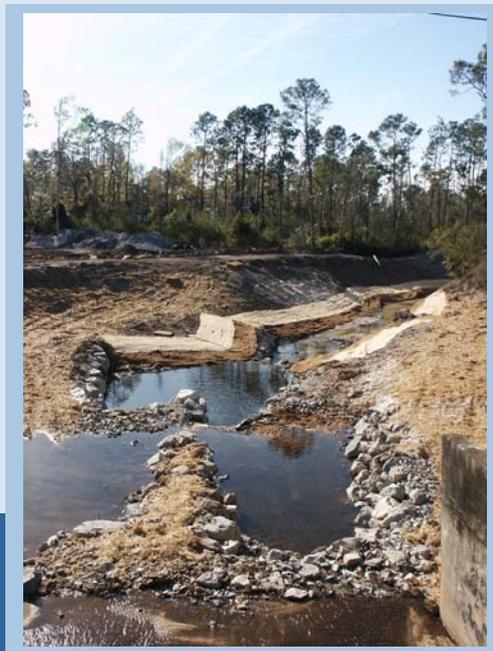


Northwest Florida Water Management District

Consolidated Annual Report



March 1, 2007



Cover Photos: Perdido River, International Paper Florida Forever land acquisition parcel (left);
Ten Mile Creek Florida Forever Capital Improvement Grant stream restoration project (center);
Long-leaf pine restoration site (right).

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Executive Summary

This Consolidated Annual Report fulfills the requirement of section 373.036(7)(a), Florida Statutes (F.S.), that the Northwest Florida Water Management District (“NFWFMD” or “District”) annually prepare and submit a report on management of water resources 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, 2007, NFWFMD Consolidated Annual Report includes seven required reports, as specified in Section 373.036(7)(b), F.S. These are:

- The District Water Management Plan Annual Report;
- The Minimum Flows and Levels Annual Priority List (per s.373.042(2), F.S.);
- The annual Five-Year Capital Improvement Plan (s. 373.536(6)(a)3, F.S.);
- The final annual Five-Year Water Resource Development Work Program (s.373.536(6)(a)4, F.S.);
- The Alternative Water Supplies Annual Report (s. 373.1961(3)(n), F.S.);
- The Florida Forever Water Management District Work Plan Annual Report (s.373.199(7), F.S.); and
- The Mitigation Donation Annual Report (s.373.414(1)(b)2, F.S.).

In addition to the required sections, each district may also include additional information on the status or management of water resources as deemed appropriate. This report includes one optional element, a Surface Water Improvement and Management Program and Watershed Restoration Summary Report. The summary report focuses on project implementation under the framework of the Surface Water Improvement and Management (SWIM) program.

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

- The District completed an update to the Regional Water Supply Plan for Region II (Santa Rosa, Okaloosa, and Walton counties). This plan was approved by the Governing Board in October. It updates the Water Resource Development component for the region and identifies five alternative water supply development project categories. The Water Resource Development component identifies 77 million gallons per day (mgd) of water that may become available in addition to traditional and previously developed alternative water supplies. <http://www.nwfwmd.state.fl.us/pubs/2006Rwsp/rwsp.htm> (District Water Management Plan Annual Report; Water Supply – Water Resource Development Work Program Annual Report)

- A Regional Water Supply Plan was approved for Region V, consisting of Gulf and Franklin counties. The plan provides for a new Region V Water Resource Development Component and includes four alternative water supply development projects. Over nine mgd of alternative water supply was identified to provide for existing and future demands. <http://www.nwfwmd.state.fl.us/pubs/rwsp/plan.htm> (**District Water Management Plan Annual Report**)
- Eight alternative water supply development and water resource development projects have been identified for funding District-wide through the Water Protection and Sustainability Program. These projects may provide over 20 mgd of alternative water supply. (**Water Supply – Alternative Water Supplies Annual Report**)
- During FY 2005-06, the District protected over 6,000 acres through fee simple acquisition or conservation easement. These acquisitions are along the St. Marks, Yellow, and Perdido rivers, and all protect floodplain functions. To date, over 212,000 acres of land have been protected for water resource purposes through the land acquisition efforts of the District. During the coming year, emphasis is expected to be placed on inholdings and additions within existing water management areas. The Econfina Creek and Perdido 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**)
- During the past fiscal year, District staff developed mitigation plans to provide compensatory wetland mitigation for impacts incurred by nine new Florida Department of Transportation (FDOT) projects. Implementation efforts continued for thirty existing projects across northwest Florida. Approval was obtained from the U.S. Army Corps of Engineers and the Governing Board for the Umbrella, Watershed-Based Regional Mitigation Plan, a comprehensive plan to facilitate fulfillment of federal and state requirements for mitigation. Final permitting of the Sand Hill Lakes Mitigation Bank was secured. Several mitigation projects were completed, including the Lynn Haven breakwater and marsh restoration. In addition, large mitigation acquisitions were completed along Lafayette Creek and Perdido River. During the coming year, continued emphasis will be placed on implementing mitigation projects within the District's plan and identifying future mitigation efforts for FDOT. <http://nwfwmdwetlands.com/index.php> (**District Water Management Plan Annual Report**)
- The District continued efforts with the Federal Emergency Management Agency (FEMA) to implement a long-term floodplain map modernization program through a Cooperating Technical Partner (CTP) 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. As of 2006, new effective flood maps have been completed for Escambia and Santa Rosa counties; preliminary flood maps have been completed for Bay and Gulf counties; and data collection and mapping activities are ongoing for Walton, Gadsden, Leon, and Wakulla counties. Public outreach efforts continued in cooperation with FEMA, including maintenance of an outreach website providing current information on the floodplain map modernization program and floodplain management. (**FEMA Business plan at <http://www.nwfwmdfloodmaps.com/>**)
- To date, the Governing Board has approved 47 Florida Forever capital improvement projects encompassing regional priority water resource protection and restoration activities. Thus far, 13 of these projects have been completed. The Florida Forever capital improvement grant projects help local governments meet local water resource challenges

while also addressing regional priorities as identified in 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 66 construction projects implemented across seven watersheds, funded through special appropriation and other complementary SWIM programs and in cooperation with local governments and state and federal agencies. The current projects continue long-term watershed restoration efforts that have thus far provided urban stormwater retrofit for over 6,500 acres and hydrologic and habitat restoration for over 35,300 acres District-wide. In the past year, watershed restoration activities under the District's wetland mitigation program and wetland mitigation planning have also been linked to the SWIM program (see <http://nwfwmdwetlands.com/index.php>) as well as other watershed restoration activities. **(SWIM Program and Watershed Restoration Summary Report)**

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

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I. Introduction

Overview

Chapter 2005-36, Laws of Florida, as enacted through 2005 House Bill 727, implemented statewide a consolidation of legislatively mandated plans and reports regarding the status of water management district programs and water resources within each district's jurisdiction. Beginning March 1, 2006, and annually thereafter, a consolidated annual report is submitted to the 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, although elements common to more than one requirement may be consolidated where appropriate. In addition to the required chapters, the statute provides that districts may include additional information on the status or management of water resources as deemed appropriate. This report includes one optional element, a Surface Water Improvement and Management Program and Watershed Restoration Summary Report. The summary report focuses on project implementation under the framework of the Surface Water Improvement and Management (SWIM) program. Inclusion of this element is appropriate given the importance of the SWIM program for the Northwest Florida Water Management District. This program encompasses watershed management District-wide; it therefore provides the planning context for identifying, prioritizing, and implementing cooperative watershed protection and restoration projects.

Together these reports provide the status of Northwest Florida Water Management District programs including land acquisition and management, watershed restoration, water resource development, 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. Minimum Flows and Levels Annual Priority List
- Chapter IV. Annual Five-Year Capital Improvements Plan
- Chapter V. Water Supply
 - 5.1 Annual Five-Year Water Resource Development Work Program
 - 5.2 Alternative Water Supplies Annual Report
- Chapter VI. Florida Forever Water Management District Work Plan Annual Report
 - 6.1 Land Acquisition Five Year Work Plan
 - 6.2 Land Management and Acquisitions
 - 6.3 Florida Forever Capital Improvement Projects
- Chapter VII. Mitigation Donation Annual Report
- Chapter VIII. Surface Water Improvement and Management Program and Watershed Restoration Summary Report
- Chapter IX. References

II. District Water Management Plan Annual Report

Introduction

The second update of the Northwest Florida Water Management District's District Water Management Plan (DWMP) was approved by the Governing Board in September 2005. The plan was initially completed in 1994, and it was first updated in 2000. The 2005 update 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. The DWMP is organized to address District programs and projects across four statutorily-defined areas of responsibility (AORs): water supply, flood protection and floodplain management, water quality, and natural systems. It should be noted that most issues and programs span two or more of these AORs, and it is customary to approach specific programs and projects in an interdisciplinary, holistic manner. For reporting purposes, however, accomplishments and priorities are primarily described within one category. Action tasks are also compiled into a comprehensive table (Table 2.1) under the sub-heading District-Wide Activities. The table lists tasks, activities, and status during fiscal year 2005-2006, and it notes AORs addressed by each task. Appendix A provides updated values and trends applicable to standardized statewide performance measures.

Water Supply

Major Accomplishments

The past year the District has made noteworthy efforts and accomplishments in regional water supply planning, major water resource assessments, and Water Protection and Sustainability Program project implementation. Among these are the following:

- The District completed an update to the Regional Water Supply Plan for Region II (Santa Rosa, Okaloosa, and Walton counties). This plan was approved by the Governing Board in October (<http://www.nwfwmd.state.fl.us/pubs/2006Rwsp/rwsp.htm>). It updates the Water Resource Development component for the region and identifies five alternative water supply development project categories. The Water Resource Development component identifies 77 million gallons per day (mgd) of water that may become available in addition to traditional and previously developed alternative water supplies.
- A Regional Water Supply Plan was developed and approved by the Governing Board for Region V, which consists of Gulf and Franklin counties. The plan (available at <http://www.nwfwmd.state.fl.us/pubs/rwsp/plan.htm>) includes a new Region V Water Resource Development Component as well as four alternative water supply development projects. Over nine mgd of alternative water supply was identified to provide for existing and future demands.

