counties. Additional efforts are underway to consider detailed re-study in hurricane damaged coastal areas throughout the Panhandle. Over the next four years, the district will work to accomplish comparable activities for the remaining, more rural counties in the District.
- During FY 2004-05, the District purchased slightly over 100 acres within the 100-year floodplain district-wide.
- The District continued cooperative stormwater monitoring programs with the City of Tallahassee, Leon and Bay counties.
- The District participated with Leon County, the City of Tallahassee, and the National Weather Service to install a real time "Capital Area Flood Warning Network."

Future Emphasis and Priorities for FY 2005-2006

- The District will continue to emphasize nonstructural flood protection, including land acquisition, floodplain map modernization, and technical assistance to local governments. District participation in the ETDM program, along with review of local government comprehensive plan amendments, developments of regional impact, and proposed state and federal permits, will also focus on floodplain protection and flood hazard prevention.
- The District will continue to develop mapping activities for funding under FEMA's floodplain map modernization program as a Cooperating Technical Partner (CTP).
- 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 seek federal sources of match funding to support development of detailed elevation data and imagery databases.
- Continued efforts will focus on acquisition of floodplain areas and developing solutions for existing flood problems.
- 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.

Water Quality

The District's surface water quality protection efforts are primarily funded through Surface Water Improvement and Management (SWIM) related programs, the Florida Forever program, and legislative special appropriations. Limited state and federal funding is also provided for the Integrated Water Resource Monitoring (IWRM) Network and the Springs Initiative program.

Major Accomplishments

- Under its Florida Forever program, the District initiated a grant program to assist local governments with funding capital improvement projects that will benefit water quality. To date, the District's governing board has awarded 32 local government grant projects for over \$14 million. These projects focus on water quality improvement and associated aquatic habitat protection and restoration.
- The "L" Street pond, an innovative stormwater treatment technology project in the city of Pensacola, is in the construction process. A nearly \$309,000 contract was awarded to a private contractor through a federal grant secured by the District.
- The District renewed its agreement with DEP to monitor ambient surface and ground water quality at 180 randomly selected sites throughout northwest Florida as part of the statewide status monitoring network. The six water resource types monitored include large lakes, small lakes, streams, rivers, unconfined aquifer, and confined aquifer. For FY 2004-2005, the monitoring program focused on the Apalachicola and Chipola river basins.
- The District completed a third year of baseline sampling for five first magnitude springs: Wakulla Springs, St. Marks Rise, Spring Creek, Jackson Blue Spring, and the Gainer Spring Group.
- The District conducted surveys of springs along the Choctawhatchee River. Water Resources Special Report 05-02, Springs Inventory of the Choctawhatchee River, details

the cataloging of 16 springs contributing to the Choctawhatchee River. Data collected from the springs help in the determination of the extent of groundwater contributions to surface waters.

- The District renewed its agreement with DEP to monitor ambient surface water quality at 24 fixed locations on major rivers and streams throughout Northwest Florida as part of the Surface Water Temporal Variability monitoring network. The 24 sites are monitored to determine trends and changes in water quality over time.
- The District completed a study of water chemistry in the Jackson Blue Spring and Wakulla Springs basins. Water Resources Special Report 05-01 describes collection of ground water samples from each basin and the comparative analysis of the samples with the chemistry of the head spring. This study will enable the District to characterize areas of ground water contribution within the spring basins.
- The District completed and refined the Floridan Aquifer Sustainability Model for southern Santa Rosa, Okaloosa, and Walton counties.
- The District, in coordination with the City of Lynn Haven, completed a 1.24-acre breakwater marsh and associated exfiltration trench stormwater treatment system to provide stormwater retrofit and associated habitat improvement.
- The District updated its SWIM priority list and further recognized the watershed approach for water resource management in northwest Florida

Future Emphasis and Priorities for FY 2005-2006

- District efforts will continue to focus on implementation of SWIM plans and related projects to address existing and potential water quality issues.
- It is expected that over approximately \$7 million in grants will be awarded to local governments during 2006 through the Florida Forever Capital Improvement Grant Program.
- The District will continue to assist the city of Pensacola in the implementation of several stormwater retrofit facilities, including within the Palafox and Bayou Texar sub-basins.
- The District and Leon County will work to construct a regional stormwater treatment facility within the Okeeheepkee sub-basin of the Lake Jackson watershed.
- The District will work in cooperation with Bay County to develop a regional stormwater treatment facility to provide water quality improvement in the Watson Bayou basin.
- The District will collect 180 water quality samples within the Choctawhatchee River and Econfina Creek basins for the DEP Status Network.
- The District will continue to monitor 15 sites in the Econfina Creek watershed monthly in order to determine water quality for recreation purposes.

- The District will continue to work with Escambia County to expand the Jones Swamp Preserve. The overall effort will help provide for water quality protection, wetland function protection and improvement, and a major greenway system linking the Pensacola and Perdido Bay watersheds. Additionally, these efforts will complement past and ongoing stormwater retrofit and habitat improvement efforts for the restoration of Bayou Chico.
- The District will implement a cooperative project with Bay County to implement a retrofit project to provide stormwater treatment for a parking area that discharges into Lake Powell.

Natural Systems

Major Accomplishments

- A hydrologic model for Deer Point Lake Reservoir watershed and an associated hydrodynamic model for the downstream estuarine system were completed. Model analysis will be used to determine fresh water inflow needs and effects of withdrawals on the salinity of the downstream estuarine system.
- The District has continued land acquisition efforts through the Florida Forever and Save Our Rivers programs. To date, 205,531 acres of land have been acquired by the District to protect water quality, natural systems, and floodplain functions.
- The District continued developing plans for implementing a mitigation bank for the 2,100-acre Carter Tract in Washington County. The bank will help provide mitigation of wetland impacts in the bank's service area.
- The District designed and implemented mitigation projects for wetland impacts associated with DOT activities pursuant to the Regional Mitigation Plan (Section 373.4137, F. S.). Project implementation has, to date, resulted in acquisition, preservation and/or enhancement of over 6,000 acres as compensatory mitigation for DOT wetland impacts.
- District staff has drafted an innovative In-Lieu-Fee agreement with the U.S. Army Corps of Engineers. An In-Lieu-Fee program would match compensatory mitigation plans with proposed future DOT wetland impacts for up to ten years in the future. Early matching of mitigation projects with proposed future wetland impacts would allow the District to ensure that wetland impacts are fully compensated in a timely and cost effective manner while protecting water resources and critical wetland habitat.
- Several restoration phases of Tates Hell Swamp, including within the Gully Branch and Gator Creek sub-watersheds, were completed. These include low water crossings, road removals, and construction of two railcar bridges to help restore the historic hydrologic connections.
- Planning efforts for the restoration floodplain area and sloughs on the Apalachicola River continued.
- The District planted 507,000 Longleaf Pine trees on 808 acres; 57,200 Slash Pine on 63 acres; and 100,430 wire grass plugs on 83 acres.
- In cooperation with the city of Lynn Haven, the District completed construction of a 1.24 acre breakwater marsh on North Bay as mitigation for a 0.62 acre wetland impact resulting from FDOT work on SR 77 in Bay County. As part of the mitigation plan, the District placed a breakwater offshore to make sure that the shoreline would not erode, then planted landward of that. The entire site has been planted with salt marsh species. The site will be monitored over the next 4 years.

- 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.
- The District provided over \$1,600,000, including Florida Forever capital improvement funding and legislative appropriations, toward the restoration of Big Escambia Creek.

Future Emphasis and Priorities for FY 2005-2006

- The District will continue to implement wetland restoration and enhancement projects as mitigation for Department of Transportation activities.
- The District will complete development of the In Lieu Fee Regional Mitigation Plan and pursue the associated agreement with the U.S. Army Corps of Engineers.
- The District plans to plant 100,000 wiregrass plugs and 500,000 longleaf pines in the coming year for various projects on the approximately 770 acres planned for restoration.
- The District will contract with a landscape architect to design a restoration plan for the area around the spring group on the Econfina Creek near U.S. Highway 20. The plan will be intended to accomplish site restoration and as effective recreational management.
- In FY 2005-06, the District expects to complete harvesting approximately 2,000 pounds of wiregrass seed from established donor sites and direct seed onto approximately 300 acres of District land.
- Completion of a Springs Inventory Special Report of the Wakulla and St. Marks rivers is planned for 2006.
- The District will complete a ground water characterization study of the St. Marks Rise and Morrison Spring basins.
- The District will continue to focus on effective implementation of the FDOT Mitigation, ETDM, and related programs.
- The District expects to award over \$7,000,000 for local Florida Forever Capital Improvement grant projects, which will provide for water quality improvement and associated habitat restoration and protection.
- The District will initiate major floodplain and slough habitat restoration activities along the Apalachicola River.
- The District will continue to implement major hydrologic and vegetation community restoration of the Tates Hell swamp system in the Apalachicola and Ochlockonee bay watersheds.

District-Wide Activities

Tasks described within this Annual Progress Report have been compiled into the table below. The table contains action tasks, recent activities, and current status during Fiscal Year 2004-2005 (October 1, 2004 through September 30, 2005). The tasks are further subdivided into water management program areas to illustrate the District's major program areas supported by specific tasks. Current project status is denoted by 'Ongoing' (O) and 'Completed' (C). The 'In-Progress' designation has been applied to on-going, day-to-day programs, such as regulatory activities, intergovernmental coordination, and multi-year projects which, combined, account for the majority of District activities. The 'Completed' designation is applied to discrete projects that were completed during the past year.

Table 2.1 District-Wide Activities

TASK	RECENT ACTIVITY	STATUS	RELATED AORs			
			WS	FP	WQ	NS
Water Resource Planning and Monitoring Program						
Water Supply Assessment	The <i>Water Supply Assessment</i> was completed in 1998. In FY 02-03, the District completed work on updating water supply projections to 2025.	C	√			
Regional Water Supply Plan – Region II	The Governing Board approved the Regional Water Supply Plan in February 2001. The plan update is in progress.	O	√			
Regional Water Supply Plan - Implementation	Ongoing – a number of WRDWP projects are currently being implemented.	O	√			
Floridan Aquifer Sustainability Modeling Project	Model development and calibration have been completed. Work will focus on model application.	C	√			√
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	District staff are working to identify potential new surface water sources in Region II.	O	√			√
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	√	√	√	√
SWIM Plan Development, Implementation, Assessment, and Revision	Implementation of SWIM plans continued.	O		√	√	√
Update/Revise SWIM Priority List	Work on the SWIM priority list update was substantially completed in 2005. The update is expected to be finalized for publication and distribution in early 2006.	C		√	√	√
Ground Water Quality Special Projects	The District completed a third year of baseline sampling of five 1 st magnitude springs (Wakulla Springs, St. Marks rise, Spring Creek, Jackson Blue Spring, and Gainer Spring Group). The District completed Springs Inventory Special Reports of the Chipola River and the Econfina Creek.	O	√		√	√
Flood Protection Special Projects	Flood protection activities included project scoping, DFIRM development, development of project proposals for FEMA funding, and development of an interagency agreement with FEMA.	O		√	√	√

TASK	RECENT ACTIVITY	STATUS	RELATED AORs			
Acquisition, Restoration, and Public Works Program			WS	FP	WQ	NS
Land Acquisition and Management	In FY 03-04, just over 475 acres of land were acquired through the Florida Forever, DOT mitigation, and Save Our Rivers programs.	○	√	√	√	√
Abandoned Well Plugging	During FY 03-04, 1,263 abandoned wells were plugged.	○	√		√	
Floodplain Land Acquisition and Restoration	The District acquired 102 acres in the 100-year floodplain.	○		√	√	√
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.	○	√	√	√	√
Operation and Maintenance of Lands and Works Program			WS	FP	WQ	NS
Management of District-Owned Lands	The approximately 201,756 acres of District-owned floodplain lands 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. The District planted 729,250 longleaf pines, 18,000 slash pines, and 8,000 pond cypress on about 790 total acres in different locations throughout the District in FY 03-04.	○	√	√	√	√
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, Chinese tallow eradication, educational field trips, and filter repairs.	○		√	√	√
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. FY 03-04 totals: 49 new Individual permits issued, 52 Individual permit modifications/renewals issued, 9 permit transfers processed, 4 temporary permits issued, 2 permits withdrawn/denied, 570 permits monitored for compliance, 6 permit compliance inspections, and 475 public assistance meetings. Enforcement actions included 727 compliance notices issued and 0 enforcement notices issued.	○	√		√	√
Well Construction Regulatory Program (Chapter 40A-3, F.A.C.)	Rule administration and enforcement is a fully implemented regulatory activity. FY 03-04 totals: 8,936 permits issued, 8,385 completion reports received, 1,609 wells inspected, 13 new contractors license issued, and 1 license renewal. Enforcement actions included 23 warning letters issued and 1 administrative complaint/violation notice issued.	○	√		√	
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. In FY 03-04, 57 artificial recharge permits were issued.	○	√		√	
Regulation of Agricultural and Forestry Surface Water Management Projects (Chapter 40A-44, F.A.C.)	The District issued a total of 36 general 40A-44 permits in FY 03-04; continued compliance inspections, with 309 for silviculture, and 318 for agriculture.	○		√	√	√
Management and Storage of Surface Waters (Chapter 40A-4, F.A.C.)	The District issued a total of 1 individual and 9 general 40A-4 permits in FY 03-04.	○	√	√	√	√
Well Permitting in Contaminated Areas (Chapter 40A-3, F.A.C.)	In FY 03-04, 82 potable well construction permits were issued.	○	√		√	

District Water Management Plan Annual Report

TASK	RECENT ACTIVITY	STATUS	RELATED AORs			
			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 participated 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. District also worked with Leon County to install a real time Capital Area Flood Warning Network.	o	√	√		
Technical Assistance and Intergovernmental Coordination	The District reviewed approximately 21 projects under the ETDM program. Additionally District staff reviewed local government comprehensive plan amendments, DRIs, external permits, and clearinghouse issues on a limited basis. 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 approved 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 2006 MFL priority list is presented in Table 3.1.

Figure 3.1 NFWMD MFL Priorities



Table 3.1 Northwest Florida Water Management District MFL Priority List (2005-2006)

#	WMD	Waterbody	WB Type	County	2004 List	2005 List	Date Estab.	Peer Rev.	Reason for Schedule Change	Existence of or Potential for Significant Harm
1	NWF	Apalachicola River	R	Multi-county	Deferred	Deferred		N	Until further notice, no comments recommended.	Interstate water management issues, protection of riverine floodplain and downstream estuary from significant harm.
2	NWF	Floridan Aquifer	A	Coastal Santa Rosa, Okaloosa, Walton	2006	2007		N	Delays in the development of the Floridan Aquifer Sustainability Model	Potential migration of saline water due to significant drawdown of Floridan Aquifer in coastal portions of these counties.
3	NWF	Inland Sand and Gravel Aquifer	A	Santa Rosa, Okaloosa	2007	2007		N		Identified in Regional Water Supply as likely future water supply
4	NWF	Deer Point Lake	E/L	Bay	2006	2006		N	FY 02/03 Approval and Guidance Letter by DEP Secretary	Projecting future increase in withdrawals from reservoir and reduced discharge to North Bay
5	NWF	Wakulla Springs	S	Wakulla	2006	2006		N	FY 02/03 Approval and Guidance Letter by DEP Secretary	Requirement of Chapter 373.042, F.S.
6	NWF	Jackson Blue Spring	S	Jackson	2008	2008		N	FY 02/03 Approval and Guidance Letter by DEP Secretary	Requirement of Chapter 373.042, F.S.
7	NWF	Yellow River	R	Santa Rosa, Okaloosa	2008	2008		N	FY 02/03 Approval and Guidance Letter by DEP Secretary	Possible future water supply use and possible dam construction. Could result in consumption or future reservoir operations impacting downstream aquatic resources.