- 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). Further information is provided in Section 5.1 of the Consolidated Annual Report.
- District-wide, eight alternative water supply development and water resource development projects have been identified for funding through the Water Protection and Sustainability Program. These projects may provide over 20 mgd of alternative water supplies and are detailed further in Section 5.2 of this report. Among the projects identified are a surface water treatment facility for the city of Port St. Joe, expansion of an inland wellfield in Walton County, and public access reuse projects in cooperation with Okaloosa County and the city of Tallahassee.
- The District completed an evaluation of conceptual alternative water supply development projects and planning level cost estimates for Okaloosa County. The evaluation included an examination of alternatives for direct surface water withdrawal, riverbank filtration, and small tributary reservoir alternatives. The final report ruled-out a previously proposed Yellow River Dam as a feasible alternative. The final report may be downloaded at: http://www.nwfwmd.state.fl.us/pubs/final_%20water_Report/Final%20Water%20Supply%20Study%20Report.pdf.
- Development and calibration of the Floridan Aquifer sustainability model for coastal Santa Rosa, Okaloosa, and Walton counties was completed. The model is being used to assess the rate and extent of saltwater intrusion that may result from groundwater withdrawals in coastal areas of the region and to predict potential long-term effects of groundwater pumping on water quality. It is expected that the model will allow the district to effectively evaluate the long-term sustainability of the coastal Floridan Aquifer under current and alternative pumping scenarios.
- The District continued to provide educational brochures and guidance documents on water conservation to utilities, local governments, and interested citizens. Over 50,000 such brochures and documents were distributed to Region II utilities and local governments from May 2004 through September 2006. Six major hotels are participating in the Conservation Hotel and Motel Program (CHAMP). The program promotes water and energy conservation by requesting guests to consider having towels and linens laundered less frequently than daily. Participating hotels report water use data from before and after the program for documentation and evaluation.
- Test well development and aquifer properties testing continued for inland wells that have the potential to serve the coastal area of Franklin County. These activities are intended to facilitate development of an alternative water supply for the coastal area where saltwater encroachment may threaten traditional supplies.
- In cooperation with Bay County, the District continues operating the monitoring network for stream flow and rainfall within the Deer Point Lake Reservoir watershed.
- The District continues to provide hydrologic condition data through its website. Data are posted for major waterbodies, watersheds, and aquifers. Included are accumulated rainfall amounts, drought conditions, stream flows, lake levels, and ground water levels. The information is updated at least every six months or as conditions warrant.
- In January, amendments to Chapter 40A-2, Florida Administrative Code, Consumptive Uses of Water, were adopted. The revisions (1) clarified rule language and the public's understanding of water use issues associated with the rule; (2) reduced permitting requirements for certain withdrawals posing minimal threat to water resources and other

users; (3) expedited the clean-up/remediation of contaminated ground water; and (4) described water use reservations to protect the fish and wildlife of the Apalachicola River and Bay floodplain and ecosystems.

- The District began providing additional public assistance notices to permit holders regarding conditions of their consumptive use permits. Items provided include compliance reminder notices sent three times per year; renewal notices sent at least at six months and one month prior to permit expiration; and lists of due dates related to the permit at the time of permit issuance.
- Since 1991, the District has maintained an agreement with DEP to implement the well permitting requirements of Chapter 62-524, Florida Administrative Code. The program addresses potable well construction in specific delineated areas including portions of Escambia, Jackson, Leon and Santa Rosa counties. The new contract will cover July 2006 through June 2011. During the fiscal year, 97 well construction permits were issued and processed through this program to provide drinking water to individual home owners in rural Jackson County.
- The District has taken several steps toward implementing e-permitting. Elements of a comprehensive e-permitting system are expected to include: (1) an e-compliance module that allows permittees to enter pumpage, water level and water quality as required by the conditions of their permits and (2) well completion report entry system that will allow all contractors to enter well completion reports on-line.

Future Emphasis and Priorities for FY 2006-2007

- Implement regional water supply plans, as approved by the Governing Board, for Regions II and V. Implementation will include appropriate notification of and coordination with local governments and utilities in accordance with Section 373.0361, F.S., and to effectively coordinate land and water planning.
- Implement alternative water supply development and water resource development projects through the Water Protection and Sustainability Program, in accordance with Governing Board resolutions and as detailed in Section 5.2.
- Implement the water resource development programs for Region II and Region V, and assist in the implementation of alternative water supply development projects within both regions.
- Continue development of the inland Sand-and-Gravel Aquifer between the Blackwater and Yellow rivers as an alternative water source for coastal Santa Rosa County.
- Continue development of the inland wellfield in Walton County to serve as an alternative water supply source for coastal Walton County.
- Continue to work with Okaloosa County to identify and develop alternative sources, including reuse, inland groundwater, and potentially inland surface water sources.
- Implement and apply the Floridan Aquifer sustainability model, including its use as a tool to evaluate future withdrawals from inland areas and other water supply alternatives.
- Continue monitoring the Floridan Aquifer and substantially complete modeling analysis to assess the feasibility of inland Floridan Aquifer alternative water supply in Franklin County.

- In cooperation with Bay County, continue operating the monitoring network for streamflow and rainfall within the Deer Point Lake Reservoir watershed.
- In cooperation with utilities, 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 development planning in critical areas.
- Continue to make the Florida Forever capital improvement grant program available to local governments and public utilities that wish to apply for grants for implementation of reuse projects and other qualifying water resource restoration and protection projects.
- Continue to provide water conservation educational information to utilities, local governments, utilities, and residents. The CHAMP program will be continued in Region II and introduced into Region V.
- Initiate development of the updated Water Supply Assessment and water demand projections.
- Develop and distribute brochures and informational handouts providing information to the public about alternative means and methods for developing farm water sources.

Flood Protection and Floodplain Management

Major Accomplishments

- The District continued efforts with the Federal Emergency Management Agency (FEMA) to implement a district-wide floodplain map modernization program through a Cooperating Technical Partner (CTP) 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. As of 2006, new effective flood maps have been completed for Escambia and Santa Rosa counties; preliminary flood maps have been completed for Bay and Gulf counties; and data collection is ongoing for Walton, Gadsden, Leon, and Wakulla counties. The District also continued implementation of outreach tasks in cooperation with FEMA, including maintenance of a public outreach website providing current information about flood map modernization and floodplain management.
- During FY 2005-2006, the District protected over 6,000 acres through fee simple acquisition or conservation easement. These acquisitions along the St. Marks, Yellow, and Perdido rivers provide long-term protection of floodplain functions, as well as water quality, natural systems, and public access.
- In cooperation with Leon County and the National Weather Service, the District manages a real-time flood warning network in Leon County, the "Capital Area Flood Warning Network."
- A number of the Florida Forever capital improvement grant projects described under Water Quality also address flood protection priorities.
- Administered the dam safety program for the District through the Chapter 40A-4, F.A.C, Management and Storage of Surface Waters program.

Future Emphasis and Priorities for FY 2006-2007

- It is anticipated that stormwater management regulation aspects of Environmental Resource Permitting will be implemented in 2007.
- The District will continue efforts with FEMA to implement the district-wide floodplain map modernization program through the Cooperating Technical Partner (CTP) agreement.
- The District will continue to operate a flood warning and monitoring network in cooperation with Leon County, the city of Tallahassee, and federal agencies for flood protection.
- The District will maintain and, where necessary, expand the availability of hydrologic data on the NFWFMD website.
- The District will continue to emphasize nonstructural flood protection including land acquisition, floodplain map modernization, and technical assistance to local governments, as well as implementation of stormwater components of ERP.
- The District will continue data collection and floodplain map development under FEMA's floodplain map modernization program as a Cooperating Technical Partner.
- The District will seek federal sources of match funding to support development of detailed elevation data and imagery databases.
- 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 continue to operate flood warning networks and monitoring sites in cooperation with local governments and federal agencies for flood protection and water resource management.
- Develop and distribute brochures and informational handouts to increase the permittee's understanding of issues and restrictions associated with the construction of permitted water management systems.

Water Quality

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

Major Accomplishments

- The District continued its highly successful Florida Forever Capital Improvement Grant Program to assist local governments with funding capital improvement projects that will provide water quality and associated aquatic and wetland ecosystem benefits. As of September 2006, the District's governing board had awarded 32 local government grant projects for over \$14 million. In January 2007, the governing board approved 15 new projects for nearly \$6 million in additional grant funding. These projects are focused particularly on accomplishing priorities identified in SWIM plans. Water quality projects completed during 2005-2006 include the Hammock Point Water Quality Improvements, Campus Circle Stormwater Improvements, and stream crossing stabilization for unpaved

roads that had been discharging sediments into the Choctawhatchee and Apalachicola River and Bay watersheds. Major stormwater retrofit projects in the Lake Jackson, St. Marks River, and St. Joseph Bay watersheds are nearing completion.

- Construction of the “L” Street pond, an innovative alum-injection stormwater treatment facility in the city of Pensacola, was completed. The facility provides treatment for an approximately 266 acre contributing drainage area within the Pensacola Bay watershed.
- 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 2005-2006, the monitoring program focused on St. Andrew Bay and Choctawhatchee River and Bay watersheds.
- 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 renewed its agreement with DEP to monitor ground water quality at 8 fixed locations throughout northwest Florida as part of the Ground Water Temporal Variability monitoring network. The sites are monitored to determine trends and changes in water quality over time.
- The District completed studies of water chemistry at St. Marks Rise and Morrison Springs. Water Resources Special Reports 06-1 and 06-2, respectively, describe the collection of ground water samples from each basin and the comparative analyses of these samples with the chemistry of the head spring.
- The District completed a spring inventory of the Wakulla and St. Marks Rivers. Water Resources Special Report 06-3 describes 51 springs located along these rivers and includes hydrologic conditions and field data at each spring site. This inventory documents the spatial distribution of springs within the NFWFMD and will enable the District to continue its water quality monitoring and other research within the river and spring basins. The report may be found at http://www.nfwfmd.state.fl.us/rmd/springs/Wakulla_StMarks/index.htm.
- The District updated its SWIM priority list and further recognized the watershed approach for water resource management in northwest Florida. The priority list may be accessed at: <http://www.nfwfmd.state.fl.us/rmd/swimpriority%20list%202-06.pdf>.
- Work is continuing on a stormwater retrofit project in Eastpoint to provide treatment to stormwater before it flows into Apalachicola Bay. The project is a cooperative effort using U.S. EPA 319 and District funding to install baffle boxes to treat stormwater runoff from the Avenue A basin in Eastpoint.
- The District continues to operate a continuous current meter in the Wakulla Springs vent. The meter provides water velocity, direction, and temperature data for the spring.
- LiDAR (Light Detection and Ranging) data were collected and processed for Santa Rosa County, and a scope of work was issued for data collection in Walton and Escambia counties.

- The District installed and began real-time stage and rainfall data collection via GOES satellite at three stations: Yellow River at SR2 in Okaloosa County, FAF #47 (groundwater level) in Walton County, and Clark Sand (ground and surface levels) in Escambia County. Operation of real-time data collection stations continues at other locations throughout the District; these data are available on the District's website.
- The District provided funding to the City of Apalachicola for stormwater improvements to enhance water quality and for the City to develop a comprehensive Stormwater Master Plan. Drafting of the Stormwater Master Plan should be completed by the end of 2006.

Future Emphasis and Priorities for FY 2006-2007

- District efforts will continue to focus on implementation of SWIM plans and related projects to address existing and potential water quality issues. SWIM planning efforts will include updating and streamlining SWIM plans where watershed needs have been identified and where priorities need to be reassessed.
- The District will continue to work in cooperation with local governments to implement priority capital improvement projects through the Florida Forever Capital Improvement Grant Program.
- The District will collect water levels and survey elevations from a network of Floridan Aquifer wells to refine the boundaries of ground water contribution areas of select first and second magnitude springs.
- The District will install a data logger within the vent of Jackson Blue Spring for the purpose of establishing a long-term discharge record.
- The District will work in cooperation with local governments to construct stormwater retrofit facilities, including regional stormwater treatment facilities, to improve water quality in regionally significant receiving waterbodies.
- The District will collect 180 water quality samples within the Blackwater, Escambia, and Yellow river 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 the ground water contribution studies for the Wakulla and Morrison Springs and Jackson and Blue Spring basins.
- Completion of a Springs Inventory Special Report for Pine Log Creek is planned in 2007.

Natural Systems

Major Accomplishments

- The District has continued land acquisition and restoration efforts through the Florida Forever and FDOT mitigation programs. To date, over 206,000 acres of land and over 6,000 acres of conservation easements have been acquired by the District to protect water quality, natural systems, and floodplain functions.
- The District has completed the first Umbrella Regional Mitigation Plan and entered into an agreement with the U.S. Army Corps of Engineers to plan and implement mitigation for regional transportation impacts. The plan encompasses state mitigation requirements under

Section 373.4127, F.S., and federal requirements under Section 404 of the Federal Clean Water Act

- The District made its first purchase of a 133 acre conservation easement under a Memorandum of Agreement between Blueprint 2000 Intergovernmental Agency and the District for protecting the water resources and natural habitat within the St. Marks River basin. Each agency contributed equally towards the \$214,100 purchase.
- The District acquired the 279 acre Yellow River Ranch in Santa Rosa County for \$825,000 to mitigate for wetland impacts associated with DOT's widening of State Road 87. As part of the mitigation, the site will undergo substantial habitat and hydrologic restoration.
- The District purchased 5,456 acres along the Perdido River from International Paper for \$12,085,069. With this purchase, approximately 15 miles of frontage on the Perdido River will be permanently protected. This purchase was made with Florida Forever and FDOT Mitigation funds.
- The District protected 149 acres of river frontage on the St. Marks River by purchasing a Conservation Easement with Florida Forever funds. Purchase of this easement will protect the river floodplain functions and limit development and land use conversion.
- The District received final approval for the 2,100 acre Sand Hill Lakes Mitigation Bank in September 2005. Implementation efforts are ongoing.
- Significant progress has been achieved in restoration and management of the Sand Hill Lakes Mitigation Bank. The FDEP permit for the bank was issued in September 2005, and the Corps of Engineers permit was issued in March 2006. Activities completed include recording of a conservation easement, resource protection law enforcement, native and exotic species surveys, fire management, water level monitoring, and exotics removal. Construction activities were initiated in July 2006 in accordance with permit requirements. These include road improvements, planting, dam removal, and hydrologic restoration.
- Salt marsh creation activities were completed at the Lynn Haven marsh to provide mitigation for FDOT wetland impacts associated with the widening of State Road 77. Monitoring activities included bi-annual site inspections, photographic monitoring. Follow-up restoration accomplished in 2006 included exotics (torpedo grass) removal, replanting one portion of the site, installation of an irrigation system, and construction of a fence to protect the plantings. Follow-up monitoring indicates excellent plant survival and coverage. Wildlife usage observed includes fiddler crabs, great blue herons, great egrets, snowy egrets, green herons, and gag grouper.
- Restoration activities were initiated in 2006 for Lafayette Creek as mitigation for FDOT impacts incurred due to widening and realignment of U.S. Highway 331. A vegetation and exotics species survey for wetlands and associated upland buffer was conducted during the growing season. Failing culverts and a dilapidated bridge were removed in August, exotic species were treated in August and September, and pine and turkey oaks were thinned from July to September. Initial fuel reduction fires were initiated in late September and completed in December 2006. Direct seeding of wire grass and sandhill species occurred on January 10, 2007 for approximately 51 acres adjacent to the stream.
- Phase I of the hydrologic restoration of an 1800-acre tract in the southwestern section of Tates Hell State Forest was completed as part of the FDOT Mitigation Program. Three low water crossings were constructed and three miles of roads and ditches were removed to reconnect Doyle Creek, a tributary of Whiskey George Creek that flows into the upper

reaches of Apalachicola Bay. Revegetation of portions of the tract will be completed in 2007 under Phase 2 of the project.

- Approximately 18,000 feet of unnecessary roads were removed from the Doyle Creek basin of Tates Hell Swamp to help mitigate for impacts incurred by FDOT during the widening of State Road 65 in Franklin County. Additionally acquisition of the 30 acre Anders parcel was accomplished in cooperation with the Bay County Conservancy to help mitigation for FDOT impacts in Bay County.
- Additional restoration tasks were completed in Tates Hell Swamp, including within the Gully Branch and Gator Creek sub-watersheds. These include low water crossings, road removals, and construction of two rail-car bridges to help restore historic hydrologic connections.
- 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.
- Planning efforts for the restoration floodplain area and sloughs on the Apalachicola River continued.
- The District obtained a \$49,000 grant from DEP to treat exotic plants at Phipps Park and completed this project in June 2006. The entire 516-acre park was inspected and approximately 70% of the invasive non-native plant species located on site have been eliminated. Phipps Park contains the most invasive and exotic species of any District Lands with over 15 non-native species.
- The District restored 771 acres with the planting of approximately 100,000 wiregrass plugs and 500,000 longleaf pines for various projects.
- 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 continued implementation of the Florida Forever Capital Improvement Grant Program as described under Water Quality. Restoration projects completed during FY 2005-2006 include the Clear Creek Restoration, Holmes County Road Stabilization, Lands Store Road Stabilization, Ten Mile Creek Stream Restoration, Deer Point Lake Stabilization, and Abatement of NPS Pollution from Unpaved Roads projects.

Future Emphasis and Priorities for FY 2006-2007

- The District will continue to work with Gulf County to remove dredge spoil sand from the flood plain of the Apalachicola River on Site 39 southeast of Wewahitchka. The project will restore floodplain habitat and hydrology, which will enhance the riverine ecosystem.
- The District continues to work with Escambia County to dredge the main channel of Bayou Chico. The project will be completed in cooperation with the U.S. Army Corp of Engineers.
- The District will continue to implement wetland restoration and enhancement projects as mitigation for Department of Transportation activities in accordance with the ongoing development and updates of the Umbrella, Watershed-Based Regional Mitigation Plan.

- The District plans to plant 100,000 wiregrass plugs and 500,000 longleaf pines in the coming year for various projects on the 1,552 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.
- The District will complete a ground water characterization study of Merritt's Mill Pond Spring Vent in Jackson County.
- The District will continue to focus on effective implementation of the FDOT Mitigation, ETDM, and related programs.
- The District will initiate major floodplain and slough habitat restoration activities along the Apalachicola River.
- The District will continue to update the hydrologic restoration plan and implement hydrologic and vegetation community restoration within the Tates Hell State Forest in the Apalachicola and Ochlockonee bay watersheds.
- The District will continue to work with Escambia County to expand the Jones Swamp Preserve. This is a major component of a comprehensive restoration effort for the Jones Swamp-Bayou Chico ecosystem. The effort will provide for protection and restoration of water quality and wetland and floodplain functions. Additionally, the preserve provides a greenway system linking the Pensacola and Perdido Bay watersheds.
- The District will continue to work in cooperation with local governments to implement priority capital improvement projects through the Florida Forever Capital Improvement Grant Program.

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 2005-2006 (October 1, 2005 through September 30, 2006). 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 initial <i>Water Supply Assessment</i> was completed in 1998, and, in 2003, water supply projections were extended to 2025. Staff are initiating work toward developing an updated set of projections. Completion is anticipated in 2008.	O	√			
Regional Water Supply Plan – Region II	The Governing Board approved the updated Regional Water Supply Plan in October 2006.	C	√			
Regional Water Supply Plan – Region V	Plan development is complete. The Governing Board approved the Regional Water Supply Plan in January 2007.	C	√			

District Water Management Plan Annual Report

TASK	RECENT ACTIVITY	STATUS	RELATED AORs				
			WS	FP	WQ	NS	
Regional Water Supply Plan - Implementation	Ongoing – a number of WRDWP projects are being implemented, as well as water supply development assistance in support of the RWSPs.	O	√				
Floridan Aquifer Sustainability Modeling Project	Model development and calibration have been completed. Ongoing work is focused on model application.	O	√			√	
Water Quality and Quantity Monitoring	This program continued according to schedules established in agreements with DEP and local governments for ongoing data collection and research efforts.	O	√		√	√	
Surface Water Availability Assessment	The District completed a feasibility assessment and development of cost estimates for developing surface water sources in Okaloosa County.	C	√		√	√	
Water Flows and Levels Monitoring	Monitoring programs continue with USGS, DEP, and local governments to collect streamflow and water level data on a limited number of streams and lakes, as well as Sand-and-Gravel Aquifer in Region II.	O	√	√	√	√	
Surface Water Monitoring Program	The trend monitoring program continued with DEP in order to monitor 24 stations throughout the District, and programs continued through agreements with Tallahassee, Leon and Bay counties to measure continuous rainfall, water levels and stream flow. Additional project-specific data collection and analysis were undertaken. The District renewed involvement in STATUS, a statewide water quality program, which includes sampling 180 randomly chosen sites annually.	O	√	√	√	√	
SWIM Plan Development, Implementation, Assessment, and Revision	Implementation of SWIM plans continued.	O		√	√	√	
Update/Revise SWIM Priority List	The updated SWIM priority list update was completed in 2006.	C		√	√	√	
Ground Water Quality Special Projects	The District completed a Springs Inventory Special Report of the Wakulla and St. Marks Rivers. Spring characterizations were completed for St. Marks Rise and Morrison Springs. The groundwater temporal variability network sampling of 8 groundwater sites will continue. Additional spring inventories and characterizations are planned for 2007.	O	√		√	√	
Flood Hazard Map Modernization	This activity includes project scoping, DFIRM development, development of project proposals for FEMA funding, and development of interagency funding agreements with FEMA.	O		√	√	√	
Acquisition, Restoration, and Public Works Program				WS	FP	WQ	NS
Land Acquisition and Management	In FY 05-06, approximately 6,017 acres of land protected through the Florida Forever and FDOT mitigation programs. Management is in place for all 212,000+ acres.	O	√	√	√	√	
Abandoned Well Plugging	During FY 05-06, 2,350 abandoned wells were plugged.	O	√		√		
Floodplain Land Acquisition and Restoration	Acquisitions of over 6,000 acres along the St. Marks, Yellow, and Perdido rivers provide flood protection and protect floodplain functions.	O		√	√	√	
Restoration Projects	The District continued work to restore the natural flow and hydroperiod within Tates Hell Swamp. Restoration work also included efforts to restore floodplain and sloughs on the Apalachicola River and implementation of wetland mitigation projects for DOT.	O	√	√	√	√	
Operation and Maintenance of Lands and Works Program				WS	FP	WQ	NS
Management of District-Owned Lands	The 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 approximately 500,000 longleaf pines and 100,000 wiregrass plugs during FY 05-06.	O	√	√	√	√	
Operation and Maintenance of Lake Jackson Stormwater Facility	Improvements and maintenance of the stormwater facility are ongoing. Activities this year included the following: trash removal, exotic species eradication, educational field trips, and filter maintenance and repairs.	O		√	√	√	