IV. Annual Five-Year Capital Improvements Plan

Introduction

This document is submitted by the Northwest Florida Water Management District in compliance with the reporting requirements of Section 373.536(6)(a)3, Florida Statutes. The format for this report has been developed jointly by the Executive Office of the Governor, the Department of Environmental Protection, and the water management districts (WMDs). As specified in statute, this report is being distributed to the Governor, President of the Senate, the Speaker of the House, chairs of all legislative committees and subcommittees with substantive or fiscal jurisdiction over districts (as determined by the President or Speaker as applicable), the secretary of the department, and the governing body of each county in which the district has jurisdiction or derives any funds for the operations of the district.

The five-year capital improvements plan (CIP) includes projected revenues and expenditures for capital improvements from fiscal years 2005-2006 through 2009-2010. 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 NFWMD Five Year Capital Improvements Plan, Fiscal Years 2006-2010

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS
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2.1 LAND ACQUISITION

REVENUES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Water Management Lands Trust Fund	360,529	0	0	0	0
Florida Forever	11,725,693	2,000,000	2,000,000	2,000,000	2,000,000
District Land Acquisition Reserve	3,472,530	3,610,737	3,754,444	3,903,871	4,059,245
TOTAL	15,558,752	5,610,737	5,754,444	5,903,871	6,059,245

EXPENDITURES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Florida Forever - Land Acquisitions	11,225,693	2,000,000	2,000,000	2,000,000	2,000,000
Land Acquisition	3,472,530	3,610,737	3,754,444	3,903,871	4,059,245
BluePrint 2000	500,000	500,000	500,000	0	0
Water Management Lands Trust Fund	360,529	0	0	0	0
TOTAL	15,558,752	5,610,737	5,754,444	5,903,871	6,059,245

2.2 WATER RESOURCE DEVELOPMENT

REVENUES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Florida Forever	2,250,000	1,600,000	1,600,000	1,600,000	1,600,000
TOTAL	2,250,000	1,600,000	1,600,000	1,600,000	1,600,000

EXPENDITURES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Florida Forever - Land Acquisitions	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000
TOTAL	1,600,000	1,600,000	1,600,000	1,600,000	1,600,000

2.3 SURFACE WATER PROJECTS

REVENUES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
DOT Mitigation Funds	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000
TOTAL	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000

EXPENDITURES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
DOT Mitigation Funds	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000
TOTAL	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000

2.5 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

REVENUES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Water Management Lands Trust Fund	0	50,000	0	50,000	0
TOTAL	0	50,000	0	50,000	0

EXPENDITURES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Land Management Equipment/Materials Storage Barn	0	50,000	0	50,000	0
TOTAL	0	50,000	0	50,000	0

Table 4. 1 NFWWMD Five Year Capital Improvements Plan, Fiscal Years 2006-2010

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 LAND MANAGEMENT

REVENUES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Water Management Lands Trust Fund	550,000	500,000	450,000	400,000	350,000
Florida Forever	750,000	600,000	575,000	225,000	275,000
TOTAL	1,300,000	1,100,000	1,025,000	625,000	625,000

EXPENDITURES	FY 2005 - 2006	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010
Public/Land Management Access Bridges	1,050,000	1,000,000	900,000	500,000	500,000
Spring Restoration	200,000	50,000	75,000	75,000	75,000
Creek Bank and Solution Hole Stabilization	50,000	50,000	50,000	50,000	50,000
TOTAL	1,300,000	1,100,000	1,025,000	625,000	625,000

TOTAL CAPITAL EXPENDITURES	25,658,752	15,560,737	15,579,444	15,378,871	15,484,245
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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 Public Access – Choctawhatchee 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, 2006

Historical Background/Need for Project: To provide public/land management access to approximately 2,500 acres of District property 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): 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. WMD 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. F&WCC 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 \$50,000 for one bridge.

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: 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: Lafayette Creek Public Access – Choctawhatchee River Water Management Area

Square Footage/Physical Description: One proposed single-lane steel bridge utilizing refurbished Bailey Bridge sections (12.5 x 45 feet) across Wolf Creek (a Lafayette Creek tributary), subject to engineering design and a potential 50/50 cost-share with Alabama Electric Cooperative.

Expected Completion Date: September 30, 2006

Historical Background/Need for Project: To provide public/land management access to approximately 1,000 acres of District property 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): The current bridge is unsafe and does not have a DOT load rating. In addition, road fill was placed across a portion of Wolf Creek adversely impacting hydrology. The District intends to restore natural hydrologic function to the creek crossing by removing logging road fill and installing one bridge, subject to site conditions. WMD 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. In addition, AEC needs the bridge for utility line maintenance/repair 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. F&WCC 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 \$50,000 for one bridge.

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: 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 to three proposed single-lane steel bridges utilizing refurbished Bailey Bridge sections (12.5 x 45 feet) across two or three sloughs associated with the floodplain of the Escambia River, subject to engineering design.

Expected Completion Date: September 30, 2006

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 to three bridges, subject to site conditions. WMD 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. F&WCC 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 \$100,000 for two to three 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: \$1,500 annually

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

Project Title: Econfina Creek 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 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. Restricted access measures for canoeists may be proposed for Williford Spring (2nd Magnitude), subject to BOT sovereign land exception.

Expected Completion Date: September 30, 2006

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): WMD 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): \$200,000, subject to final architecture/engineering design/permit.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at \$50,000 for "conceptual" and 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, 2006

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. WMD 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 F&WCC 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.): None

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 and/or Boxed Culverts

Type: Combination Single Lane Steel Bailey Bridges and/or Boxed Culverts (50-year life)

Physical Location: Sand Hill Lakes Mitigation Bank Public & Land Management Access – Econfina Creek Water Management Area

Square Footage/Physical Description: Three proposed single-lane steel bridges utilizing refurbished Bailey Bridge sections (12.5 x 45 feet) and/or up to two boxed culverts, subject to engineering design.

Expected Completion Date: September 30, 2006

Historical Background/Need for Project: To provide critical public/land management access to approximately 2,155 acres of District mitigation bank property in the Econfina Creek 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): Inadequate bridges (unsafe and do not meet DOT load ratings) and road fill was placed across Pine Log Creek for fishing and management access by the previous landowner, the District intends to replace the bridges for public/land management access purposes to address the mitigation purposes of the property and to restore natural hydrologic function to portions of Pine Log Creek, subject to engineering design. WMD could delay the project, which would prevent vehicular access by the public for recreational use of the property, prevent land management/maintenance access to further the mitigation requirements of the property to conduct 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. F&WCC 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 \$450,000 for all proposed structures.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at \$30,000 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: OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridge

Type: Up to three concrete design options, e.g. Single Lane Hollow Core Concrete (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 (12.5 feet x 165 feet), subject to most cost effective engineering design (one of three possible design options).

Expected Completion Date: September 30, 2006

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): Current Bridge has been condemned and closed to vehicular traffic per DOT. WMD 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 maintenance of other bridges and low water crossing structures on the Island. Lack of access prevents habitat restoration, erosion control, prescribed burning, etc. activities and prevents law enforcement/emergency vehicles from accessing the property to suppress wildfire, enforce F&WCC rules and regulations and adversely impacts public safety.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): \$300,000, subject to engineering design.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at \$25,000 for engineering design/construction services, subject to most cost effective concrete bridge option.

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

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

PROGRAM: OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Seashell, Devil's Hole and Bluff Stabilization/Erosion Control

Type: Creek Bank and Solution Hole Stabilization/Erosion Control Measures

Physical Location: Seashell primitive campsite, Devil's Hole recreation site and Bluff creek bank – Econfina Creek Water Management Area

Square Footage/Physical Description: Proposed creek bank stabilization/erosion control measures, subject to recommend engineering design.

Expected Completion Date: September 30, 2006

Historical Background/Need for Project: Creek bank/solution hole stabilization/erosion control measures to preserve/protect the water quality of Econfina Creek (a Class I Waterbody) and enhance/maintain public recreation sites.

Plan Linkages: District's Florida Forever Work Plan

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

Alternative(s): WMD could delay the project, which would adversely impact the water quality of Econfina Creek and force the closure of WMD recreation sites.

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

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

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

Anticipated Additional Operating Costs/Continuing: \$500 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

Overview

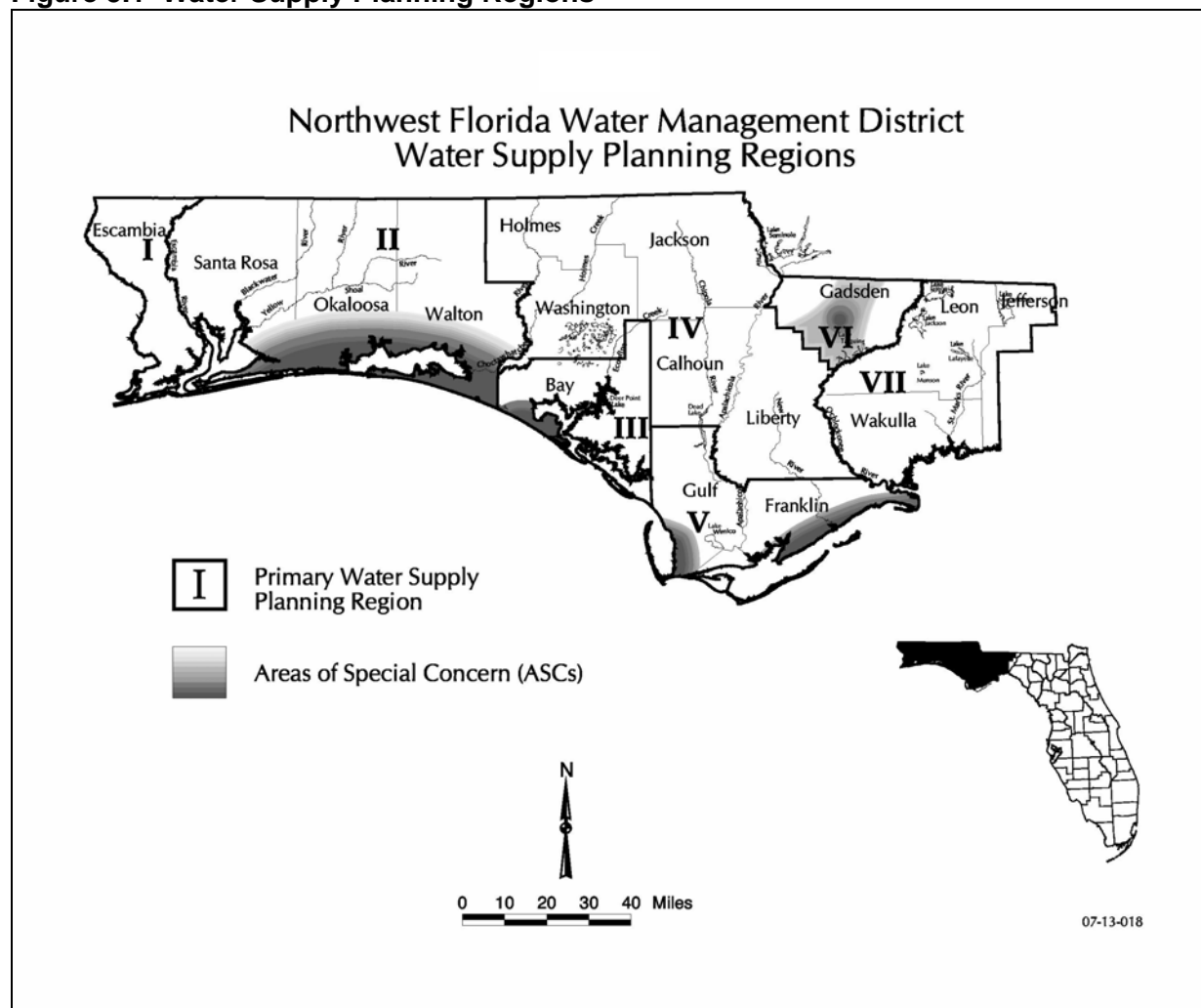
Each water management district (WMD) is required by Section 373.536(6)(a)4, Florida Statutes (F.S.), to prepare a Five-Year Water Resource Development Work Program to describe strategies for implementing the water resource development components of each approved regional water supply plan (RWSP) developed 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 districts’ approved regional water supply plans, and the adequacy of proposed expenditures.” Following this review, each water management district governing board shall state, in writing, to DEP which of the recommended changes it will incorporate into its Work Program or specify the reasons for not incorporating the changes. Upon completion of the DEP review process, the Department will include each of the water management districts’ responses in a final evaluation report and submit copies to the Governor, Senate President, and Speaker of the House.

Introduction: Regional Water Supply Planning in Northwest Florida

In 1997, the Florida Legislature amended the Florida Water Resources Act (Chapter 373, F.S.) to provide additional guidance to the state’s five WMDs 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.

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. Based on the WSA and subsequent action by the NFWFMD Governing Board, it was determined that 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 excessive pumping from Floridan Aquifer wells could result in saltwater intrusion and damage to public water supply wells. In 2003, the demand projections from the WSA were updated through 2025. Based on governing board action and the updated water demand projections, it was concluded at that time that no new regional water supply plans were needed for remaining regions in northwest Florida. Issues affecting the adequacy and sustainability of traditional water supplies for coastal Franklin County (Region V) are under evaluation, however. Thus, funding has been budgeted for resource assessment and alternatives analysis for this region, and the Governing Board may consider development of a RWSP.

Figure 5.1 Water Supply Planning Regions



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. 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.

Pumping of local Floridan Aquifer wells to supply growing demands along the coastal fringe has resulted in formation of a substantial cone of depression in the aquifer, and current levels of water withdrawal may not be sustainable on a long-term basis. Public supply water use in the region is projected to increase 59 percent from 48.87 million gallons per day (Mgal/d) in 2005, to 77.70 Mgal/d 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.

The first regional water supply plan developed in northwest Florida under §373.0361, F.S., was approved for Santa Rosa, Okaloosa and Walton counties in February 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.

The Region II RWSP is currently being updated and is scheduled for completion in FY 2005-2006. This update will be developed in an open public process in accordance with Section 373.0361, F.S. The plan will incorporate a revised water resource development component, a water supply development component, specific alternative water supply development projects, and other elements as described in the statute. As part of the plan, the Water Resource Development Work Program (WRDWP) reported on here will be updated as well. Thus, reports to follow will be based on the updated plan and work program. Efforts are also underway to consider development of a RWSP for Region V to alleviate potential water supply problems along the coastal area of special concern (ASC) identified in Franklin County.

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 RWSP was based upon meeting such needs for a 1-in-10 year drought event. As noted in the plan, 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. As described below, completion of the strategies detailed in this work program is expected to result in additional quantities of water that will be available for reasonable-beneficial uses through the regional water supply planning period. The sources of these additional quantities of water are expected to include both the Floridan and Sand-and-Gravel aquifers, increased reuse and conservation, and, potentially, new 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. As the RWSP is updated, emphasis will focus on the sustainability of the resource, as well as needs to develop new resources to meet future demands beyond the 20 year planning horizon.

Work Program Implementation

Since completion of the 2000 Regional Water Supply Plan for Region II, considerable progress has been made toward implementing the Region II Water Resource Development Work Program. The Coastal Sand-and-Gravel Aquifer Sources project (Program Strategy 3) has been completed, and the Inland Sand-and-Gravel Aquifer project (Strategy 2) is substantially complete. The Western Sub-Regional Model for the Floridan Aquifer Sustainability Model Analysis (Strategy 1) has been completed, and considerable progress has been made toward completion of the Eastern Sub-Regional Model. Additionally, significant work has been accomplished toward evaluation of potential alternative surface water sources in Okaloosa County (Strategy 7). Other strategies, including Water Reuse Coordination, Water Conservation, and Hydrologic Data Collection and Analysis, are implemented on an ongoing basis. Strategies and progress toward implementation are described in more detail below.