District Water Management Plan Annual Report

TASK	RECENT ACTIVITY	STATUS	RELATED AORs			
			WS	FP	WQ	NS
Regulation Program						
Consumptive Uses of Water Regulatory Program (Chapter 40A-2, F.A.C.)	Administration and enforcement for consumptive use of water is an ongoing regulatory program that is meeting the objectives of Chapter 40A-2, F.A.C. During FY 2005-2006, 130 Consumptive Use Permits were processed.	o	√		√	√
Well Construction Regulatory Program (Chapter 40A-3, F.A.C.)	Rule administration and enforcement is a fully implemented regulatory activity. During FY 2005-2006, 9,200 well construction permits were processed.	o	√		√	
Artificial Recharge Regulatory Program (Chapter 40A-3, F.A.C.)	This rule was repealed effective July 1, 1998. The administration and processing of the artificial recharge permits was incorporated into the well construction regulatory program and is an ongoing activity.	o	√		√	
Regulation of Agricultural and Forestry Surface Water Management Projects (Chapter 40A-44, F.A.C.)	No Agriculture and Forestry individual surface water permits were issued during 2005-2006.	o		√	√	√
Management and Storage of Surface Waters (Chapter 40A-4, F.A.C.)	The District processed 220 MSSW permits during FY 2005-2006.	o	√	√	√	√
Environmental Resource Permitting	It is anticipated that stormwater management aspects of ERP will be implemented in 2007, with wetland resource protection ERP implemented in 2008.	o	√	√	√	√
Outreach Program						
WaterWays Education Program	Development and production of materials has been completed; distribution of materials is a continuing responsibility.	o	√	√	√	√
Participation on Interagency Hazard Mitigation Team, State Emergency Operations, and Annual State Hurricane Exercise	The District participates in a statewide program with EOC to prepare for and respond to hurricanes in northwest Florida. The District continued to monitor rivers and streams and provide information to the state, EOC, counties, National Weather Service, and the public. The District also works with Leon County on the real time Capital Area Flood Warning Network.	o	√	√		
Technical Assistance and Intergovernmental Coordination	The District reviewed approximately 26 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 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 2006-2007 MFL priority list is presented in Table 3.1.

Figure 3.1 NFWWMD MFL Priorities

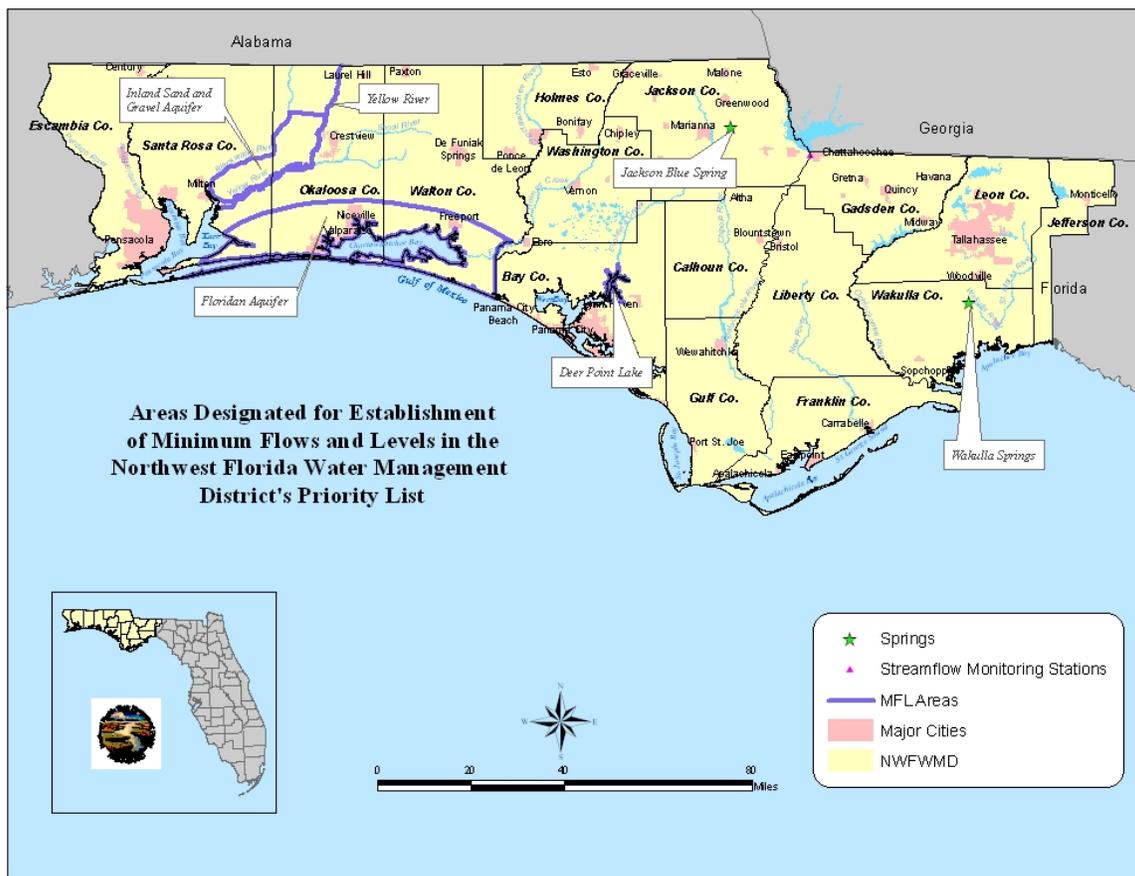


Table 3.1 Northwest Florida Water Management District MFL Priority List (2006-2007)

#	Waterbody	WB Type	County	2005 List	2006 List	Date Estab.	Peer Rev.	Reason for Schedule Change	Existence of or Potential for Significant Harm
1	Floridan Aquifer	A	Coastal Santa Rosa, Okaloosa, Walton	2007	2007		N		Potential migration of saline water due to significant drawdown of Floridan Aquifer in coastal portions of these counties.
2	Inland Sand and Gravel Aquifer	A	Santa Rosa, Okaloosa	2007	2007		N		Identified in Regional Water Supply as likely future water supply. Monitoring and Hydrologic modeling is ongoing to consider potential for harm.
3	Deer Point Lake	E/L	Bay	2006	2015		N	Revised analyses indicate projected demands are well within capacity without causing significant harm. Placed on re-evaluation status for 2015.	Potential increase in withdrawals greater than currently projected that result in reduced discharge to North Bay.
4	Wakulla Springs	S	Wakulla	2006	2008		N	Pending multi-party ongoing technical analyses of Wakulla Springs Basin.	Scheduling of first order magnitude springs is a Requirement of Chapter 373.042, F.S. Monitoring and technical analyses to determine hydrology and aquatic resource needs are ongoing.
5	Jackson Blue Spring	S	Jackson	2008	2008		N		Scheduling of first order magnitude springs is a Requirement of Chapter 373.042, F.S. Monitoring and technical analyses to determine hydrology and aquatic resources needs are ongoing.
6	Yellow River	R	Santa Rosa, Okaloosa	2008	2010		N	Major diversions or flow alterations due to Yellow R. Dam construction has been determined not to be feasible.	Monitoring and Technical analyses to determine consumptive demands, hydrology and aquatic ecosystem needs are ongoing.

IV. Annual Five-Year Capital Improvements Plan

Introduction

The five-year capital improvements plan (CIP) includes projected revenues and expenditures for capital improvements for fiscal years 2006-2007 through 2010-2011. 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 represented below:

2.0 Acquisition, Restoration and Public Works

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

3.0 Operation and Maintenance of Lands and Works

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

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

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

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

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

Five-Year Capital Improvements Plan

The purpose of the Five-Year Capital Improvements Plan (CIP) is to project future needs and anticipate future funding requirements to meet those needs. The CIP includes expenditures for basic construction costs (permits, inspections, site development, etc.), other project costs (land, survey, existing facility acquisition, professional services, etc.) and anticipated changes in program costs, changes in maintenance costs and changes in utility costs.

The development and construction of all capital projects are budgeted either under program heading Acquisition, Restoration and Public Works or under program heading Operation and Maintenance of Lands and Works.

The capital improvements projects are categorized according to the following activities: Land Acquisition, Surface Water Projects, Facilities Construction and Major Renovations and Land Management.

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

Table 4. 1 NFWFMD Five Year Capital Improvements Plan, Fiscal Years 2007-2011

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS					
2.1 LAND ACQUISITION					
REVENUES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Water Management Lands Trust Fund	475,954	0	0	0	0
Florida Forever	12,012,000	1,750,000	1,750,000	1,750,000	1,750,000
District Land Acquisition Reserve	3,795,017	3,984,768	4,184,006	4,393,207	4,612,867
TOTAL	16,282,971	5,734,768	5,934,006	6,143,207	6,362,867
EXPENDITURES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Florida Forever - Land Acquisitions	11,512,000	1,250,000	1,750,000	1,750,000	1,750,000
Land Acquisition	3,795,017	3,984,768	4,184,006	4,393,207	4,612,867
BluePrint 2000	500,000	500,000	0	0	0
Water Management Lands Trust Fund	475,954	0	0	0	0
TOTAL	16,282,971	5,734,768	5,934,006	6,143,207	6,362,867

Table 4. 1 NFWMD Five Year Capital Improvements Plan, Fiscal Years 2007-2011**2.2 WATER RESOURCE DEVELOPMENT**

REVENUES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Florida Forever	1,438,000	1,000,000	1,000,000	1,000,000	1,000,000
TOTAL	1,438,000	1,000,000	1,000,000	1,000,000	1,000,000

EXPENDITURES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Florida Forever - Land Acquisitions	1,438,000	1,000,000	1,000,000	1,000,000	1,000,000
TOTAL	1,438,000	1,000,000	1,000,000	1,000,000	1,000,000

2.3 SURFACE WATER PROJECTS

REVENUES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
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 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
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 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Water Management Lands Trust Fund	0	175,000	0	50,000	0
TOTAL	0	175,000	0	50,000	0

EXPENDITURES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Land Management Equipment/Materials Storage Barn	0	175,000	0	50,000	0
TOTAL	0	175,000	0	50,000	0

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS**3.1 LAND MANAGEMENT**

REVENUES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Water Management Lands Trust Fund	550,000	500,000	500,000	500,000	500,000
Florida Forever	825,000	300,000	275,000	250,000	200,000
TOTAL	1,375,000	800,000	775,000	750,000	700,000

EXPENDITURES	FY 2006 - 2007	FY 2007 - 2008	FY 2008 - 2009	FY 2009 - 2010	FY 2010 - 2011
Public/Land Management Access Bridges	1,125,000	350,000	625,000	600,000	550,000
Spring Restoration	200,000	400,000	100,000	100,000	100,000
Creek Bank and Solution Hole Stabilization	50,000	50,000	50,000	50,000	50,000
TOTAL	1,375,000	800,000	775,000	750,000	700,000

TOTAL CAPITAL EXPENDITURES	26,295,971	14,909,768	14,909,006	15,143,207	15,262,867
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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: Umbrella, Watershed-Based 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, 2007

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: OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridge

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

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

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

Expected Completion Date: September 30, 2007

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. Bridge design is complete. Bids will be presented for Governing Board approval in March, 2007.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): \$375,000, subject to engineering design/bid (estimated cost may increase to \$585,000 due to increases in construction and material costs. Actual construction, if approved, will be subject to approval of a budget amendment.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at \$15,000 for engineering design/construction services (estimated cost may increase to \$42,000 per latest engineering fee quote).

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

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

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridges

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

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

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

Expected Completion Date: September 30, 2007

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

Plan Linkages: District's Florida Forever Work Plan

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

Alternative(s): The current bridges were used for logging purposes, have deteriorated and are unsafe. None of the bridges have a DOT load rating. In addition, road fill was placed across these sloughs adversely impacting hydrology. The District intends to restore natural hydrologic function to the Escambia River floodplain by removing logging road fill and installing two bridges, subject to site conditions. 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. Bridge engineering designs are underway and will be completed in late spring, 2007.

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

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Estimated at \$35,000 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 Springs Complex – Restoration and Protection

Type: Multiple Spring Restoration and Protection Project

Physical Location: Econfina Creek Water Management Area

Square Footage/Physical Description: Proposed restoration and protection of Pitt, Sylvan and Williford springs. The District intends to work with DEP's Spring Restoration Committee (SRC) to develop a comprehensive spring restoration/protection plan for the Econfina Creek Springs Complex located at the junction of Econfina Creek and Hwy. 20. Project will consist of a three step process, i.e. drafting and evaluating a "conceptual design," review/approval by the Spring Restoration Committee and by the Public and Board approval of a final design and restoration and protection (construction) measures. Restricted access measures for canoeists may be proposed for Williford Spring (2nd Magnitude), subject to BOT sovereign land exception. Design concepts and design sketches are complete as of March, 2007. Site surveying is also under way. The next step is review/approval of concepts/sketches by the SRC/Public/Governing Board. Final design should commence summer of 2007.

Expected Completion Date: September 30, 2007

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 \$100,000 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, 2007

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.): \$25,000 for engineering designs.

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

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

PROGRAM: 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, 2007

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

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Public/Land Management Access Bridges and Bridge Culverts

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

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

Square Footage/Physical Description: Three proposed single-lane steel Bailey bridges and two bridge culverts (boxed culverts), subject to engineering design.

Expected Completion Date: September 30, 2007

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 or specifications for public roadways) and road fill was placed across Pine Log Creek for fishing and management purposes 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. The District 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 bank to conduct habitat restoration, erosion control, prescribed burning, etc. activities. Lack of access prevents law enforcement/emergency vehicles from accessing 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, subject to engineering design.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): \$78,390 for engineering design services.

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

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

PROGRAM: ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: LAND MANAGEMENT

Project Title: Black Pond Water Control Structure

Type: Water Control Structure

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

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

Expected Completion Date: September 30, 2007

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

Plan Linkages: District's Florida Forever Work Plan

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

Alternative(s): District could delay the project, which may endanger public safety, especially private downstream landowners and public recreational users of the property in the event of floods. Natural lake/swamp levels are also being adversely impacted due excessive drawdown of the natural lake/swamp ecosystem which adversely impacts fish and wildlife populations.

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

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

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

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

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V. Water Supply

5.1 Five-Year Water Resource Development Work Program: Fiscal Year 2006-2007 Update

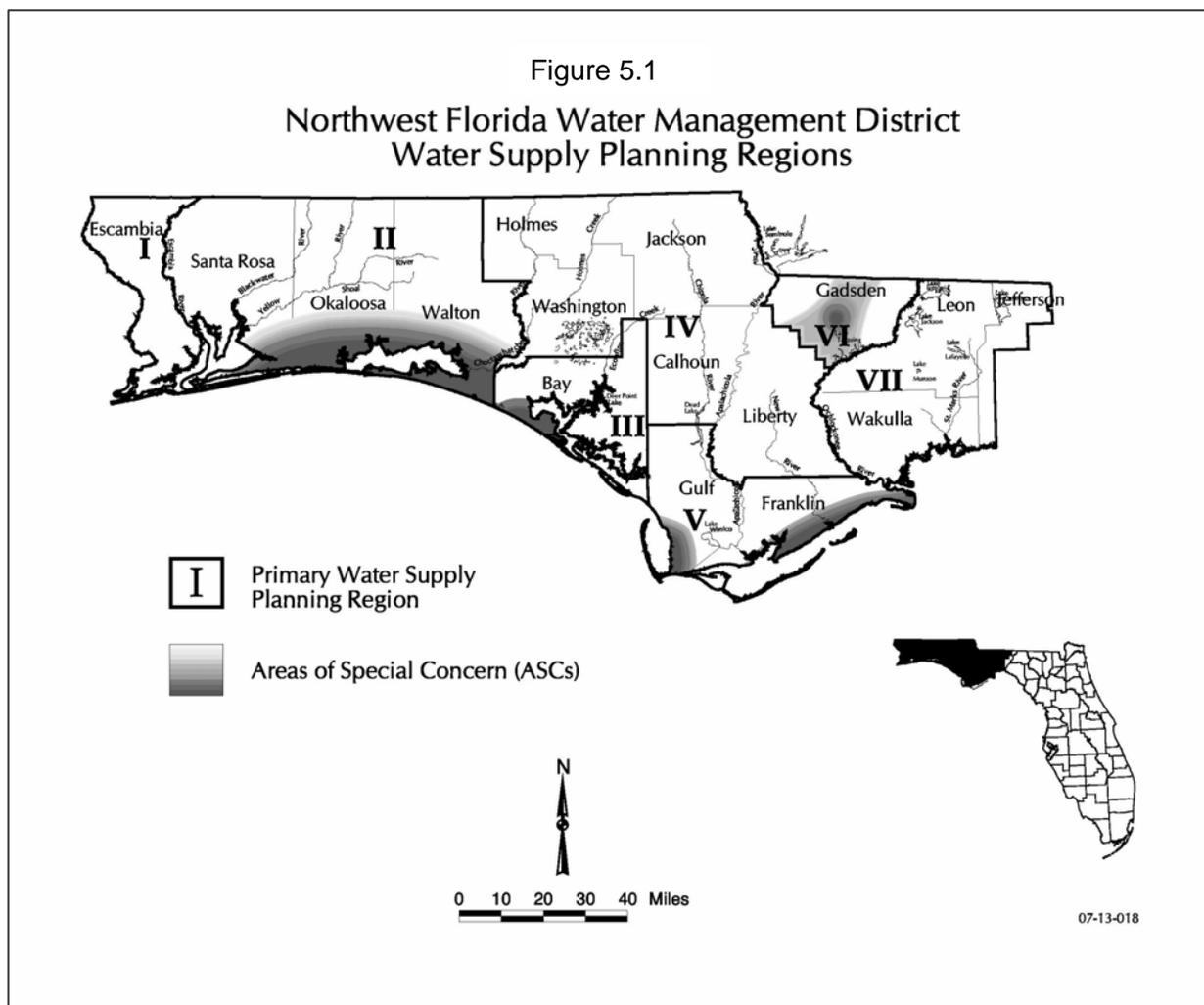
Overview

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 (NFWWMD or District) established seven water supply planning regions (Figure 1.1) and completed the "District Water Supply Assessment" (WSA) in 1998. Based on the WSA and subsequent action by the NFWWMD 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. In 2006, the NFWWMD Governing Board determined that issues affecting the adequacy and sustainability of traditional water supplies for coastal Franklin County, as well as the need for planning alternative surface water development in Gulf County, warranted development of a regional water supply plan for Region V. The Region V RWSP is currently under development and expected to be completed during FY2006-2007. Funding has been budgeted for resource assessment, alternatives analysis, and plan development and implementation for Regions II and V.



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 demands along the coastal fringe has caused formation of a substantial cone of depression in the aquifer. Public supply water use in the region is projected to increase 59 percent from 48.87 million gallons per day (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.

An update to the Region II RWSP was developed during FY2005-2006 and is scheduled for Governing Board approval in October 2006. This update was developed in an open public process in accordance with Section 373.0361, F.S., including technical and public workshops with local governments, utilities, and the public. The plan incorporates updated and revised water resource development and water supply development components, specific alternative water supply development projects, and other elements as described in the statute. As part of the plan, the Water Resource Development Work Program (WRDWP) reported on here is being updated concurrently with the RWSP. The current report is consistent with the proposed plan update while also reporting on cumulative project completion from the 2000 RWSP. Reports to follow, beginning with the March 1, 2007 Consolidated Annual Report, will be based on the updated plan and work program.