Funding for Water Supply and Water Resource Development

Since the State Constitution limits the NFWFMD to only 1/20th of the *ad valorem* taxing authority afforded the other four WMDs, the additional 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 supply planning and development from numerous sources, including the following:

- Water Management Lands Trust fund monies, as authorized by statute;
- Florida Forever (Capital Improvements only);
- District General Revenues;
- Special Appropriations;
- Federal Grants;
- Local government and water supply utility cost-sharing; and
- Water Protection and Sustainability Trust Fund (s. 373.1961(3)(b), F.S.) (new).

The Water Protection and Sustainability Program Trust Fund established by the 2005 Florida Legislature provides a significant, dedicated source of revenue for alternative water supply development projects and water resource development projects. This new funding source will allow the District to provide cost-share funding for projects that may have otherwise been delayed or placed in competition with other projects for limited funds.

The District is currently developing a process and strategy for implementing elements of the Water Protection and Sustainability Program enacted in 2005. It is anticipated that a more detailed description of alternative water supply projects using the funds allocated to the District for FY 2005-2006 will be included in the Consolidated Annual Report as required by Ch. 373.036(7), F.S., and in future revisions of this report as required by Ch. 373.536(6)(a)4, F.S. Potential projects, currently in preliminary planning stages, include alternative ground and surface water supply development, reuse, and spring protection projects.

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. Funding identified in the District's annual budget for water resource development in Region II is summarized in Table A at the end of this document. Budget figures provided for future year project funding may change from year to year, as more information becomes available and the scope of planned projects increases or decreases accordingly.

For FY 2005-2006, the District has budgeted approximately \$800,000 for water resource development in Region II. In addition to the water resource development efforts, the District will continue to assist local governments in the region by funding water supply development projects. As the RWSP update is completed in FY 2005-2006, specific alternative water supply development assistance projects can be budgeted.

Descriptions of the Region II water resource development projects planned for FY 2005-2006 through 2009-2010 are found on the following pages.

Water Supply Development Project Assistance

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.

Significant water supply development assistance projects to date have included \$750,000 in assistance in FY 2002-2003 to the City of Crestview for repairs to an existing public supply well and construction of another. Additionally, in FY 2001-2002, the District began facilitating a \$3.1 million federal grant for development of the Fairpoint Regional Utility System wellfield. This wellfield project was developed to provide an inland alternative water supply source from the Sand-and-Gravel Aquifer on a wholesale basis to coastal utilities that had depended exclusively on the Floridan Aquifer. Project purposes are to reduce pumping from coastal Floridan Aquifer public water supply wells and to help meet future demands.

Water supply development assistance projects anticipated during FY 2005-2006 include development of alternative inland water supply sources in Walton County and construction of reuse projects within Okaloosa and Walton counties. It is also anticipated that the Water Protection and Sustainability Trust Fund may contribute funding for springs protection. This may include data acquisition and a possible City of Tallahassee wastewater reuse/Wakulla Springs protection project currently under development.

The District also assists with priority water resource development projects outside of Region II when those projects help to prevent or address emerging water supply problems. Current projects include test well drilling and development in Region V to support aquifer properties testing for an inland, alternative water supply for coastal Franklin County. Also, the District is assisting 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. Up to \$272,000 has been allocated for the Franklin County assistance, and \$40,000 has been designated for the ECUA model update.

Strategy 1.0 Floridan Aquifer Sustainability Model Analysis

The District recently completed two sub-regional solute transport models required for analysis of saltwater intrusion into the Floridan Aquifer. The model is available for use by the regulated community and will be used for analysis of potential alternative water supply development options. 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." The 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 affecting the westernmost region of the model domain, lateral intrusion from the lower to the upper Floridan Aquifer around the edge of the Bucatunna Clay confining unit, and downward vertical leakage through the intermediate system.

Preliminary calibration of the eastern sub-region model (applicable to Destin Water Users, South Walton Utility System, City of Freeport and Regional Utilities of Walton County) is

complete. This model will be completed during FY 2005-2006. Both models are useful for investigating development of aquifer minimum levels, further supply planning strategies, analysis of water supply alternatives, and consumptive use permitting decisions.

Estimated 5-Year Cost (FY 2005-2010)	\$346,000	Potential Funding Source	<i>NFWWMD, Local Governments, Utilities</i>
Estimated District Participation	\$1,166,263	Quantity of Water Made Available	<i>20-30 Mgal/d</i>
Implementing Agency	<i>NFWWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2005-2006)	\$216,000	Total Amount Spent to Date (Through FY 2004-2005)	\$820,263

Project funding has been provided by the Water Management Lands Trust Fund, local governments, and general revenues of the District. An estimated sustainable amount of additional water withdrawal from the Floridan Aquifer that will be identified as a result of this modeling effort is 20 to 30 Mgal/d. Once the modeling effort is complete for the entire region, it should be possible to determine more accurately if this amount of withdrawal is sustainable or if additional sources of water will need to be developed to meet current and increased future demands.

Strategy 2.0 Inland Sand-and-Gravel Aquifer Project

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. In order to assess the volume of water producible from the aquifer, ground-water-flow model development was initiated and completed. 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 will be used to determine the potential yield from this aquifer as an alternative source of supply.

Presently, the model is available for use by both the regulated community and the District. The District is using the model to evaluate impacts associated with water resource development over and above that already permitted. Pipeline construction from the interior wellfield to the immediate coastal area is complete, and water is being conveyed south to alleviate demand on the Floridan Aquifer. The model will be used to evaluate what further quantities of water may be safely withdrawn from this source and permitted.

Estimated 5-Year Cost (FY 2005-2010)	\$20,000	Funding Source	NWFWMD
Estimated District Participation	\$494,405	Quantity of Water Made Available	18 Mgal/d
Implementing Agency	NWFWMD	Project Status	Ongoing
Proposed FY Expense (FY 2005-2006)	\$20,000	Total Amount Spent to Date (Through FY 2004-2005)	\$474,405

Strategy 3.0 Coastal Sand-and-Gravel Aquifer Sources

A preliminary analysis of water availability from the Sand-and-Gravel Aquifer in the Region II coastal area is complete. The analysis is summarized in the report "Availability of Ground Water from the Sand-and-Gravel Aquifer in Coastal Okaloosa County, Florida" (NWFWMD Water Resources Technical File Report 04-1). The report identifies the water-bearing capacity of the Coastal Sand-and-Gravel Aquifer in southern Okaloosa County as having a high probability of producing sustainable quantities of fresh ground water. Based on the potential production sites enumerated, the estimated addition to local production capacity is 1.8-2.4 Mgal/d in the vicinity of Fort Walton Beach. The report is available via the District website.

Further site-specific analysis of aquifer hydraulics, water quality, environmental, and engineering considerations would be required before this source could actually be used. Additional production sites may also be available that were not identified in the preliminary analysis. Compared to the high cost of transporting water from distant sources, the Sand-and-Gravel Aquifer is likely to be one of the least cost alternatives. Due to the relatively small quantity of water available, however, further analysis and planning is needed to identify additional sources above and beyond this water supply option.

Estimated 5-Year Cost (FY 2005-2010)	\$0	Potential Funding Source	NWFWMD, Utilities
Estimated District Participation	\$82,676	Quantity of Water Made Available	1.8-2.4 Mgal/d
Implementing Agency	NWFWMD	Project Status	Complete
Proposed FY Expense (FY 2005-2006)	\$0	Total Amount Spent to Date (Through FY 2004-2005)	\$82,676

Currently, there are no major future District expenses anticipated for this project. Implementing utilization of this resource is now within the purview of local utilities. However, if a local utility expresses an interest, there may be further opportunities for the District to assist in the identification and development of suitable production sites for coastal Sand-and-Gravel Aquifer water sources.

Strategy 4.0 Development of Regional Water Management Strategies and RWSP Updates

District staff are currently preparing an update to the Region II RWSP. It is anticipated that the plan update will be complete by October 2006. An estimated \$118,000 in funding for this work will be provided through the Water Management Lands Trust Fund. The District will also continue coordination and technical work necessary to support implementation and further development of regional strategies for Region II. Related administrative activities include funding and project management, coordination with DEP and other agencies as necessary, grant writing for project funding, reporting on plan status, coordination with local governments and utilities, and technical assistance to local utilities. Activities over the past year have included plan update development, ongoing evaluation of plan implementation progress, project planning, coordination with Okaloosa County and other local governments and utilities, coordination of the plan with the new Water Protection and Sustainability Program, and updating the WRDWP Annual Report.

At times, activities conducted under this project help facilitate and coordinate participation of utilities in cooperative water supply planning efforts or plan implementation. This may include assistance with development of new wellfields, reuse, conservation, aquifer storage and recovery, and surface water for water supply. It is possible that additional funding may be needed for this element to provide for further investigation into capital project options. This may require providing assistance to utilities and local governments with well siting, raw water transport, hydrogeology, and related engineering work for development of unused or underused water sources, including the Floridan Aquifer and the identified inland and coastal Sand-and-Gravel aquifer sources. These further investigations, which have not been identified at this time, could lead to specific water supply development assistance or water resource development projects that support dependable and sustainable supplies of water.

Estimated 5-Year Cost (FY 2005-2010)	\$293,000	Potential Funding Source	<i>NWFWMD</i>
Estimated District Participation	\$975,132	Quantity of Water Made Available	<i>NA</i>
Implementing Agency	<i>NWFWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2005-2006)	\$118,000	Total Amount Spent to Date (Through FY 2004-2005)	\$682,132

Strategy 5.0 Water Reuse Coordination Program

It has been estimated that approximately 5 Mgal/d of withdrawals from the coastal Floridan Aquifer could be replaced with reclaimed wastewater. While the cost of developing and distributing reclaimed water in Region II may be expensive compared to traditional sources, its use has substantial environmental benefits when properly applied for irrigation purposes. Progress has been made toward achieving the 5 Mgal/d goal, and cooperative efforts on the part of the District, utilities, private developers, and local governments will continue.

Initial District activities have included identifying and mapping potential reuse sources and demands and communication with utilities. Following completion of these activities, the District's role has been primarily to serve as a coordinator and facilitator for reclaimed water supply efforts undertaken by utilities in Santa Rosa, Okaloosa, and Walton counties. The

District has made its Florida Forever Capital Improvements grant program available as a resource for local governments and public utilities to obtain funding for reuse projects. While Florida Forever funds may not be applied solely for the purpose of treatment, transmission, or distribution of reuse water, use of these funds may be considered where appropriate for reuse projects that may restore as well as conserve existing water resources.

District staff have also emphasized reuse and conservation in both resource regulation and in reviewing proposed comprehensive plan amendments and developments of regional impact (DRIs). In response to regulatory and cooperative planning efforts, significant investments in reuse have been made in coastal areas of the region, and new projects are being planned. It is estimated, for example, that approximately 1 Mgal/d of reuse water will be available for golf course and landscape irrigation in the new Camp Creek Golf Course and WaterSound DRI. Additional alternative water supply development funding made available through the Water Protection and Sustainability Trust Fund is expected to further promote reuse project development. Within Region II, planning is underway for new reuse projects in Freeport, unincorporated south Walton County, Okaloosa County, and Crestview.

Estimated 5-Year Cost (FY 2005-2010)	\$75,000	Potential Funding Source	<i>NWFWMD</i>
Estimated District Participation	\$163,309	Quantity of Water Made Available	<i>5 Mgal/d</i>
Implementing Agency	<i>NWFWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2005-2006)	\$15,000	Total Amount Spent to Date (Through FY 2004-2005)	\$88,309

The District will continue to work with interested parties to develop reuse projects, including providing assistance for projects eligible for water protection and sustainability funding and other grant funds. Coordination with DEP on wastewater regulatory and NWFWMD Consumptive Use Permitting decision-making, as well as opportunities to participate in rulemaking activities that further the beneficial use of reclaimed water, will also continue. The estimated cost for coordination of this program is \$15,000 in FY 2005-2006. Funding will be provided through the Water Management Lands Trust Fund. It is anticipated that construction funding assistance will be provided through the Water Protection and Sustainability Trust Fund as project plans develop. Florida Forever Capital Improvement funding may also be available for construction of eligible aspects of reuse projects. Specific construction funding will be identified when project plans are more fully developed and approved for implementation.

Strategy 6.0 Water Conservation Program

Given the high level of conservation already taking place in Region II and earlier efforts through the regulatory program, the District's water supply planning consultant projected that the additional potential for water conservation to offset future potable demands on the Floridan Aquifer within the region was limited to approximately 2.5 Mgal/d. Although this reflects a relatively small quantity of water, conservation is still considered to be important to the long-term sustainability of the water resource in Region II. This is particularly true given the growth and land development currently ongoing and planned.

District staff are therefore continuing to emphasize conservation education and awareness. In 2004, a concerted effort began to distribute water conservation brochures to Region II utilities, with over 45,000 brochures being distributed from May 2004 through September 2005. 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. A new brochure (*3 R's of Water: Reuse, Recycle and Reclaim*) was developed over the past year to encourage reuse of water in homes, farms, industries, and communities. Beginning in July, sample brochures were sent to all utilities in Region II, as well as others in Franklin and Gadsden counties. Thus far, over 1,000 have been requested and delivered.

During FY 2004-2005, the District initiated the Water Conservation Hotel and Motel Program (CHAMP) program in 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. In June 2005, Water CHAMP materials were provided to four hotels in Okaloosa and Walton counties. These include three in-room brochures, staff training materials, posters, and an environmental self-audit check list. Comments received from participating hotels have been positive, and reduced laundry loads have been reported. In exchange for the free materials, hotels have been asked to provide three months of water bills prior to the program and monthly water bills after the program was implemented. The District will prepare an evaluation following receipt of the information. District staff are currently working on expanding the program to other hotels in Okaloosa, Walton and Santa Rosa counties. Since July, letters and samples have been provided to an additional 22 hotels.

The District participated in the recently-completed statewide study of the effects of water rate pricing structures on public supply water demand. District staff also consistently emphasize water conservation both in resource regulation and in review of comprehensive plan amendments and DRIs. 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 are distributed.

Estimated 5-Year Cost (FY 2005-2010)	\$75,000	Potential Funding Source	<i>NFWWMD</i>
Estimated District Participation	\$140,348	Quantity of Water Made Available	<i>2.5 Mgal/d</i>
Implementing Agency	<i>NFWWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2005-2006)	\$15,000	Total Amount Spent to Date (Through FY 2004-2005)	\$65,348

Funding for water conservation efforts are provided through the Water Management Lands Trust Fund. 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 Surface Water Supply Feasibility

Although surface water sources are not likely to be needed in the immediate future, they have been identified as a potentially abundant and economical source of supply to meet future demands beyond 2020. 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. Current activities include identifying and evaluating the feasibility of more specific surface water supply alternatives. The range of options under consideration includes direct withdrawal, off-line storage, within-bank groundwater withdrawals, capture of excess wet weather surface flows, conveyance and storage canals, tributary impoundments, and aquifer storage and recovery of surface water.

Ongoing activities are particularly focused on evaluating the feasibility of developing surface-water sources for public supply within Okaloosa County. Several approaches are currently under consideration, including development of one or more small watershed reservoirs, direct withdrawal and treatment from the Yellow and/or Shoal rivers, offline storage, and in-riverbank filtration. Subsurface geology, soil, topography, land use, environmental, and stream-flow data are continuing to be collected and evaluated. Preliminary yield estimates are also being developed to geographically locate where reservoir sites might be feasible. Specific criteria are also being identified and evaluated for preliminary reservoir siting analysis. These include land use, environmental, technical, physical, and financial considerations.

Estimated 5-Year Cost (FY 2005-2010)	\$591,000	Potential Funding Source	NFWFMD
Estimated District Participation	\$794,591	Quantity of Water Made Available	20 Mgal/d
Implementing Agency	NFWFMD	Project Status	Ongoing
Proposed FY Expense (FY 2005-2006)	\$291,000	Total Amount Spent to Date (Through FY 2004-2005)	\$203,591

The District estimates continuing costs at \$291,000 in FY 2005-2006, with funding provided through the Water Management Lands Trust Fund. Possible funding sources for development of regional surface water supply facilities include public utilities, the Water Protection and Sustainability Trust Fund, Florida Forever, and the federal government.

Strategy 8.0 Hydrologic Data Collection and Analysis

The NFWFMD 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. 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.

Estimated 5-Year Cost (FY 2005-2010)	\$425,000	Potential Funding Source	<i>NWFWMD</i>
Estimated District Participation	\$652,878	Quantity of Water Made Available	<i>NA</i>
Implementing Agency	<i>NWFWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2005-2006)	\$85,000	Total Amount Spent to Date (Through FY 2004-2005)	\$227,878

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 \$85,000 in FY 2005-2006 to provide for new installations and annual maintenance, operation, and data analysis costs. Funding sources include the District's General Fund, Water Management Lands Trust Fund, federal funding, and local governments.

Strategy 9.0 Abandoned Well Plugging

District efforts have resulted in the plugging of nearly 2,350 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. 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. During FY 2004-2005, the District permitted the proper plugging of 249 abandoned wells in Santa Rosa, Okaloosa, and Walton counties.

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 groundwater quality. Recent efforts have helped facilitate the plugging of wells operated by Destin Water Users, Okaloosa County Water and Sewer, Regional Utilities, and the Florida Department of Transportation (FDOT). Since this is an ongoing project, it is likely that many more wells will be identified for plugging in the future.

Estimated 5-Year Cost (FY 2005-2010)	\$150,000	Potential Funding Source	<i>NWFWMD, State of Florida, Federal, Local Governments</i>
Estimated District Participation	\$183,559	Quantity of Water Made Available	<i>NA</i>
Implementing Agency	<i>NWFWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2005-2006)	\$30,000	Total Amount Spent to Date (Through FY 2004-2005)	\$33,559

This project supports District efforts to sustain coastal water supply sources. Funding for abandoned well plugging has traditionally been provided through cooperative efforts, including the Florida Pollution Recovery Trust Fund, U.S. EPA, District general revenues, individual well-owners, and local governments. The District anticipates continued use of these sources to fund the well plugging program.

Strategy 10.0 Aquifer Storage and Recovery (ASR) Viability

While large-scale District-funded ASR operations may not be economically feasible at present, this option may be explored further by utilities. The District's efforts in this regard would be aimed at working cooperatively with interested parties wherever viable ASR opportunities exist and would include technical, financial and educational assistance. Associated activities will also be coordinated closely with ongoing aquifer sustainability efforts and surface water source alternatives analyses. Aquifer storage, when available or where feasible, may be used to store very large quantities of water at very low cost far more effectively than above ground storage facilities or above ground impoundments. Possible funding sources for future ASR testing and development include Florida Forever, the Water Protection and Sustainability Trust Fund, Water Management Lands Trust Fund, federal funds and coastal public utilities interested in pursuing this alternative.

During FY 2005-2006, it is anticipated that, in coordination with increased activities to study surface water supply alternatives, the District may also conduct preliminary groundwater 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.

Estimated 5-Year Cost (FY 2005-2010)	\$30,000	Potential Funding Source	<i>NWFWMD, Utilities, Local Governments</i>
Estimated District Participation	\$30,000	Quantity of Water Made Available	<i>TBD</i>
Implementing Agency	<i>NWFWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2005-2006)	\$10,000	Total Amount Spent to Date (Through FY 2004-2005)	\$0

Water Resource Development Project Summary

Overall, the District's FY 2005-2006 funding for water resource development projects in Region II is \$800,000. The total cost of the program is currently estimated to be at \$4,683,161 by the end of FY 2009-2010. As noted following the WRDWP funding table (below), however, the work program and funding summary described are based on the 2000 Region II RWSP, which is currently being updated. The WRDWP and associated funding will be revised with the plan update.

The figures in the Water Resource Development Work Program Funding Summary table address planned water resource development expenditures to implement the District's Region II Water Supply Plan for Santa Rosa, Okaloosa and Walton counties. The figures therefore do not directly correspond, in total, to the figures provided in the program and activity spreadsheet of the District's FY 2005-2006 budget. In this regard, the FY 2005-2006 WRDWP budget of approximately \$800,000 is that portion of the District's funds budgeted specifically for Region II under "Water Resource Development Projects" (Activity Code 2.2.1). This amount will adequately fund planned water resource development projects in Santa Rosa, Okaloosa and Walton counties. The remaining funds budgeted are those that have been reserved for future

Water Supply

water supply planning and development expenditures. These future reserves are for work that could include additional water resource development projects in Santa Rosa, Okaloosa, and Walton counties. They could also be applied to develop (or update) and implement additional RWSPs or to provide financial assistance for water resource development or water supply development projects in other regions.

Table 5.1 NFWWMD 2005-2010 Water Resource Development Work Program Funding Summary

Region II Water Resource Development Projects		RWSP Page #	Plan Implementation Costs					Estimated Entire Project Cost*	Total or Reoccurring	Total Amount Spent through FY 04-05**
			FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10			
1	Floridan Aquifer Sustainability Model Analysis	77	\$216,000	\$100,000	\$30,000	\$0	\$0	\$1,166,263	T	\$820,263
2	Inland Sand-and-Gravel Aquifer Project	78	\$20,000	\$0	\$0	\$0	\$0	\$494,405	T	\$474,405
3	Coastal Sand-and-Gravel Aquifer Sources	80	\$0	\$0	\$0	\$0	\$0	\$82,676	T	\$82,676
4	Dev. of Regional Strategies & RWSP Updates	83	\$118,000	\$75,000	\$20,000	\$20,000	\$60,000	\$975,132	R	\$682,132
5	Water Reuse Coordination Program	80	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$163,309	R	\$88,309
6	Water Conservation Program	81	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$140,348	R	\$65,348
7	Surface Water Supply Feasibility	82	\$291,000	\$150,000	\$50,000	\$50,000	\$50,000	\$794,591	R	\$203,591
8	Hydrologic Data Collection & Analysis	84	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$652,878	R	\$227,878
9	Abandoned Well Plugging	85	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$183,559	R	\$33,559
10	Aquifer Storage and Recovery Viability	80	\$10,000	\$10,000	\$10,000	\$0	\$0	\$30,000	T	\$0
TOTAL			\$800,000	\$480,000	\$255,000	\$215,000	\$255,000	\$4,683,161		\$2,678,161

Note: This funding summary is based on the 2000 Region II RWSP, which is currently being updated. The WRDWP and associated funding will be revised with the plan update.

* Cost estimates beginning FY 01-02 continuing through FY 09-10. These estimates do not include funding provided by outside entities.

** Figures include preliminary year costs for FY 05-06, because final audited cost distribution information was not available at the time this report was prepared. Floridan Aquifer Sustainability Model Analysis and Development of Regional Strategies commenced prior to development of the WRDWP (2000 and 1998, respectively).

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5.2 Alternative Water Supplies Annual Report

Prior to the 2005 legislative session, each water management district was required to submit an *alternative water supplies annual report* by January 30 to the Governor, the President of the Senate, and the Speaker of the House of Representatives that accounted for disbursement of budgeted amounts pursuant to section 373.1961(2)(k), F.S.; described projects funded; and accounted separately for funding provided through grants, loans, and the use of district lands or facilities.

Pursuant to the changes enacted through 2005 Senate Bill 444 and beginning March 1, 2006, each water management district is now required under section 373.1961(3)(n) 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.

During 2005, District efforts for plan implementation were focused on completion of Water Resource Development projects, including the Floridan Aquifer Sustainability Model and modeling of coastal Sand and Gravel aquifer sources and evaluation of the feasibility of surface water supplies. It should be noted, however, that substantial water supply development assistance was provided to local governments and utilities within Region II from 2001 through 2004. 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 in 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 project development for a series of Alternative Water Supply Development and Water Resource Development projects pursuant to the Water Protection and Sustainability Program and the Region II RWSP. It is anticipated that substantial implementation will begin in 2006. Table 5.2 provides summary information on these projects.

**Table 5.2 Alternative Water Supply Development and Water Resource Development Projects
Proposed for Funding Under the Water Protection and Sustainability Program, 2005-2006**

Project	Cooperators	Planning Region	Affected Waterbody	Project Type	Estimated Quantity (Mgal/d)	Estimated Construction Funding			
						NFWFMD (WPSP)	NFWFMD (General Fund)	Local	Total
Walton County Inland Wellfield	Utilities in Walton County	II	Floridan Aquifer	Inland Floridan Aquifer Wellfield	9	\$6,000,000	\$1,000,000	\$6,000,000	\$13,000,000
Okaloosa County Auburn Reuse	Okaloosa County	II	Floridan Aquifer	Reuse/Reclaimed Water	1.0	\$2,000,000	\$0	\$4,000,000	\$6,000,000
FRUS – Alternative Water Supply Expansion	Fairpoint Regional Utility System	II	Floridan Aquifer; Sand & Gravel Aquifer	Inland Sand & Gravel Aquifer Wellfield	1.4	\$500,000	\$500,000	\$1,000,000	\$2,000,000
Tallahassee Reuse and Springs Protection	City of Tallahassee	VII	Wakulla Springs; Floridan Aquifer	Spring Protection; Reuse	1.2	\$1,000,000	\$0	\$2,700,000	\$3,700,000
Franklin County Alternative Water Supply	Local Water Utilities	V	Floridan Aquifer	Inland Floridan Aquifer Wellfield	3	\$500,000	\$500,000	\$500,000	\$1,500,000
Total					15.6	\$10,000,000	\$2,000,000	\$14,200,000	\$26,200,000

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 206,000 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 district 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 provision of high-quality outdoor recreation opportunities. The Florida Forever Program authorizes issuance of up to \$300 million 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, waterbody restoration, recreation facilities, public access improvements, and removing invasive plants, among others. The remaining fifty percent must be spent on land acquisition.

The First Five Years

Florida Forever began in 2001 as the successor program to Preservation 2000. Florida Forever has now reached the half-way mark and its success speaks for itself. The Northwest Florida Water Management District has successfully acquired, in fee or less-than-fee (conservation easement), 8,705 acres of wetlands, floodplain and aquifer recharge areas for \$14,000,749. This equates to approximately \$1,608 per acre.

Up to fifty percent of the Florida Forever funds can be spent on certain types of capital improvement projects. The Governing Board has elected to make a portion of these funds available as grants to local governments for projects that help communities address significant local water resource challenges that are also consistent with regional objectives and the goals of Florida Forever. In the last five years, the District has accomplished the following local government capital improvement grant projects with Florida Forever funds:

- Big Escambia Creek Restoration Project
- Port of Panama City Stormwater Improvement
- Boone Boulevard Stormwater Improvement
- Caroline Court Stormwater Improvement
- Clear Creek Restoration Project
- Deer Point Lake Reservoir Unpaved Road Stabilization/NPS Pollution Abatement

Additional description of capital improvement project implementation using Florida Forever and other funding sources may be found in Section 6.3 of the District’s Consolidated Annual Report.

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 inholdings and additions within the existing water management areas (WMAs). Specifically, the Econfina Creek and Choctawhatchee River WMAs will be high priority areas for these types of acquisitions. 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	Chipola River	Spring Lake Area	Sand Hill Lakes
Econfina Creek & others flowing into Deer Point Lake Reservoir	Lower Apalachicola River Wetland	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		
	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 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, 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 all the property rights the seller owns. In "less-than-fee" purchases, the District would attempt to acquire only those rights in property 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's 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, the general information is provided separately as part of the Five Year Plan for the Florida Forever Program. Specific land acquisition projects are individually identified below and detailed information specific to the project is provided.

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT 2006 Proposed Land Acquisition Areas



Map Created: February 7, 2006

3.17.001

Figure 6.1 2006 Proposed Land Acquisition Areas

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

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 is difficult to find anymore, while the lower end of the river is characteristic of a black water stream.

The project area is mostly undeveloped and contains a diverse list of species. Acquisition of a major portion of the Perdido River floodplain 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 Northwest Florida Water Management District and The Conservation Fund have entered into an Acquisition Agreement (161 Agreement) to acquire land in fee from International Paper along the Perdido River. Public access for canoeing and fishing will be achieved through this fee simple acquisition.

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 5,355 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

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.

The District owns approximately 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 some 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 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.

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 Santa Rosa and 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. Three timber companies 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.

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 90,721 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.

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 Basin

Originating in Alabama and flowing into Choctawhatchee Bay, the Choctawhatchee River 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 Atlantic Sturgeon. The District owns approximately 60,595 acres along the river, comprising approximately 85 percent of the river floodplain. 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 67,600 acres have been identified for fee simple acquisition on the Choctawhatchee River, and 7,368 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, fresh marshes, 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 Creek 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. 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 Reservoir, 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 41,655 acres. Priority purchases will be concentrated on parcels adjacent to existing District lands.

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 37,000 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 Areas

Upper portion of acquisition is a 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, fresh marshes, and other wetlands. Salt and fresh 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 20,700 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 area located in central Jackson County. Acquisition of the Spring Lake area and its numerous springs, which ultimately flow into Dry Creek, a significant tributary stream to the Chipola, will provide enhanced water resource protection to the area.

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

Public Access

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

Land Acquisition

Approximately 26,000 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 NFWMD, 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 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. The District owns 35,506 acres of river floodplain, and 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 53,000 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

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 Recreation Area 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.

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 12,000 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 ten 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 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 1,032 acres 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 7,867 acres have been identified for possible fee simple or 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 – 2005

Northwest Florida Water Management District
Table 6.1 Acquisitions Completed in 2005

Property Name	Date Purchased	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Fee Simple Acquisitions						
Rogers	02/25/05	40.2	\$ 29,710	\$739.05	DOT Mitigation	Blackwater River
Brewer/Guiles	04/22/05	72.5	\$ 74,475	\$999.66	DOT Mitigation	Blackwater River
Lafayette Creek	04/26/05	3,160	\$4,503,000	\$1,425.00	DOT Mitigation/ Florida Forever	Choctawhatchee River
Bluff Springs	05/27/05	311.3	\$ 357,537	\$1,148.53	DOT Mitigation/ Florida Forever	Escambia River
St. Joe	12/16/05	949.2	\$2,400,000	\$2,500.00	Florida Forever	Econfina Creek
Allen	12/21/05	278.9	\$ 825,000	3,000.00	DOT Mitigation	Yellow River
	SUB-TOTAL	4,812.10	\$8,189,722			

Property Name	Date Purchased	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Less-Than-Fee Acquisitions						
BluePrint 2000	11/30/05	132.62	\$ 214,100	\$1,614.38	Florida Forever	St. Marks
SUB-TOTAL		132.62	\$ 214,100			
GRAND TOTAL		4,944.72	\$8,403,822			

**Northwest Florida Water Management District
Table 6.2 Surplusing Completed in 2005**

Property Name	Date Surplused	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Watson	02/04/05	18.7	\$0	\$0	Exchange	Escambia
White	10/07/05	1.0	\$0	\$0	Exchange	Choctawhatchee

**Northwest Florida Water Management District
Table 6.3 Projected Funding, Staffing and Resource Management
for Fiscal Year 2005-2006**

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	34,919		\$ 570,268	\$ 397,554
	Escambia Conservation Easements	19		\$2,630	\$1,632
	Garcon Point	3,245		\$ 142,712	\$ 58,683
	Yellow/Escribano	17,725		\$ 435,877	\$ 430,528
	Blackwater	380		\$ 21,810	\$ 22,263
	Region Total	56,288	2	\$1,173,297	\$ 910,660
Central	Choctawhatchee	60,595		\$ 950,349	\$ 580,342
	Choctawhatchee/Holmes Conservation Easements	1,112		\$ 2,630	\$ 1,632
	Econfina	39,500		\$2,043,762	\$1,803,162
	St. Andrews/Econfina Conservation Easements	1,551		\$ 2,630	\$ 1,632
	Carter Restoration	2,155		\$ 342,074	\$ 102,016
	Region Total	104,913	5	\$3,341,445	\$2,488,784