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, implementation of the strategies detailed in this work program has resulted in identification of 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 the Floridan and Sand-and-Gravel aquifers, increased reuse and conservation, and surface water sources. It should also be noted that all future water demands, including considering 1-in-10 year drought and seasonal water demand fluctuations, are addressed through the consumptive use permitting program. As the RWSP is updated, emphasis will focus on the sustainability of traditional and alternative sources of water supply as well as the need to develop new sources 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 the final calibrations and adjustments have been made toward completion of the Eastern Sub-Regional Model. A final report has been issued assessing the feasibility and preliminary cost estimates of surface water source alternatives 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, legislative mandates for water supply planning and water resource development have required the NFWFMD to use other sources of revenue and to seek grant funds for addressing water supply issues. To date, the District has identified or secured funding for water resource development and supply development from numerous sources, including the following:

- Water Management Lands Trust Fund (WMLTF);
- 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 Program Trust Fund.

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 funding source allows 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 seeks to focus WPSPTF revenues toward implementation of alternative water supply development and priority water resource development projects. Additional water resource development activities and other support functions will continue to be funded with WMLTF, District general revenues, grant funds, and other sources as available.

A description of alternative water supply projects using the funds allocated to the District for FY2005-2006 was included in the 2006 Consolidated Annual Report as required by Ch. 373.036(7), F.S. The District has developed a process and strategy for implementing elements of the Water Protection and Sustainability Program through projects that include alternative ground and surface water development, reuse, and springs protection.

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. The District has also set aside reserves that may be necessary to fund water resource development efforts and water supply assistance, including possible funding for other regions in future years. Additional District expenditures for acquisition and protection of important recharge lands should also be recognized.

For FY 2006-2007, the District has budgeted approximately \$543,000 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 alternative water supply development projects.

Water Supply Development Project Assistance

While this report is focused on the District's water resource development component of the Region II RWSP, a brief description of the District's technical and financial assistance for water supply development helps illustrate how the combined components of the RWSP work together to ensure sustainable long-term water supplies. 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 development of inland water sources for coastal utilities in Santa Rosa (inland Sand and Gravel Aquifer project), Okaloosa (inland Floridan Aquifer wells and transmission facilities), and Walton (Rock Hill inland wellfield development and transmission facilities) counties. These projects have significantly reduced pumping from coastal Floridan Aquifer wells. Implementation of reuse projects in all three counties is helping reduce the use of potable-quality water for landscape irrigation. These projects are continuing to be finalized over the next several years as opportunities, needs, and funding issues are addressed. Project descriptions in the following section provide additional detailed information. These efforts complement dedicated regulatory efforts to fully protect water resources within the coastal water resource caution area. Within this area, stringent conservation and reporting requirements are applied, and new allocations of potable Floridan Aquifer water for non-potable uses are prohibited.

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 and water resource 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 assisted 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. Water Protection and Sustainability Program funds have been allocated to assist the City of Tallahassee improve and increase reuse and provide additional protection for the Wakulla Springs area.

Strategy 1.0 Floridan Aquifer Sustainability Model Analysis Project

The District recently completed development of a solute transport model required for analysis of saltwater intrusion into the Floridan Aquifer. The model was developed with two distinct domains, west and east, to more accurately portray hydrogeologic characteristics and to make the massive, complex data sets manageable. Model results for the western domain have applicability to the major coastal utilities in Santa Rosa, Okaloosa and Walton counties: Holley-Navarre Water System (WS), Midway WS, Santa Rosa County (Navarre Beach), Okaloosa County West WS, Hurlburt Field, City of Mary Esther, City of Fort Walton Beach, Okaloosa County Garnier WS, and Eglin AFB Main and Housing WS. The consultant's final modeling report has been distributed to interested utilities and is available from the District or via the District web site. The model is available for use by the regulated community.

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

Water Supply

Model Final Report” (HydroGeoLogic, Inc. 2005). 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.

The eastern sub-region model (applicable to Destin Water Users, South Walton Utility System, City of Freeport and Regional Utilities of Walton County) was completed during FY 2005-2006. Both model domains are used to determine sustainable levels of withdrawal for public supplies, and will be 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 2006-2011)	\$100,000	Potential Funding Source	<i>NFWFMD, Local Governments, Utilities, Regional Utility Authority</i>
Estimated District Participation	\$1,157,176	Quantity of Water Made Available	30 Mgal/d
Implementing Agency	<i>NFWFMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2006-2007)	\$100,000	Total Amount Spent to Date (Through FY 2005-2006)	\$1,057,176

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 water withdrawal from the coastal Floridan Aquifer identified as a result of this modeling effort is 30 Mgal/d. As the model is applied regionally and calibrated with new monitoring data, it should be possible to continually improve estimates of Floridan Aquifer water available to meet current and future demands in a sustainable manner. Future work accomplished through this project will be directed to model application through additional resource assessments, consumptive use permit application evaluation, withdrawal scenario development, and investigating alternative approaches to meeting requirements for establishment of minimum aquifer levels or water reservations.

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. Through this project, a ground water flow model was developed to assess and identify the volume of water producible from the aquifer. The study area for this effort is that portion of Santa Rosa and Okaloosa counties lying between the Blackwater and Yellow rivers. In previous years, significant data collection was accomplished. This involved constructing project-specific monitoring wells, determining aquifer hydraulic properties, mapping aquifer unit thicknesses, and measuring ground-water levels and stream discharge. Model development and calibration was accomplished subsequent to data collection. The model is 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 applying the model to identify further quantities of water may be safely withdrawn from this source and to evaluate potential 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. Based on this work and continuing development of the inland wellfield, it is anticipated that Santa Rosa County utilities will continue to decrease withdrawals from the coastal Floridan Aquifer.

Estimated 5-Year Cost (FY 2006-2011)	\$50,000	Funding Source	NFWWMD
Estimated District Participation	\$642,775	Quantity of Water Made Available	18 Mgal/d
Implementing Agency	NFWWMD	Project Status	Ongoing
Proposed FY Expense (FY 2006-2007)	\$50,000	Total Amount Spent to Date (Through FY 2005-2006)	\$592,775

Strategy 3.0 Coastal Sand-and-Gravel Aquifer Project

The 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" (DeFosset 2004). 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 2006-2011)	\$0	Potential Funding Source	NFWWMD, Utilities
Estimated District Participation	\$82,676	Quantity of Water Made Available	1.8-2.4 Mgal/d
Implementing Agency	NFWWMD	Project Status	Complete
Proposed FY Expense (FY 2006-2007)	\$0	Total Amount Spent to Date (Through FY 2005-2006)	\$82,676

Currently, there are no future District expenses anticipated for this project and it is not included in the plan update as a water resource development project. 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 Project

Although this project does not directly provide water supplies, it is an important part of the District's implementation strategy by providing support, oversight, tracking, and reporting of the RWSP for Region II. The plan update was completed in FY2005-2006 and is scheduled to be submitted for Governing Board consideration in October 2006. The District will 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, 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 this 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. Such further investigations, which have not been identified at this time, could lead to specific alternative water supply development assistance or water resource development projects that support dependable and sustainable supplies of water.

The Districtwide Water Supply Assessment required under Ch. 373.036, F.S., is scheduled for update and revision by 2008, and will be accomplished for Region II under this Water Resource Development project. This update coincides with or is subsequent to local government comprehensive plan evaluation and appraisal reports, which include substantially revised requirements for coordination with the District's RWSP. A primary objective for this project will be to provide assistance to and coordination with local planning efforts.

Strategy 5.0 Water Reuse Coordination Project

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. Continuing efforts have included coordination and facilitation of reclaimed water supply efforts undertaken by utilities in Santa Rosa, Okaloosa, and Walton counties. These efforts have complemented those carried out through the District's Regulatory program. Together, they have helped promote reuse projects in Okaloosa and Walton counties. A recent project is Okaloosa County's Bob Sikes Water Reclamation Facility, for which the District has allocated funding assistance through the WPSPTF. Additional

municipal and county beneficial reuse initiatives are being planned for the vicinities of Fort Walton Beach and Niceville.

The District has made its Florida Forever Capital Improvements grant program and funds from the Water Protection and Sustainability Program Trust Fund 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 continues to emphasize 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 and implementation is underway for new reuse projects in unincorporated south Walton County, Okaloosa County, and Crestview.

Estimated 5-Year Cost (FY 2006-2011)	\$75,000	Potential Funding Source	<i>NFWWMD</i>
Estimated District Participation	\$163,309	Quantity of Water Made Available	<i>5 Mgal/d</i>
Implementing Agency	<i>NFWWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2006-2007)	\$15,000	Total Amount Spent to Date (Through FY 2005-2006)	\$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 NFWWMD 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 2006-2007. 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 Project

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.

Water Supply

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 50,000 brochures being distributed from May 2004 through September 2006. 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 to encourage reuse of water in homes, farms, industries, and communities. Sample brochures were sent to all utilities in Region II, as well as others in Franklin and Gadsden counties. Thus far, over 5,000 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. Water CHAMP materials were provided to six hotels in Okaloosa and Walton counties to date.

The District participated in the recent statewide study of the effects of water rate pricing structures on public supply water demand (Whitcomb 2005). 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 2006-2011)	\$75,000	Potential Funding Source	<i>NWFWMD</i>
Estimated District Participation	\$148,570	Quantity of Water Made Available	<i>2.5 Mgal/d</i>
Implementing Agency	<i>NWFWMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2006-2007)	\$15,000	Total Amount Spent to Date (Through FY 2005-2006)	\$73,570

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 Project

Although surface water sources are not likely to be needed in the immediate future, they have been identified as a potentially viable source of supply to meet future demands beyond approximately 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. During FY2005-2006, the District's water supply consultants prepared an analysis of potential surface water supply sources in Okaloosa County, presented in the report "Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates" (PBS&J 2006). This report lays the groundwork for several potential alternative

water supply development projects. The alternatives under consideration are direct river withdrawal, potentially with offline tributary surface impoundments, and riverbank filtration. Future water resource development project activities will include follow-on technical assistance to Okaloosa County and other area utilities, detailed field assessments of environmental and technical characteristics within potential project areas, and evaluating the feasibility of additional potential surface water project sites at the request of local governments and utilities in Region II. Associated with these activities, the District may evaluate watershed resource protection and restoration needs and opportunities.