**Northwest Florida Water Management District
Table 6.3 Projected Funding, Staffing and Resource Management
for Fiscal Year 2005-2006 (Continued)**

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Eastern	Upper Chipola	7,377		\$ 106,539	\$ 90,372
	Apalachicola	35,506		\$ 110,875	\$ 86,832
	Apalachicola/Chipola Conservation Easements	816		\$2,630	\$ 1,630
	Lake Jackson	516		\$ 52,453	\$ 77,344
	St. Marks Conservation Easements	1,032		\$ 2,630	\$ 1,811
	Ochlocknee Conservation Easements	312		\$ 2,630	\$ 704
	Region Total	45,559	1	\$ 277,757	\$ 258,693
	Regional Totals	206,760	8	\$4,792,499	\$3,658,137
	Management Administration		4	\$ 600,528	\$ 530,176
	Grand Total	206,760	12	\$5,393,027	\$4,188,313

**Northwest Florida Water Management District
Table 6.4 Land Management Activity During 2004
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															3
Garcon Point															3
Blackwater River															
Yellow River	226	226				127		64	63						12
Choctawhatchee River	490	490				8	8				624		624		8
Econfina Creek	1717	375	744		598	857	113	744			1112		456	656	4
St. Andrews	22			22											
Carter Restoration	463	122		341		283		283			259			259	
Devils Swamp Restoration	437			437											
Upper Chipola River															
Apalachicola River	166	166													
Lake Jackson	352			352		2		2							291
Totals	3,873	1,379	744	1,152	598	1,275	121	1,091	63		1,995		1,080	915	321

**Northwest Florida Water Management District
Table 6.5 Land Management Activity During 2004
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	5				2		23	3				60	
Garcon Point				3						3								20	
Blackwater River						1												25	
Yellow River	8	3	4	5		3	2		50				18					15	
Choctawhatchee River	8	9	12	11		10	8		15				31					80	4
Econfina Creek	10	13	8	16	4	3	12	40	22	18	2		19	125				229	8
Upper Chipola River	1		1	1		1		2	10	2	1	2	3					7	1
Apalachicola River	2	1	1	2		2	1				4		4					6	
Lake Jackson			1	2				9		5	1	9	4	1				6	
Totals	42	35	35	49	5	28	28	51	97	28	10	11	102	129				448	13

6.3 Florida Forever Capital Improvement Projects

Introduction

This section describes restoration and water resource development projects funded pursuant to the Florida Forever Five Year Work Plan, as referenced in section 373.199(7), F.S. 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.

Implementation of the 2004 Work Plan

The 2004 NFWFMD work plan listed 11 specific District projects for implementation. These projects would be 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 competitive local Florida Forever Capital Improvement Grant program and specified 11 specific projects approved for funding under this program.

Local government capital improvement grant projects completed during fiscal year 2004-2005 include the following:

- Deer Point Lake Dirt Road Stabilization (Phase I). Provided for application of pervious pavement and sedimentation controls to stabilize and reduce sedimentation from 6.9-miles of unpaved roads affecting Deer Point Lake Reservoir. The project was accomplished with a \$500,000 Florida Forever grant together with \$500,000 in local funding.
- Big Escambia Creek Restoration Project. Through the Florida Forever Program and legislative special appropriations, the District contributed \$1,633,216 toward completion of the Big Escambia Creek Restoration Project. This project provided for restoration of the stream into its natural channel, clearing of a major log jam, and rehydration of approximately 1,000-acres of wetlands. Over \$6,000,000 were provided by other project partners, primarily including the U.S. Army Corps of Engineers.
- Caroline Court Stormwater Improvement Project. The District provided funding to assist the City of Tallahassee in constructing a multipurpose stormwater retrofit facility to provide water quality improvement and flood protection in the St. Marks River watershed. The project was accomplished with a \$300,000 Florida Forever grant together with over \$687,000 in local funding.
- Port of Panama City Stormwater Improvements Project. This project provided for installation of three stormwater treatment units to provide water quality improvement for a previously-developed portion of the Port of Panama City. The project was accomplished with a \$60,000 Florida Forever grant together with \$50,500 in local funding.
- Boone Boulevard Stormwater Management Improvement Project. The District provided funding assistance to the city of Tallahassee for completion of a major urban stormwater retrofit project with the Lake Jackson basin. The project was accomplished with a \$477,000 Florida Forever grant together with over \$5,000,000 in local funding.

Current Capital Improvement Project Plan

Table 6.6 lists NFWFMD capital improvement projects proposed for funding during FY 2005-2006. Basic project descriptions are provided, and progress and modifications from the previous year's project plans are described as proposed.

Table 6.6 NFWFMD Florida Forever Capital Improvement Projects

Project	Description	Progress/Modification from Previous Year	Estimated Funding
Apalachicola River Environmental Restoration	Restoration of floodplain hydrology and ecology by removing dredged material and restoring blocked sloughs.	May be partially funded through other state appropriations and used as federal match.	\$800,000
Fuller Road Okecheepkee Regional Stormwater System	Cooperative project with Leon County to construct regional stormwater treatment facility to retrofit area largely developed prior to implementation of current regulatory requirements.	Engineering design phase complete. Local government and federal funding sources will be used along with Florida Forever.	\$600,000
Carter Tract Access Improvements	Install three bailey bridges and two box culverts.	Continuing project.	\$450,000
Florida River Island Bridge Replacement	Replacement of public access bridge.	Continuing project.	\$300,000
Competitive Local Grant Program	Competitive grants for cooperative local grant projects. Approved projects described below.	Funding includes ongoing projects and 14 new projects approved by the Governing Board in November 2005.	\$11,963,390
Total			\$14,113,390

In November 2005, the District's Governing Board approved fourteen additional local government capital improvement grant projects for funding under the Florida Forever program. Current approved projects are listed in Table 6.7. It should be noted that substantial additional funding has been provided by each of the projects listed by the indicated grant recipients.

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
Walton County	Oyster Lake Restoration	Choctawhatchee River and Bay/Oyster Lake	Restore lake and wetland habitat and associated hydrology.	2003	\$487,500
Walton County	Hammock Point Water Quality Improvement	Choctawhatchee River and Bay	Eliminate unpaved road sedimentation and install stormwater treatment systems.	2003	\$259,032
Blackwater Soil and Water Conservation District	Clear Creek Restoration	Pensacola Bay System	Stabilize major eroding gully impacting stream and discharging sediments to estuarine system	2003	\$100,000
Santa Rosa Island Authority	Little Sabine Bay Circulation Project	Pensacola Bay/Santa Rosa Sound	Stormwater treatment systems and sediment removal.	2003	\$375,000
Holmes County	Unpaved Roads NPS Pollution Abatement	Choctawhatchee River and Bay	Stabilize unpaved roads to reduce sedimentation and improve water quality.	2003	\$450,000
City of Port St. Joe	St. Joseph Lake Stormwater Treatment	St. Andrew Bay/ St. Joe Bay	Construct regional stormwater retrofit facility to benefit St. Joseph Bay.	2004	\$350,000
Bay County	Deer Point Lake Dirt Road Stabilization Phase II	St. Andrew Bay/ Deer Point Lake Reservoir	Stabilize unpaved roads to reduce sedimentation and improve water quality.	2004	\$500,000
Blueprint 2000 Intergovernmental Agency	Gibby Pond Regional Stormwater Facility	St. Marks River/Lake Munson	Construct retrofit regional stormwater treatment facility.	2004	\$732,160
Escambia County	Ten Mile Creek Stream Restoration	Ten Mile Creek/Perdido Bay	Restore stream ecosystem.	2004	\$500,000
Calhoun County	Lands Store Road Stormwater Improvement	Apalachicola River and Bay	Stabilize unpaved road to reduce sedimentation and improve water quality.	2004	\$350,000
Leon County	Killearn Lakes Restoration Project	Ochlockonee River/Lake Iamonia	Water quality/habitat improvement.	2004	\$332,000
City of Pensacola	Long Hollow Stormwater Retrofit	Pensacola Bay System	Stormwater retrofit for water quality and flood projection.	2005	\$600,000

Table 6.7 NFWMD 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
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
City of Tallahassee	Call St. and Cadiz St. Stormwater Retrofit	St. Marks River/Apalachee Bay watershed	Stormwater retrofit for water quality improvement and flood protection.	2005	\$500,000
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 Wetland Restoration	Ten Mile Creek/ Perdido Bay	Wetland restoration and wetland treatment system.	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
Panama City Port Authority	Port of Panama City Stormwater Retrofit	St. Andrew Bay Watershed	Additional stormwater retrofit for Port of Panama City.	2005	\$100,000
Washington County	Rolling Pines Road Stabilization	St. Andrew Bay Watershed	Sedimentation abatement; Econfina Recharge Area.	2005	\$440,500
City of Gulf Breeze	Gulf Breeze Stormwater Improvements	Pensacola Bay System	Stormwater retrofit for water quality and flood projection.	2005	\$1,000,000
Leon County	Harbinwood Estates Stormwater Retrofit	Lake Jackson/ Ochlockonee River and Bay	Stormwater retrofit and basin stabilization	2005	\$1,000,000
Leon County	Okeeheepkee Basin Retrofit	Lake Jackson/ Ochlockonee River and Bay	Stormwater retrofit for water quality and flood projection.	2005	\$500,000
Franklin County	Sawyer Street Stabilization	Apalachicola Bay	Shoreline restoration and sedimentation control	2005	\$366,000
Orange Hill Soil and Water Conservation District	Unpaved Roads Stabilization	Choctawhatchee River and Bay and Apalachicola River and Bay	Unpaved road/ stream crossing stabilization at approx. eight sites.	2005	\$320,000
Total					\$11,963,390

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 implement Environmental Resource Permitting and because section 373.4137, F.S., is specifically excluded from this report, this annual requirement is fulfilled separately by DEP.

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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 water resource protection and restoration activities include 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 plans have been developed and approved for major watersheds, as illustrated below (Figure 8.1).

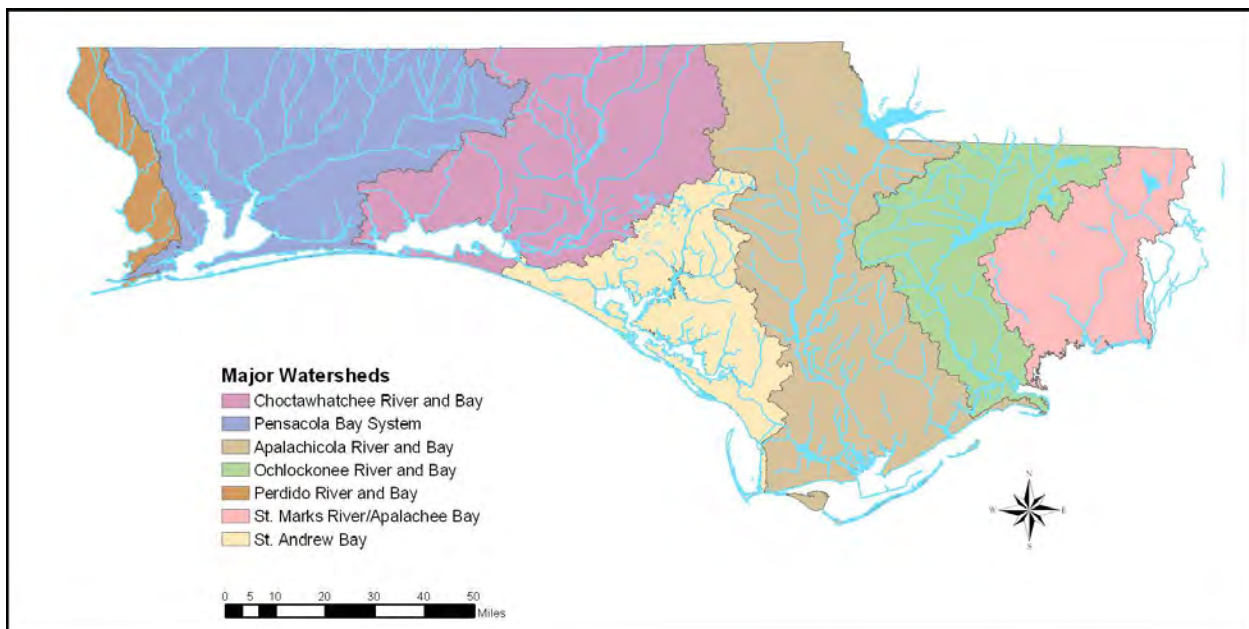


Figure 8.1 NFWMD Watersheds

As a planning framework, the SWIM program helps support interrelated District programs, including regional wetland mitigation, Florida Forever capital improvements, land acquisition, and the ETDM program. Plan implementation is accomplished through a variety of interrelated activities. Among these are stormwater retrofit projects for water quality improvement and flood protection, wetland and aquatic habitat restoration projects, resource assessments, intergovernmental coordination, floodplain mapping, public outreach and awareness initiatives, and water supply planning. Implementation integrates and leverages a variety of funding sources, including SWIM (s. 451-459, F.S.), Florida Forever capital improvement funding (s. 259.105 and s. 373.199, F.S.), other state and federal grant funding, and local government contributions. Cumulatively, the overall effort results in significant protection and improvement of watershed resources district-wide.

Status of Watershed Planning

The Northwest Florida Water Management District's SWIM Priority list was updated in early 2006. The District's designated priority waterbodies are:

- Apalachicola River and Bay System
- Pensacola Bay System
- Choctawhatchee River and Bay Watershed
- St. Andrew Bay Watershed
- St. Marks River and Apalachee Bay Watershed
- Ochlockonee River and Bay Watershed
- Perdido River and Bay Watershed

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

In addition to funding through SWIM and the Water Management Lands Trust Fund, funding in support of implementation of SWIM plans and associated priority projects is also provided by Florida Forever Capital Improvement funding, legislative special appropriations, and local governments working in partnership with the District. 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. Other related coordination and planning activities that complement SWIM include District participation in the Efficient Transportation Decision-Making (ETDM) program with FDOT and other agencies, and work in cooperation with the Federal Emergency Management Agency (FEMA) to implement the Flood Hazard Map Modernization program. Additionally, where alternative water supply development funding needs for a RWSP do not require all of the funding allocated within a given year, remaining AWSD funding provided under the Water Protection and Sustainability Trust Fund may be allocated to springs protection or other water resource development projects that complement watershed resource protection and restoration.

SWIM Activities and Program Implementation Update

Table 8.1 provides a planning-level update of anticipated SWIM project implementation for 2006 through 2007. Funding amounts indicated are inclusive of SWIM funding, Water Management Land Trust Fund, anticipated legislative appropriations, and other state and federal grant sources, and they provide for implementation of approved SWIM plan projects. Additional local and state match funding amounts are not included in the figures provided.

Table 8.1 SWIM Activities and Program Implementation

SWIM Program Activities	Purpose	Current Funding
Apalachicola River and Bay System		
East Bay/Tates Hill Swamp Restoration	Hydrologic and habitat restoration	\$375,000
Apalachicola River and Floodplain Restoration	Floodplain and riverine habitat restoration	\$1,160,365
Eastpoint Stormwater Plan	Stormwater Retrofit Plan Development	\$200,000
Eastpoint Stormwater Retrofit	Stormwater retrofit for 205 acre treatment area	\$251,000
IFAS No-Till Study	Agricultural BMP validation	\$35,000
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$200,000
Pensacola Bay System		
Urban Stormwater Retrofit	Urban Stormwater Retrofit	\$520,307
Bayou Chico Restoration	Estuarine Restoration	\$400,000
South Escambia County Greenway	Watershed resource protection and habitat restoration	\$120,000
Hurricane Ivan Debris Removal	Hurricane debris removal for environmental protection and public safety	\$2,003,598
Palafox Basin Stormwater Retrofit	Urban stormwater retrofit	\$320,319
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$200,000
Choctawhatchee River and Bay Watershed		
Urban Stormwater Retrofit	Urban Stormwater Retrofit	\$2,285,302
Ecological Restoration	Wetland and riparian habitat restoration	\$325,000
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$250,000

Table 8.1 SWIM Activities and Program Implementation

SWIM Program Activities	Purpose	Current Funding
St. Andrew Bay Watershed		
Regional Stormwater Retrofit	Urban Stormwater Retrofit	\$2,000,000
Freshwater Needs Assessment	Estuarine freshwater inflow needs evaluation	\$100,000
Henry Davis Park Retrofit	Urban Stormwater Retrofit	\$850,000
West Bay Hydrologic Restoration	Wetland hydrologic restoration	\$687,816
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$150,000
St. Marks River/Apalachee Bay Watershed		
Tram Road Public Access Reuse Facility	Public access reuse project for springshed protection and water quality improvement	\$1,000,000
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$100,000
Ochlockonee River and Bay Watershed/Lake Jackson		
Regional Stormwater Retrofit	Urban Stormwater Retrofit	\$600,000
District-Wide Activities		
Water Resources Planning	Watershed planning, resource reporting, programmatic oversight, and resource assessments	\$391,362
Research, Data Collection, and Monitoring	Water resource data collection and monitoring	\$192,472
Minimum Flows and Levels	Fresh water need determinations	\$291,633
Water Resource Education	Public outreach for water resource education	\$123,524
Surface Water	Surface water resource restoration and contracts oversight	\$499,244

Watershed Resource Restoration Capital Improvement Summary Table

Summary information on watershed resource restoration projects ongoing during 2005-2006 is presented in Table 8.1. 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 continue long-term watershed resource restoration and wetland mitigation efforts that to date have provided hydrologic and habitat restoration for over 28,000 acres and urban stormwater retrofit for over 2,800 acres District-wide.

Table 8.2 NFWWMD 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 350,000 cubic yards of dredge spoil and additional slough restoration.	NFWWMD	SWIM; Florida Forever	Permitting
Eastpoint Stormwater	Stormwater retrofit for approximately 205 acres of treatment area.	Eastpoint W&SD; U.S. EPA	SWIM; U.S. EPA 319	Engineering/ Design
Tates Hell Swamp Restoration	Tates Hell Swamp hydrologic restoration, including Gator Creek Gully Branch, Big Slough, and Sand Beach Branch areas, encompassing over 20,000 acres.	FDACS DOF, NFWWMD, FDOT	SWIM; FDOT Mitigation	Complete – Monitoring
Doyle Creek Basin Restoration	Additional hydrologic and vegetation restoration for approximately 2,000 acres of Tates Hell Swamp.	FDOT	FDOT Mitigation	Implementation
Unpaved roads/stream crossing BMPs	Stabilization of two unpaved road stream crossings and removal of direct sediment discharges into tributary streams.	Orange Hill SWCD	Florida Forever	Planning
Lands Store Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharge into the Apalachicola River.	Calhoun County	Florida Forever	Implementation
Lamb Eddy Road stabilization	Stabilization of unpaved road and removal of direct sediment discharge into the Chipola River.	Calhoun County	Florida Forever	Planning
Sawyer Lane Drainage Improvements	NPS/sedimentation abatement; shoreline habitat protection and restoration on Apalachicola Bay.	Franklin County	Florida Forever	Planning
Pensacola Bay System				
Carpenter Creek Basin Retrofit	Regional stormwater retrofit for 108 acre contributing basin of Bayou Texar.	Pensacola	Florida Forever	Implementation
19 th & Brainerd Streets Stormwater	Regional stormwater retrofit for 160 acre contributing basin of Bayou Texar.	Pensacola	SWIM	Implementation
Clear Creek Restoration	Erosion control and stream restoration.	Blackwater SWCD, U.S. FWS	Florida Forever	Implementation
Palafox Basin Alum Injection System	Regional stormwater retrofit for 266 acre contributing basin of Pensacola Bay; L-Street Pond Alum injection system.	Pensacola	SWIM: U.S. EPA (319)	Implementation
Long Hollow Stormwater Retrofit	Regional stormwater retrofit for 745 acre contributing basin of Pensacola Bay	Pensacola	Florida Forever	Permitting

SWIM Program and Watershed Restoration Summary Report

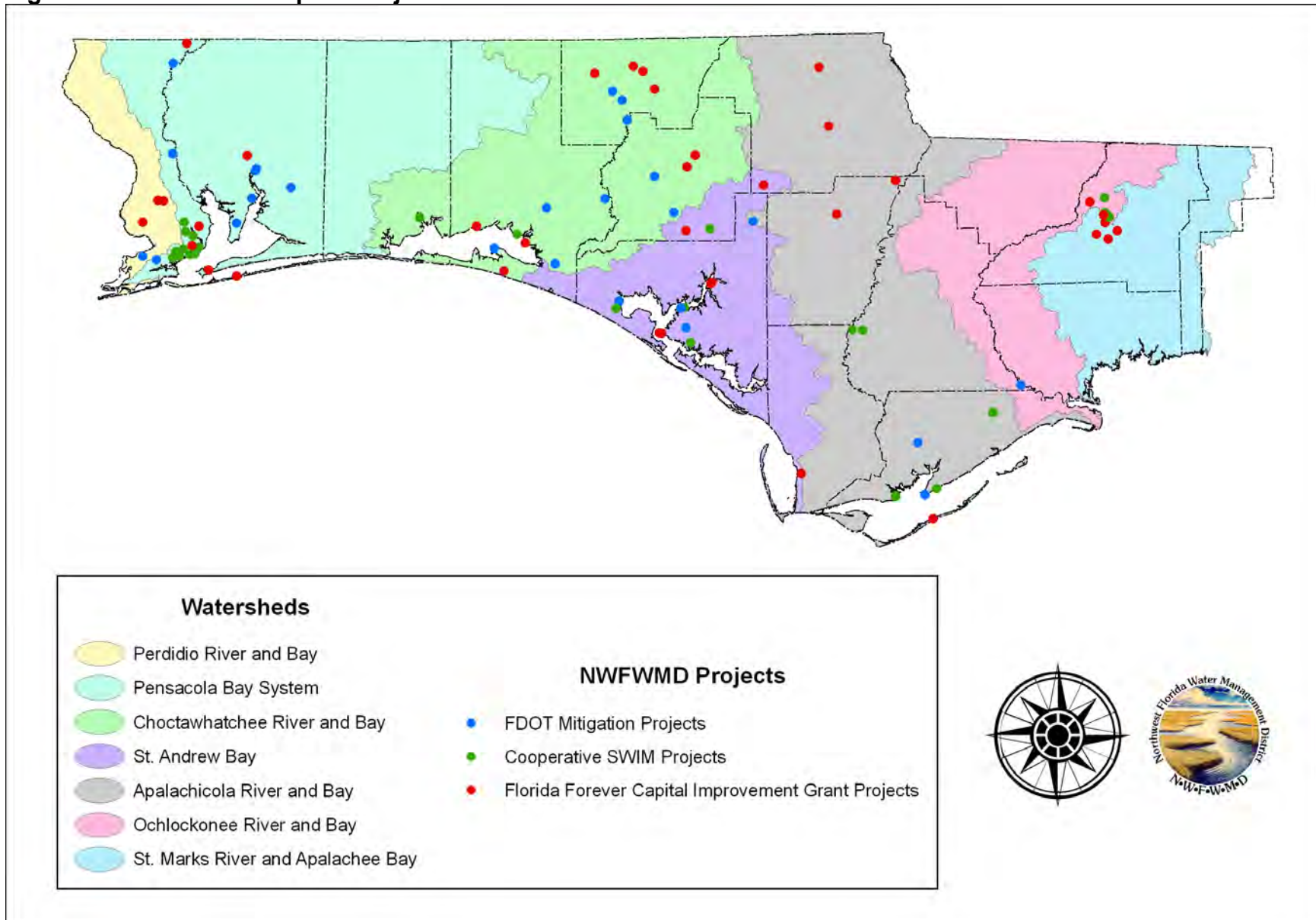
Project Name	Purpose	Cooperator	Program	Status
Gulf Breeze Stormwater Improvements	Regional stormwater retrofit for 355 acres discharging into Pensacola Bay and Santa Rosa Sound.	Gulf Breeze	Florida Forever	Planning
17 th Avenue Stormwater Pond	Stormwater retrofit for 60 acres discharging into Bayou Texar.	U.S. EPA, DEP, DCA, Pensacola	SWIM	Implementation
Little Sabine Bay Circulation Project	Stormwater retrofit and habitat restoration on Santa Rosa Sound.	Santa Rosa Island Authority	Florida Forever	Permitting
Rogers Tract Mitigation	Mitigation preservation and enhancement in the Blackwater River watershed.	FDOT	FDOT Mitigation	Implementation
Bluff Springs Mitigation	Mitigation preservation and enhancement for approximately 322 acres in the Escambia River watershed.	FDOT	FDOT Mitigation	Implementation
Yellow River Ranch	Mitigation restoration project for approximately 275 acres in the Yellow River watershed.	FDOT	FDOT Mitigation	Implementation
Brewer Tract Mitigation	Mitigation preservation and enhancement for approximately 89 acres in the Blackwater River watershed.	FDOT	FDOT Mitigation	Implementation
Choctawhatchee River and Bay Watershed				
Oyster Lake Restoration	Wetland restoration	Walton County	Florida Forever	Implementation
Holmes County Unpaved Roads NPS Pollution Abatement	Stabilization of unpaved road stream crossing and removal of direct sediment discharge from tributary stream.	Holmes County	Florida Forever	Implementation
Hammock Point Water Quality Improvement	NPS pollution and sedimentation abatement for approximately 70 acres discharging into Choctawhatchee Bay.	Walton County	Florida Forever	Implementation
Lafayette Creek Mitigation	Mitigation wetland protection and enhancement for approximately 3,000 acres in the Choctawhatchee Bay watershed.	FDOT	FDOT Mitigation	Implementation
Live Oak Point/Hogtown Bayou Mitigation	Wetland restoration and natural shoreline protection for major salt marsh on Choctawhatchee Bay.	FDOT	FDOT Mitigation; SWIM	Planning
Unpaved roads/stream crossing BMPs	Stabilization of six unpaved road stream crossings and removal of direct sediment discharges into tributary streams.	Orange Hill SWCD	Florida Forever	Planning
Choctawhatchee Bay Stormwater Phase I	NPS pollution abatement and removal of direct sediment discharges from Choctawhatchee Bay.	Walton County	Florida Forever	Planning

Project Name	Purpose	Cooperator	Program	Status
St. Andrew Bay Watershed				
Lake Powell Stormwater Retrofit	Construction of demonstration stormwater retrofit; exfiltration system.	Bay County	SWIM	Planning
Sand Hill Lakes Mitigation Bank	Ecological restoration and public access, encompassing approximately 2,155 acres of wetland mitigation.	NFWFMD	FDOT Mitigation	Implementation
Deer Point Lake Unpaved Roads Phases I, II, III	Unpaved road stabilization to remove sediment discharges from Deer Point Lake Reservoir.	Bay County	Florida Forever	Implementation
11 th Street Stormwater Retrofit	Stormwater retrofit for 86 acres of urban development discharging into Watson Bayou.	Bay County	SWIM, Florida Forever	Planning
Port of Panama City Stormwater Improvements	Stormwater retrofit for existing industrial port area discharging into St. Andrew Bay.	Panama City Port Authority	Florida Forever	Implementation
Ward Creek Hydrologic Restoration	Hydrologic and wetland restoration, including approximately 550 acres in the West Bay watershed.	NFWFMD	Florida Forever	Planning
St. Joseph Lake Stormwater Improvement	Stormwater retrofit for approximately 594 acres discharging in to St. Joseph Bay.	City of Port St. Joe	Florida Forever	Implementation
Lynn Haven Breakwater and Retrofit	Stormwater retrofit and shoreline wetland habitat restoration.	Lynn Haven; FDOT	SWIM; Florida Forever; FDOT Mitigation	Complete
Rolling Pines Road Stabilization	Unpaved road stabilization to eliminate sedimentation within the Econfina Recharge Area.	Washington County	Florida Forever	Planning
WMA Habitat Restoration	Environmental forest restoration for 744 acres within the Econfina Recharge Area		Land Management	Implementation
Lake Jackson/Ochlockonee River and Bay Watershed				
Boone Boulevard Retrofit	Stormwater retrofit for 80 acres discharging into Lake Jackson.	Tallahassee	Florida Forever	Complete
Fuller Road RSTF	Regional stormwater retrofit for 330 acres discharging into Lake Jackson.	Leon County	Florida Forever	Implementation
Okeehoopkee Basin Retrofit	Regional stormwater retrofit for 232 acres discharging into Lake Jackson.	Leon County	Florida Forever	Implementation
Harbinwood Estates Retrofit	Stormwater retrofit and erosion control to retrofit approximately 200 acres discharging into Lake Jackson.	Leon County	Florida Forever	Planning

SWIM Program and Watershed Restoration Summary Report

Project Name	Purpose	Cooperator	Program	Status
Meginniss Arm Shoreline	Shoreline restoration on Lake Jackson for wetland mitigation.	FDOT	FDOT Mitigation	Planning
Womack Creek Restoration	Hydrologic and vegetation restoration for approximately 100 acres of Tates Hell Swamp.	FDOT	FDOT Mitigation	Complete - Monitoring
Tom Hahn Creek Restoration	Hydrologic and vegetation restoration for approximately 6,000 acres of Tates Hell Swamp.	FDOT	FDOT Mitigation	Planning - Implementation
Killearn Lakes Restoration	Habitat restoration and water quality improvement, including a treatment area of approximately 73 acres in the Lake Iamonia and Ochlockonee River watershed.	Leon County	Florida Forever	Planning
St. Marks River/Apalachee Bay Watershed				
Gibby Pond Retrofit	Regional stormwater retrofit for 327 acres within the St. Marks River/Apalachee Bay watershed.	Blueprint 2000; FDOT	Florida Forever	Implementation
Campus Circle Retrofit	Regional stormwater retrofit for 40 acres within the St. Marks River/Apalachee Bay watershed.	Tallahassee, FDOT	Florida Forever	Implementation
Call & Cadiz St. Stormwater	Regional stormwater retrofit for 90 acres within the St. Marks River/Apalachee Bay watershed.	Tallahassee	Florida Forever	Implementation
Caroline Court Retrofit	Additional stormwater retrofit within the St. Marks River/Apalachee Bay watershed	Tallahassee	Florida Forever	Implementation
Perdido River and Bay Watershed				
Ten Mile Creek Restoration	Major environmental stream restoration encompassing approximately one mile of Ten Mile Creek.	Escambia County	Florida Forever	Implementation
Blue Pit Wetland Restoration	Wetland restoration and development of a wetland treatment system within the Ten Mile Creek basin.	Escambia County	Florida Forever	Planning

Figure 8.2 Watershed 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.