Estimated 5-Year Cost (FY 2006-2011)	\$500,000	Potential Funding Source	NFWWMD
Estimated District Participation	\$952,854	Quantity of Water Made Available	25 Mgal/d
Implementing Agency	NFWWMD	Project Status	Ongoing
Proposed FY Expense (FY 2006-2007)	\$100,000	Total Amount Spent to Date (Through FY 2005-2006)	\$452,854

The District estimates continuing costs at \$100,000 in FY 2006-2007, with funding provided through the Water Management Lands Trust Fund. Implementation of surface water alternative water supply development projects will be funded through the WPSPTF, local governments, and utilities.

Strategy 8.0 Hydrologic Data Collection and Analysis Project

The NFWWMD 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 2006-2011)	\$478,000	Potential Funding Source	NFWWMD
Estimated District Participation	\$824,228	Quantity of Water Made Available	NA
Implementing Agency	NFWWMD	Project Status	Ongoing
Proposed FY Expense (FY 2006-2007)	\$88,000	Total Amount Spent to Date (Through FY 2005-2006)	\$346,228

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 \$88,000 in FY 2006-2007 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 Project

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.

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. The District intends to implement this project through the District's regulatory programs to the extent possible.

Estimated 5-Year Cost (FY 2006-2011)	\$150,000	Potential Funding Source	<i>NFWFMD, State of Florida, Federal, Local Governments</i>
Estimated District Participation	\$183,559	Quantity of Water Made Available	NA
Implementing Agency	<i>NFWFMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2006-2007)	\$30,000	Total Amount Spent to Date (Through FY 2005-2006)	\$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 well plugging that is not associated with regulatory requirements.

Strategy 10.0 Aquifer Storage and Recovery Viability Project

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 interests and 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 as a Water Resource Development project include the Water Protection and Sustainability Trust Fund, Water Management Lands Trust Fund, federal funds and coastal public utilities interested in pursuing this alternative.

During subsequent years, it is anticipated that, in coordination with increased activities to study surface water supply alternatives, the District may 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 2006-2011)	\$30,000	Potential Funding Source	<i>NFWFMD, Utilities, Local Governments</i>
Estimated District Participation	\$30,000	Quantity of Water Made Available	<i>TBD</i>
Implementing Agency	<i>NFWFMD</i>	Project Status	<i>Ongoing</i>
Proposed FY Expense (FY 2006-2007)	\$10,000	Total Amount Spent to Date (Through FY 2005-2006)	\$0

Water Resource Development Project Summary

Overall, the District's FY 2006-2007 funding for water resource development projects in Region II is \$543,000. The total cost of the program is currently estimated to be at \$5,426,841 by the end of FY 2010-2011. 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 and is scheduled for Board approval in October 2006. The WRDWP and associated funding will be revised with the plan update, beginning with the Consolidated Annual Report due March 1, 2007. This is because this report is due within 30 days of budget adoption by the Governing Board (Ch. 373.536(6)(a)4, F.S.), which is October 28, 2006, and the RWSP update will be presented for Governing Board approval on October 26, 2006.

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 2006-2007 budget. In this regard, the FY 2006-2007 WRDWP budget of approximately \$543,000 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 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 (e.g., Region V, Franklin and Gulf counties) or to provide financial assistance for water resource development or water supply development projects in other regions.

Table 5.1.A. NFWFMD 2006-2011 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 05-06**
			FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11			
1	Floridan Aquifer Sustainability Model Analysis	77	\$100,000	\$40,000	\$40,000	\$40,000	\$40,000	\$1,317,176	T	\$1,057,176
2	Inland Sand-and-Gravel Aquifer Project	78	\$40,000	\$10,000	\$0	\$0	\$0	\$642,775	T	\$592,775
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	\$145,000	\$100,000	\$15,000	\$20,000	\$20,000	\$1,086,694	R	\$786,694
5	Water Reuse Coordination	80	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$163,309	R	\$88,309
6	Water Conservation	81	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$148,570	R	\$73,570
7	Surface Water Supply Feasibility	82	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$952,854	R	\$452,854
8	Hydrologic Data Collection & Analysis	84	\$88,000	\$90,000	\$100,000	\$100,000	\$100,000	\$824,228	R	\$346,228
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			\$543,000	\$410,000	\$325,000	\$320,000	\$320,000	\$5,431,841		\$3,513,841

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 10-11. These estimates do not include funding provided by outside entities.

** Figures include preliminary year costs for FY 06-07, 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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Five-Year Water Resource Development Work Program Region V: Franklin and Gulf Counties

This Water Resources Development Work Program document is a supplement to the District's Five Year Water Resource Development Work Program (WRDWP) submitted in October 2006 per section 373.536(6)(a)4, Florida Statutes (F.S.), to incorporate the Water Resource Development Component for Region V. The WRDWP describes strategies and spending plans for implementing water resource development components of each approved RWSP developed or revised under section 373.0361, F.S. The primary funding sources for implementing the plan are the Water Protection and Sustainability Program Trust Fund (WP&SPTF) and the Water Management Lands Trust Fund (WMLTF). The District-wide WRDWP, incorporating specific plans for Water Supply Planning Region's II and V and describing other activities across the District will be incorporated within the March 1, 2007, Consolidated Annual Report and updated annually in accordance with Sections 373.536 and 373.036, F.S.

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

Hydrologic and Water Quality Data Collection and Analysis Project

This activity provides essential water resource data, analysis, and modeling for determining the location, distribution, and physical characteristics of production wells and other supply sources. It is inclusive of water resource development in support of developing alternative sources of water supply to serve all Region V communities. Tasks will include ground water modeling, water quality sampling and analysis, hydrologic monitoring and analysis, and preliminary well and facility design for regional water supply. Longer term monitoring tasks over the next 5 years may also include water quality and hydrologic monitoring to manage and protect groundwater resources including protection of groundwater quality from saltwater encroachment.

Estimated 5-Year Cost (FY 2007-2011)	<i>\$600,000</i>	Potential Funding Source and Implementing Agency	<i>NWFWMD, WP&SPTF, WMLTF</i>
Estimated District Participation	<i>\$600,000</i>	Quantity of Water Made Available	<i>Up to 9 Mgal/d</i>
Proposed FY Expense (FY 2007)	<i>\$400,000</i>	Status	<i>Ongoing</i>

Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance Project

District staff will coordinate with local governments and utilities, to include providing technical assistance for required water supply-related comprehensive planning activities, source protection, and project design and engineering. This may include coordination to assist in development and review of Water Supply Facility Work Plans and water supply portions of Evaluation and Appraisal Reports. Additionally, the District will help coordinate and support regional coordination and planning on the part of regional water supply entities and local governments. Other assistance includes activities related to protection of groundwater and surface water sources, water resources engineering, coordination with other resource protection and management agencies, and other technical assistance. Water supply source protection will be coordinated through other water resource protection and restoration activities currently ongoing external to the activities planned under this work program.

Estimated 5-Year Cost (FY 2007-2011)	<i>\$100,000</i>	Implementing Agency and Potential Funding Source	<i>NWFWMD, WP&SPTF, WMLTF</i>
Estimated District Participation	<i>\$100,000</i>	Quantity of Water Made Available	<i>Up to 9 Mgal/d</i>
Proposed FY Expense (FY 2007)	<i>\$25,000</i>	Status	<i>Ongoing</i>

Reclaimed Water Use and Conservation Coordination and Assistance Project

Water reuse is the deliberate, beneficial use of reclaimed water. Reuse is an important component of the regional water supply strategy and is included wherever feasible in Region V as a way to reduce demand for potable quality water. The District's role in developing public access beneficial reuse will include coordinating among local utilities, inventorying existing and potential beneficial reuse sources and demands, and providing technical and financial assistance for specific reuse projects. District staff will also review local comprehensive plan amendments and development proposals to assist in local reuse and conservation planning, provide normal consumptive use permit review and issuance, and coordinate with DEP's reuse regulation responsibilities.

Estimated 5-Year Cost (FY 2007-2011)	<i>\$25,000</i>	Potential Funding Source and Implementing Agency	<i>NWFWMD, WP&SPTF, WMLTF</i>
Estimated District Participation	<i>\$25,000</i>	Quantity of Water Made Available	<i>To be determined by project</i>
Proposed FY Expense (FY 2007)	<i>\$5,000</i>	Status	<i>Ongoing</i>

RWSP Implementation Project

Coordinating implementation activities, project and program management, completing administrative tasks related to plan implementation and tracking, fulfilling statutory reporting requirements, and related activities are all part of implementing the RWSP for Region V. This activity will also provide for technical assistance to local governments and water suppliers, public awareness and outreach, distribution of educational materials, and other related activities supporting sustainable water supply in the region.

Estimated 5-Year Cost (FY 2007-2011)	<i>\$25,000</i>	Potential Funding Source and Implementing Agency	<i>NWFWMD, WMLTF</i>
Estimated District Participation	<i>\$25,000</i>	Quantity of Water Made Available	<i>Up to 9 Mgal/d new sources, additional reuse and conservation to be determined</i>
Proposed FY Expense (FY 2007)	<i>\$5,000</i>	Status	<i>Ongoing</i>

**Table 5.1.B. 2007-2011 Region V Water Resource Development Work Program
Five-Year Funding Summary**

Region V Water Resource Development Activities		RWSP Page #	Plan Implementation Costs					Estimated Total Cost*
			FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11	
1	Hydrologic and Water Quality Data Collection and Analysis	11	\$400,000	\$125,000	\$25,000	\$25,000	\$25,000	\$600,000
2	Regional Water Supply Source Protection, Coordination, and Technical Assistance	12	\$25,000	\$25,000	\$25,000	\$15,000	\$10,000	\$100,000
3	Reclaimed Water Use and Conservation Coordination and Assistance	12	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000
4	Regional Water Supply Plan Implementation	12	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000
TOTAL			\$435,000	\$160,000	\$60,000	\$50,000	\$45,000	\$750,000

*Does not include Water Resource Development expenses funded through the Water Protection Sustainability Program Trust Fund and Water Management Lands Trust Fund prior to FY 2006-2007.

Per the RWSP for Region V, the current water supply development project plan is provided with Table 2. These projects qualify as alternative water supply development projects upon Governing Board approval of the Region V RWSP and are intended to provide for long-term, sustainable water supplies to meet foreseeable demand. Costs listed reflect total capital cost estimates and include those eligible for Water Protection Sustainability Program Trust Fund (WPSPTF) funding through the NFWMD WPSPTF grant program. These costs may be updated on an annual basis as the WRDWP is updated consistent with the District's budget and availability of funding.