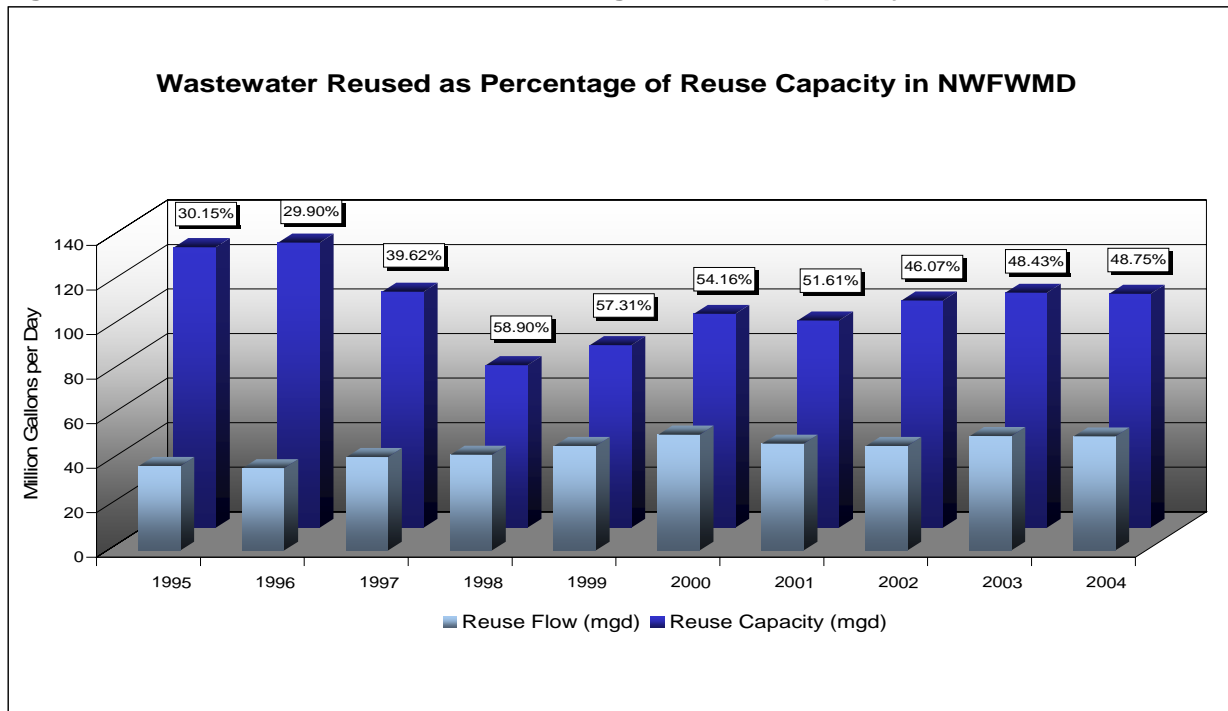
Water Supply

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

WS 1(a) Percentage of Domestic Wastewater Reuse

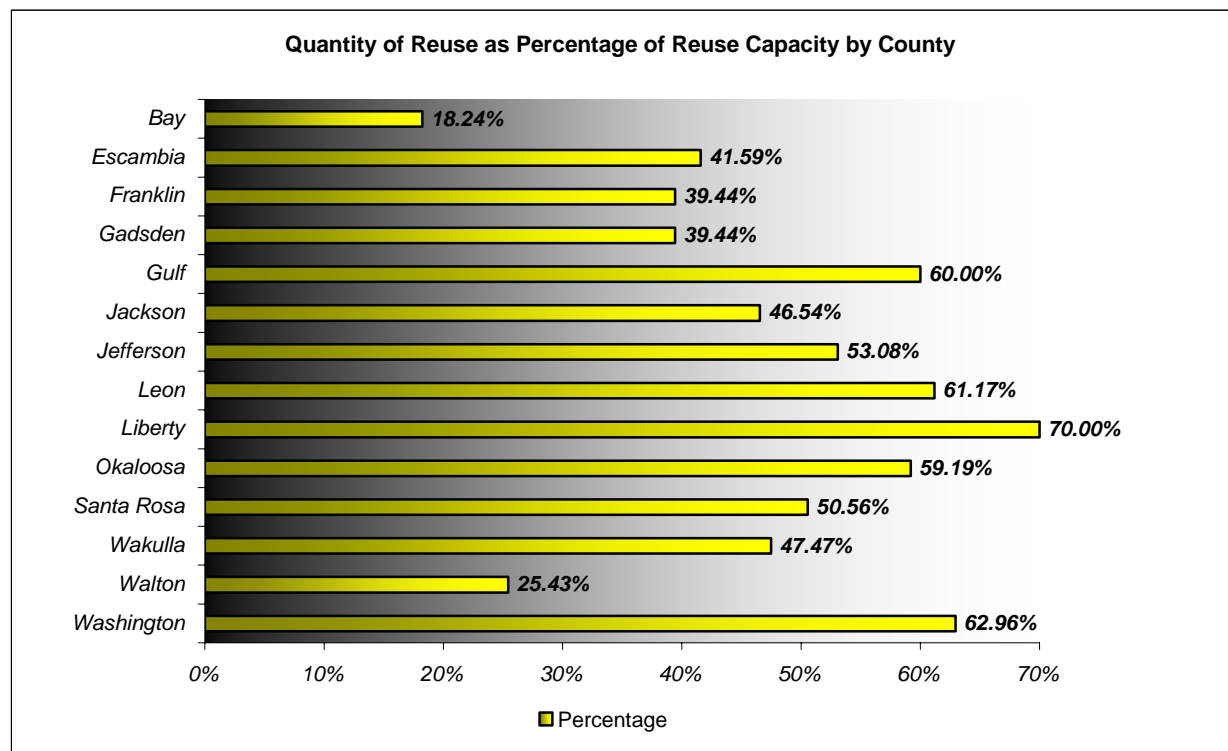
The state and water management districts continue to emphasize wastewater reuse. This resource as a result has become an important alternative to the use of potable supplies for such beneficial uses as landscape irrigation, industrial processing, and power generation. This measure is intended to identify on an annual basis the wastewater reuse capacity of facilities within the NFWWMD and the proportion of wastewater effluent actually reused. Figures 2.2 and 2.2 illustrate that in FY 2004-2005 nearly 49 percent of domestic wastewater reuse capacity in the NFWWMD was applied as designated reuse. Approximately 17 percent of the total classified as reuse was allocated to beneficial public access irrigation.

Figure A.1 Wastewater Reused as Percentage of Reuse Capacity



Source: FDEP, Division of Water Resource Management, 2004 Reuse Inventory.

Figure A.2 Wastewater Reused as Percentage of Reuse Capacity by County



Source: FDEP, Division of Water Resource Management, 2004 Reuse Inventory. [Holmes and Calhoun County omitted as reuse capacity is negligible in both locations.]

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.

Table A.1. Water Supply Planning Region Summary by County

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

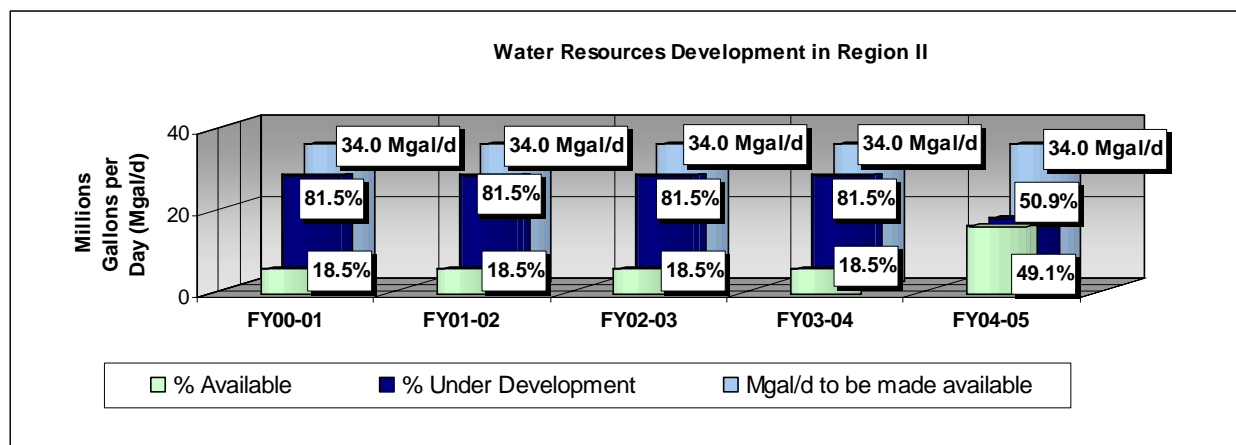
WS 1(c) Within each water supply planning region:

- 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 approved in February 2001. Within the planning region, 34.0 Mgal/d of additional water supply was identified as being needed by 2020. The updated RWSP Water Resource Development Work Program identifies approximately 78 Mgal/d of water as being potentially available from identified sources. Approximately 16.7 Mgal/d have been recently developed through alternative water supply development projects within the planning area. This represents 49.1 % of the additional water supply identified as being needed by 2020 (Figure 2.3). An additional 17.3 Mgal/d (50.9%) are under development or in the planning process.

Figure A.3 Water Resources Development in Region II



Source: NFWFMD Staff, 2005

Previous annual reports estimated the amount of water to be made available through water resource development activities at 80.5 Mgal/d, of which 34.0 Mgal/d would be needed by 2020 and 27.7 Mgal/d were under development. These figures were static through the planning period, in large part due to the long-term nature of the WRD projects identified in the 2000 RWSP. However, substantial accomplishment of the WRD projects and activities over the past year allows a more accurate estimate and update of the figures for FY 2004-2005 and to the present. Task and project accomplishment have resulted in the development of the inland Sand and Gravel Aquifer and the inland Floridan Aquifer serving coastal utilities. These projects are defined as non-traditional or alternative sources for the coastal region in the Region II RWSP. Production of these sources is estimated at approximately 16.7 Mgal/d of new supplies made available through the WRD component of the RWSP. Additional capacity will be needed by 2025; however, further development of these alternative supplies is anticipated and will be

addressed in the Region II RWSP update, currently under development. It should be noted that the RWSP for Region II is being revised at the time of this writing. Thus, the next annual report will present revisions as appropriate.

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 2004-2005, the District continued the water supply development assistance program in Franklin County that was initiated the previous year. Test well development and aquifer performance testing projects were completed on two inland Floridan Aquifer wells; two additional test wells and related aquifer performance testing are currently being developed. This water supply development assistance project is aimed at alleviating saltwater intrusion concerns in the coastal area of Franklin County. This project is expected to yield 3 to 4 Mgal/d.

Through alternative water supply development assistance funding under the new Water Protection and Sustainability Program, it is anticipated that approximately 11 Mgal/d will be made available within Region II in the near future. Specific projects currently in planning are described in Chapter 5.2 of the Consolidated Annual Report.

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 programs, surface waterbodies are regularly assessed for a variety of water quality parameters. According to DEP, surface waters supply drinking water to about 50 percent of Florida’s population. Of the approximately 6,500 public drinking-water systems in the state, only 23 systems utilize surface water, but include large population centers such as the Tampa Bay region and some cities of the Lower East Coast. In the Northwest Florida Water Management District, Bay County relies on a surface water source for public water supply and the City of Port St. Joe expects to transition to surface water upon completion of their new water treatment facility within the next several years.

Within the state-designated Group 3 watersheds, which includes the St. Andrew Bay watershed, the Secretary of DEP issued a final order adopting the verified list of impaired waters on June 24, 2005. No segments or tributaries of the Deer Point Lake Reservoir are listed. The final verified list of impaired waters for Group 2 watersheds, including the Apalachicola-Chipola rivers watershed, was adopted by DEP on May 27, 2004. The Port St. Joe fresh water canal is not listed, although the Chipola River is listed as impaired due to fecal coliform levels. Mosquito Creek is a Class I waterbody in Gadsden County listed as impaired on the final verified list for the Group 1 basins, as adopted on August 28, 2002. The creek, however, is not currently used for public water supply.

Thus, 100% of current surface water supply sources can be considered as meeting designated use criteria according to state methodology.

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

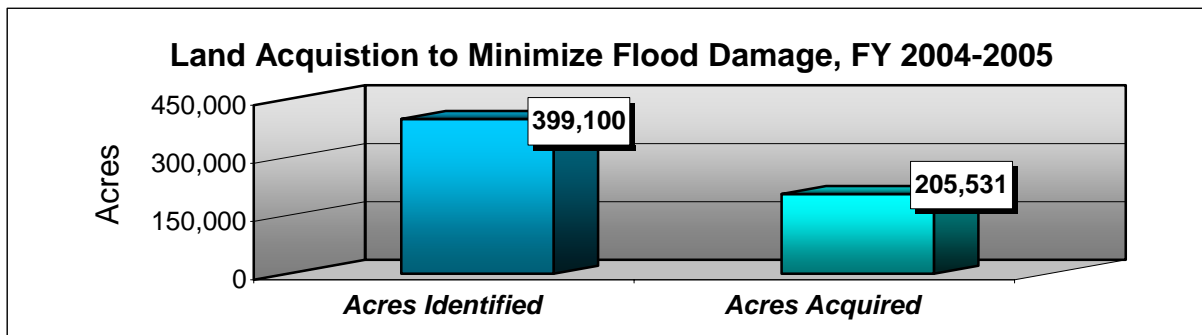
As stated in the 2005 DWMP, the District does not own or operate any facilities that provide flood protection. Since the structural approach tends to be more expensive, less effective, and involve greater risks, a nonstructural approach is preferred for flood protection and floodplain management.

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. To date, the District has acquired 205,531 acres through fee and less-than-fee purchases of the 399,100 acres identified through the Florida Forever Work Plan (2004). This comprises 51.5 percent of the acres identified and represents significant progress by the District in floodplain protection.

Figure A.4 Land Acquisition to Minimize Flood Damage, FY 2004-2005



Source: NFWFMD Staff, December 2005

*Percentages are generated by using GIS to calculate all lands identified for purchase within the 100-year floodplain and dividing that number into the actual number of acres acquired within the 100-year floodplain.

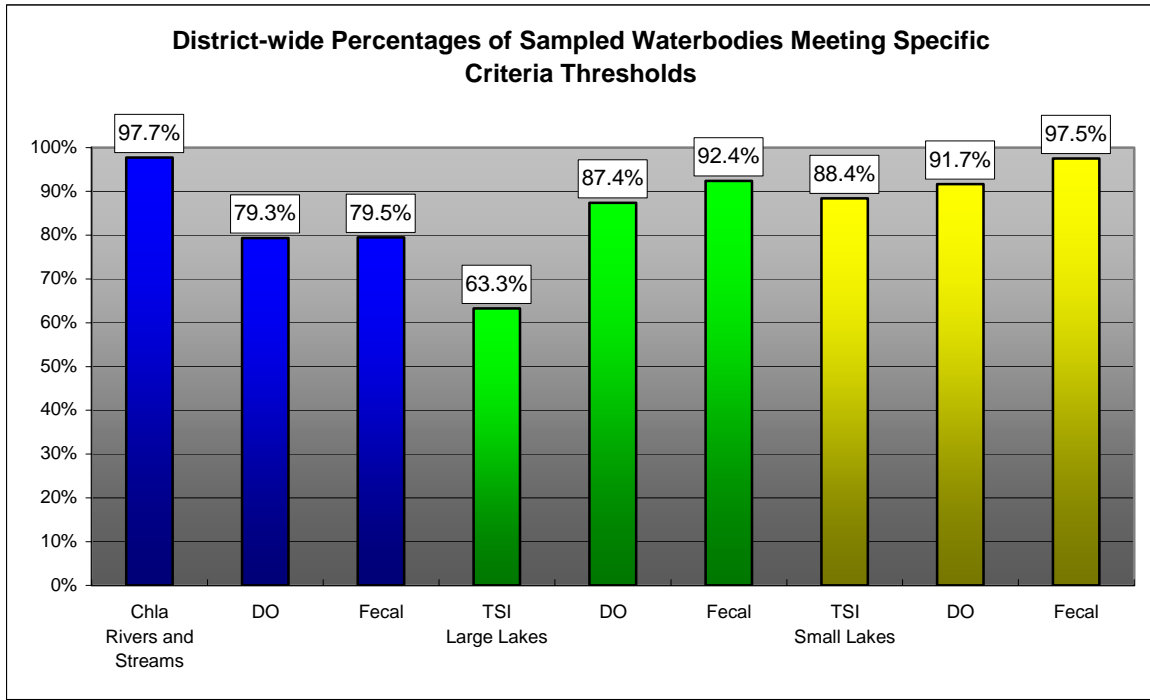
Water Quality

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

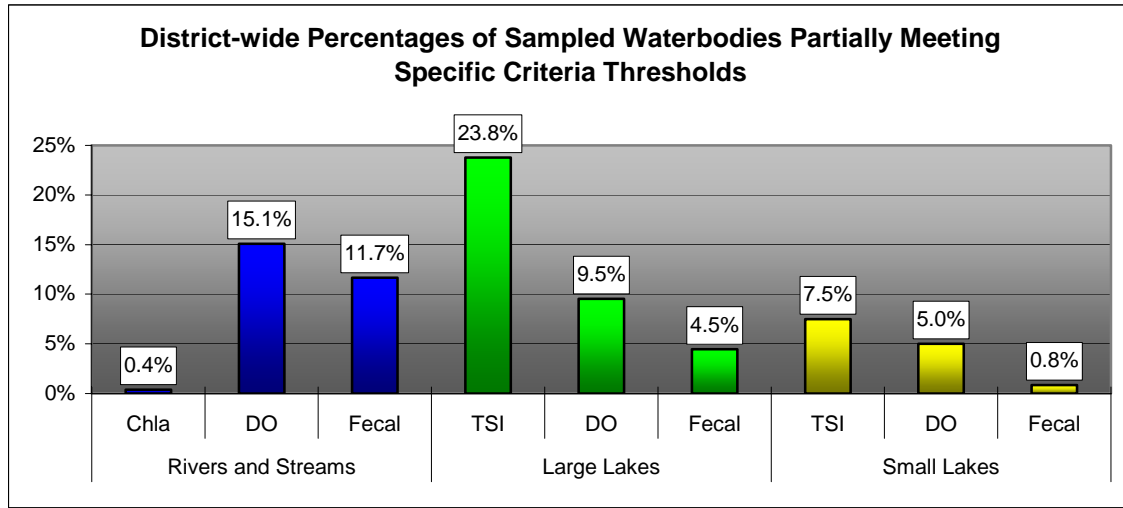
Under Florida’s water quality protection programs, waters are classified for uses, including drinking water, shellfish harvesting, and fish and wildlife maintenance. This performance measure indicates the extent to which the water quality needed to support the designated use is being attained. The graphs below reflect percentages of the total quantity of samples meeting, partially meeting, or not meeting specified criteria thresholds defined in Section 62-303, F.A.C., for which the waterbody was sampled. Information regarding designated use of water segments is not available, and threshold data is therefore being used as a proxy. The three criteria for rivers and streams are chlorophyll a, fecal coliform, and dissolved oxygen. The criteria for small and large lakes include fecal coliform, dissolved oxygen, and trophic state index. Figures 2.5 through 2.7 show District-wide averages for the three types of waterbodies (rivers and streams, large lakes, and small lakes) and their sampling criteria. The values shown below were derived by averaging results by waterbody type, and reporting the overall average for each criterion.

Figure A.5 District-wide Percentages of Sampled Waterbodies Meeting Specific Criteria Thresholds



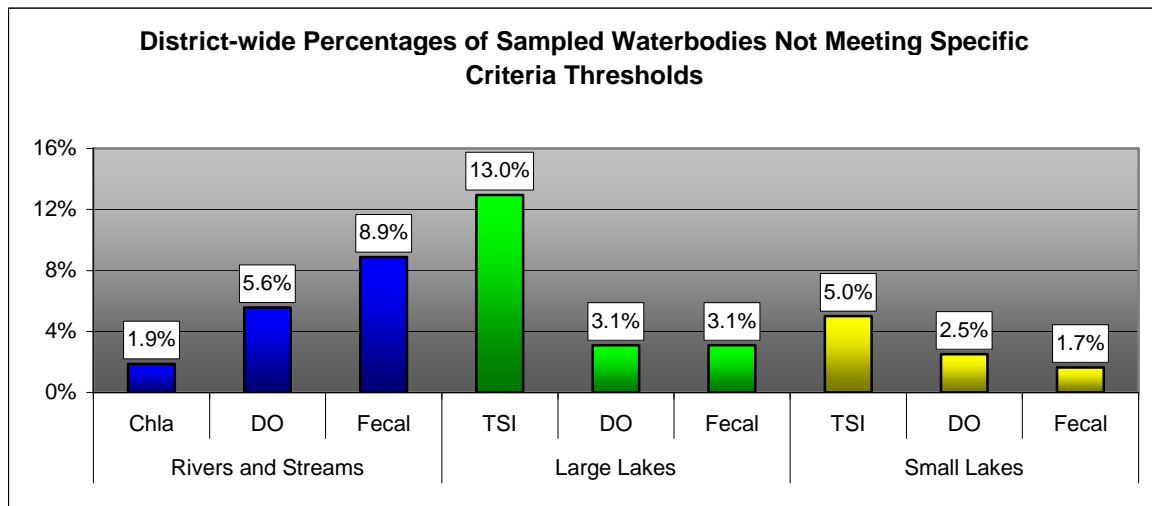
Source: DEP 305(b) Report, 2004

Figure A.6 District-wide Percentages of Sampled Waterbodies Partially Meeting Specific Criteria Thresholds



Source: DEP 305(b) Report, 2004

Figure A.7 District-wide Percentages of Sampled Waterbodies Not Meeting Specific Criteria Thresholds



Source: DEP 305(b) Report, 2004

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 NFWMD 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. This measure is intended to identify groundwater quality trends in order to assure protection of water resources. The data necessary to report these trends are not currently available, but the models currently under development at the District will provide such data 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 long-term increasing nitrate concentrations in both Wakulla Springs and Jackson Blue Springs (Table A.2).

Table A.2. Nitrate Trends at Selected NFWMD Springs

Spring	Nitrate Trend
Jackson Blue Springs	30 year degrading trend
Wakulla Springs	30 year degrading trend

Sources: NFWMD Water Resources Special Report 02-1; FGS Bulletin No. 66

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. Alternatives to MFLs are being considered for rivers and springs, including establishment of reservations.

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.

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

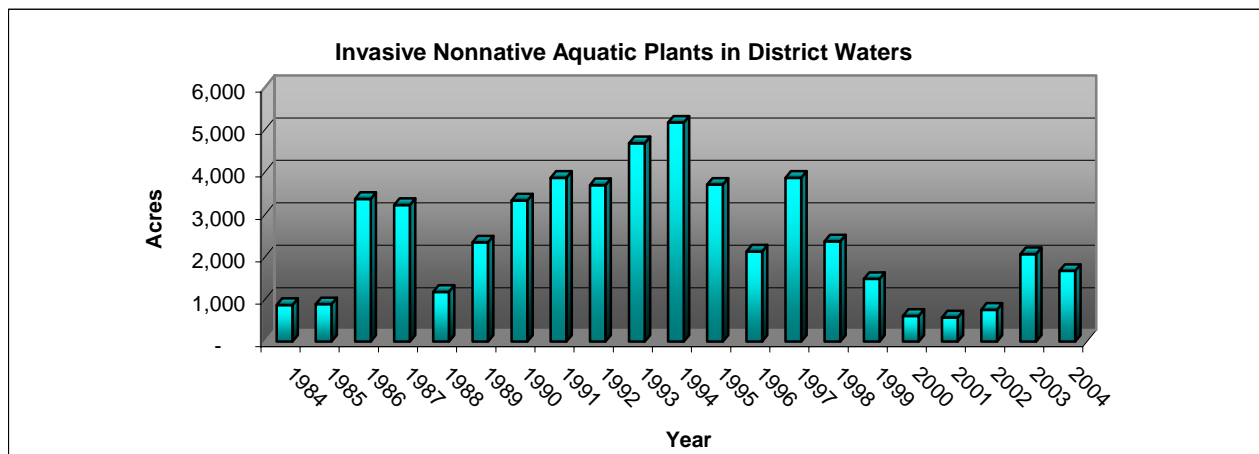
The Northwest Florida Water Management District does not implement the Environmental Resource Permitting program.

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, the U.S. Army Corps of Engineers, 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 are hydrilla (*Hydrilla verticillata*), waterhyacinth (*Eichhornia crassipes*), and alligatorweed (*Alternanthera philoxeroides*). In 2004, the annual aquatic plant survey found 1,666 acres of invasive aquatic plants (Figure 2.8).

Figure A.8 Invasive Nonnative Aquatic Plants in District Waters



Source: DEP; Bureau of Invasive Plant Management Annual Aquatic Plant Survey, 2005

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

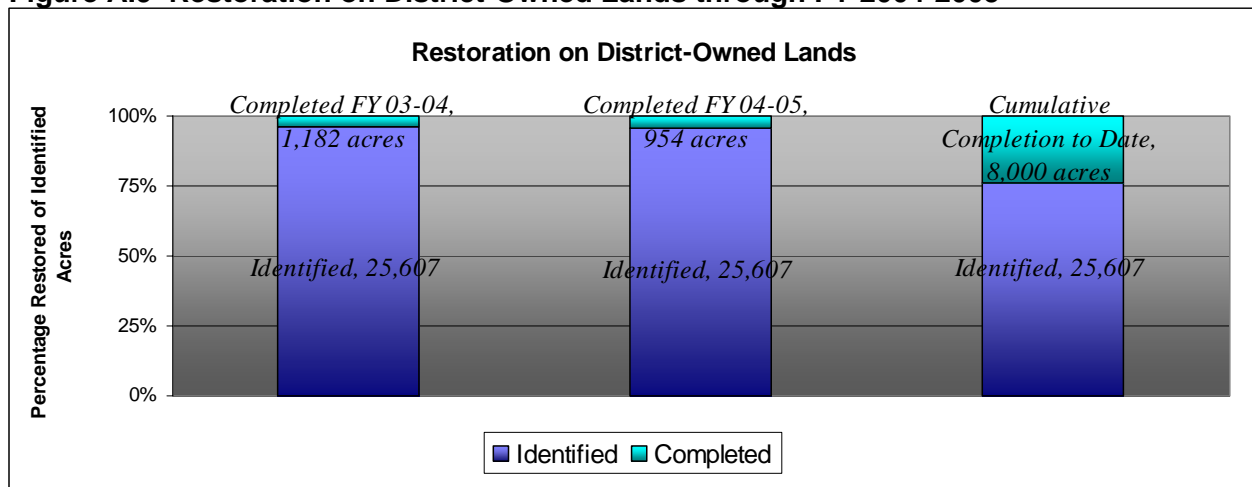
Exotic plant infestations have the potential to significantly impact the biological integrity of areas the District has acquired for protection and preservation. This problem is recognized as a major threat to the remaining natural areas in Florida, and on a statewide basis includes such species as melaleuca, Brazilian pepper, skunk vine, Chinese tallow, Old World climbing fern, and many others. 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, and Escambia 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 (*Lagustrum sinense*). The District has obtained a grant from DEP to treat exotic plants at Phipps Park during FY 2005-2006. The entire 516 acres of the park will be inspected and exotics will be treated as they are located.

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. The majority of habitat restoration needs identified on District lands consist of restoration of the longleaf-wiregrass complex in the Econfina Recharge Area. In 2004-2005, 954 acres were restored out of the 25,607 acres initially identified as needing restoration District-wide. An estimated 8,000 acres of restoration have been accomplished on District lands to date. It is estimated that about 770 acres of habitat restoration will be accomplished during 2006.

Figure A.9 Restoration on District-Owned Lands through FY 2004-2005



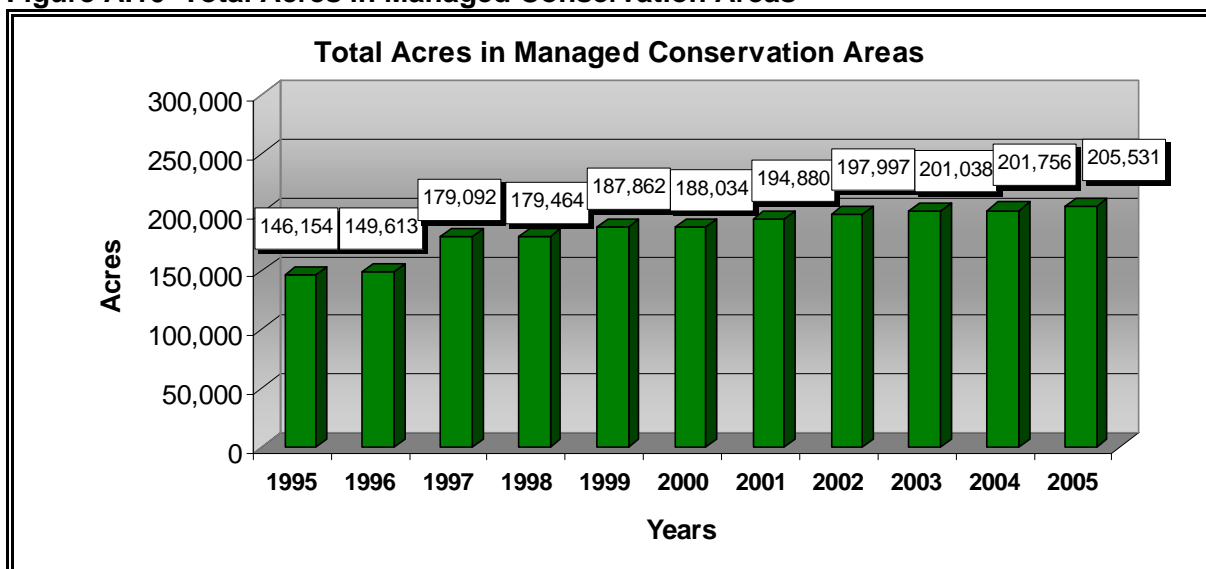
Source: NFWFMD Staff, December 2005.

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. This measure also indicates the number of acres acquired annually and cumulatively by the District (including less-than-fee acquisitions). Annual acquisitions vary widely, due in large part to specific opportunities for land acquisition in any given year.

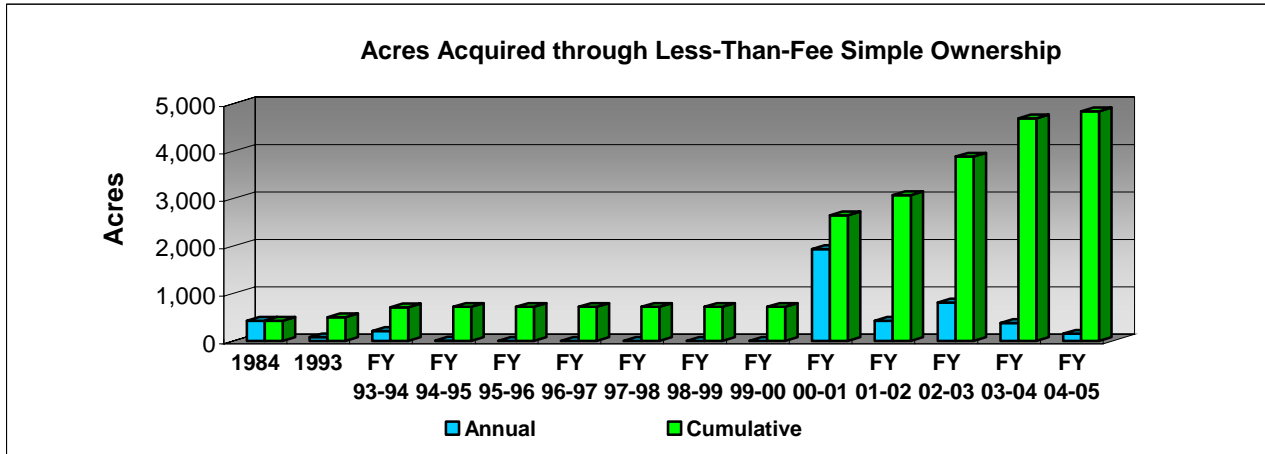
Figure A.10 Total Acres in Managed Conservation Areas



Source: NFWFMD Staff, December 2005

“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. In FY 2004-2005, the District acquired 152 acres of less-than-fee property.

Figure A.11 Acres Acquired Through Less-Than-Fee Simple Ownership



Source: NFWFMD Staff, September 2005.

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 2004-2005.

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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