Table 5.1.C. Region V Water Supply Development Projects							
Project/Activities	Responsible Entities	Purpose / Objective	Estimated Quantity (Mgal/d)	Time-frame	Funding Amounts & Sources		
					WPSPTF	NFWMD	Local
<i>Inland Source Development and Water Supply Source Protection</i>							
Franklin County Inland Ground Water Source	Franklin County, Utilities	Develop inland alternative water supply source to abate risk of salt water intrusion in coastal wells	3.0	2007 - 2010	\$500,000	\$500,000*	TBD
<i>Treatment and Transport Facility Development</i>							
Gulf County Surface Water Supply	City of Port St. Joe	Develop surface water system to reduce impact on coastal production wells	6.0	2007 - 2009	\$4,000,000	\$0	\$16,000,000 to \$21,000,000
<i>Utility Interconnects and Infrastructure Improvements</i>							
Water Supply System Facility Interconnects, Enhancements, and Improvements	Local Governments and Utilities	Assist with delivery system interconnections and facility improvements	TBD	2007 - 2011	TBD	TBD	TBD
<i>Reclaimed Water Use</i>							
Water Reuse Facilities	Local Governments and Utilities	Construction of water reuse facilities to replace use of potable water for landscape irrigation and other beneficial uses	<1.0	2007 - 2011	TBD	TBD	TBD

TBD - to be determined

*May also be eligible as WPSPTF funding

5.2 Alternative Water Supplies Annual Report

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

- Accounts for the disbursement of all budgeted amounts pursuant to section 373.1961, F.S.;
- Describes all alternative water supply projects funded;
- Describes the quantity of new water to be created as a result of such projects;
- Accounts separately for any other funding provided through grants, matching grants, revolving loans, and the use of district land or facilities to implement regional water supply plans.

Beginning in 2006, the District initiated funding a series of Alternative Water Supply Development projects and Water Resource Development projects under the Water Protection and Sustainability Program (WPSP). A number of these projects help implement as water supply development past, long-term efforts of the District and local utilities to identify and develop alternative water supplies through dedicated water resource development efforts. It should also be noted that substantial water supply development assistance was provided to local governments and utilities prior to enactment of the WPSP. 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 continued development and implementation of a series of Alternative Water Supply Development and Water Resource Development projects pursuant to the Water Protection and Sustainability Program, the Region II RWSP, and the Region V RWSP (proposed for approval in January 2007). Table 5.2 provides summary information on these projects.

**Table 5.2.A. NFWWMD Alternative Water Supply Development and Water Resource Development Projects
FY 2005-2006 Appropriation**

Project	Cooperators	Planning Region	Affected Waterbody	Project Type	Estimated Quantity (Mgal/d)	Estimated Construction Funding			
						NFWWMD (WPSP)	NFWWMD (General Fund)	Local	Total
Area-Wide Alternative Water Supply Source Expansion	Utilities in Walton County	II	Floridan Aquifer	AWSD Inland Floridan Aquifer Wellfield	9.0	\$6,500,000	\$0	\$11,172,750	\$17,672,750
Bob Sikes Water Reclamation Facility Expansion	Okaloosa County	II	Floridan Aquifer	AWSD Reuse/Reclaimed Water	1.0	\$2,000,000	\$0	\$4,000,000	\$6,000,000
Inland Floridan Aquifer Source	Franklin County Local Utilities	V	Floridan Aquifer	WRD Inland Floridan Aquifer Development; long-term AWSD	3.0	\$500,000	\$0	\$500,000	\$1,000,000
Tram Rd. Public Access Reuse Facility	City of Tallahassee	VII	Wakulla Springs; Floridan Aquifer	Spring Protection; Reuse	1.2	\$1,000,000	\$0	\$2,700,000	\$3,700,000
Total					14.2	\$10,000,000	\$0	\$18,372,750	\$28,372,750

**Table 5.2.B NFWMD Alternative Water Supply Development and Water Resource Development Projects
FY 2006-2007 Appropriation**

Project	Cooperators	Planning Region	Affected Waterbody	Project Type	Estimated Quantity (Mgal/d)	Estimated Construction Funding			
						NFWMD (WPSP)	NFWMD (General Fund)	Local	Total
Surface Water Treatment Plant	City of Port St. Joe	V	Floridan Aquifer; Chipola River	AWSD Surface Water Canal/ Treatment	6.0	4,000,000	\$0	\$21,000,000	\$25,000,000
Inland Sand-and-Gravel Aquifer Wellfield	Fairpoint Regional Utility System	II	Floridan Aquifer; Sand-and-Gravel Aquifer	AWSD Inland Floridan Aquifer Wellfield	1.4	\$1,000,000	\$0	\$1,500,000	\$2,500,000
Reuse Improvements	City of Chipley	IV	Floridan Aquifer	WRD Public Access Reuse	1.0-3.8	\$500,000	\$0	\$0	\$5,000,000*
Additional AWSD or Local Reuse Projects	Local Governments and Utilities	II, V	Floridan Aquifer	AWSD; WRD Public Access Reuse TBD	tbd	\$500,000	\$0	\$750,000	\$1,250,000
Total					8.4+	\$6,000,000	\$0	\$23,250,000	\$33,750,000

*Construction Costs for Chipley facility anticipated to be between \$5,000,000 and \$7,000,000, with the balance of funding provided by SRF

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 213,000 acres have been protected for water resource purposes through the land acquisition efforts of the District either in fee simple or through conservation easements.

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

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

Florida Forever Program

In 1999 the Florida Legislature passed the Florida Forever Act (Section 259.105, F.S.) which continues the state's long-term commitment to environmental land acquisition, restoration of degraded natural areas, and high-quality outdoor recreation opportunities. The Florida Forever Program authorizes issuance of up to \$300 million annually in bonds over a ten-year period to several state agencies and the five water management districts (WMDs). Together, the WMDs receive up to \$105 million annually as outlined in the table below.

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

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

Acquisition Planning

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

This year the District's acquisition efforts will focus on the purchase of 5,355 acres along the Perdido River and inholdings and additions within the existing water management areas (WMAs). Existing WMAs include the Escambia River, Blackwater River, Yellow River, Garcon Point, Choctawhatchee River/Holmes Creek, Econfina Creek, Chipola River, and Apalachicola River. All of these WMAs will be high priority areas for the acquisition of additions and inholdings. Acquisition efforts will be directed toward acquiring those properties which the District adjoins on one, two or three sides (additions) or those parcels which the District surrounds on all sides (inholdings).

Approved Acquisition Areas

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

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

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

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

Mitigation Acquisitions

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

Note to Landowners

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

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

Note on Less-Than-Fee Methods of Land Protection

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

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

Land Acquisition Projects

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

Figure 6.1.a. 2007 Proposed Land Acquisition Areas (West Region)

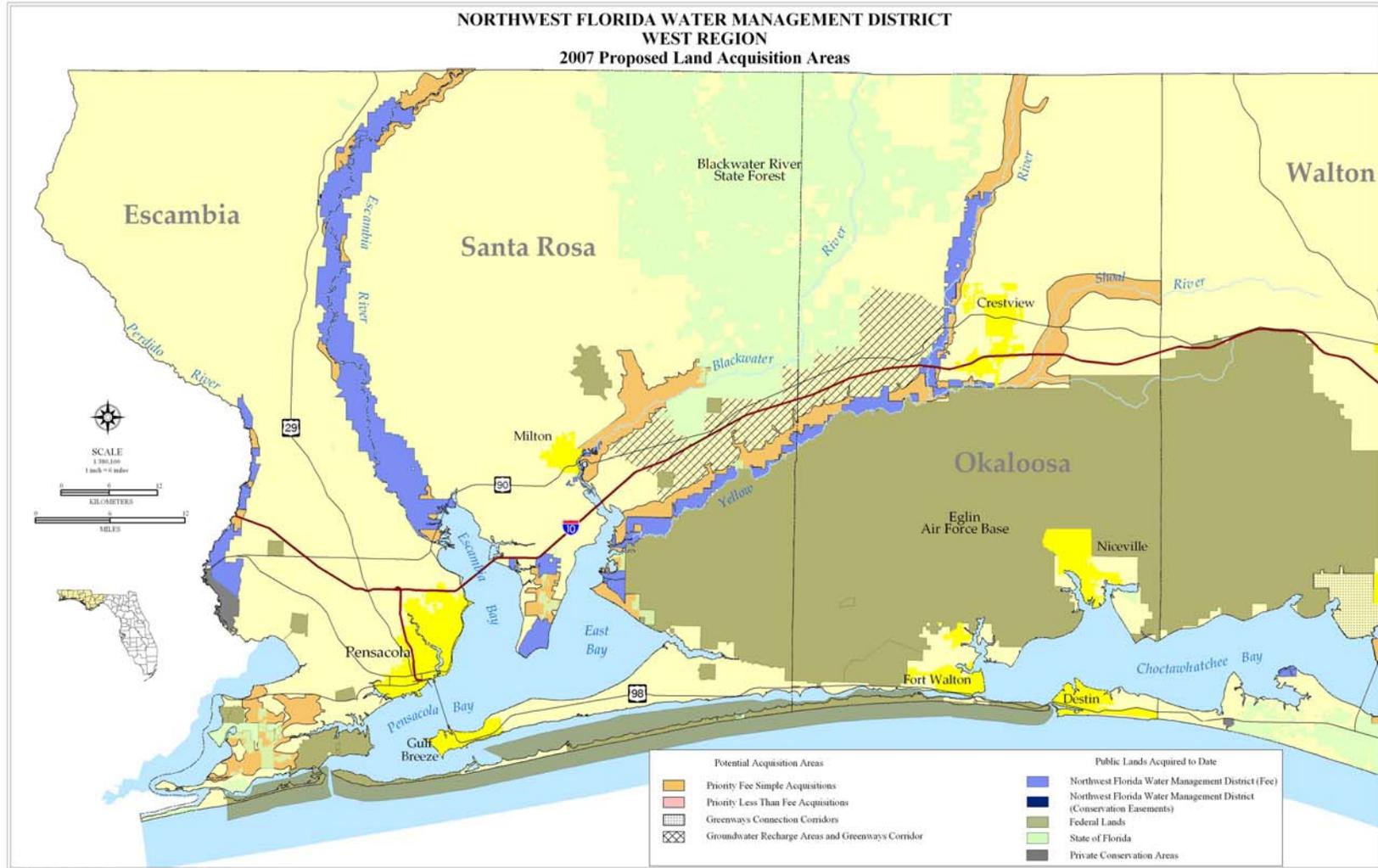


Figure 6.1.b. 2007 Proposed Land Acquisition Areas (Central Region)

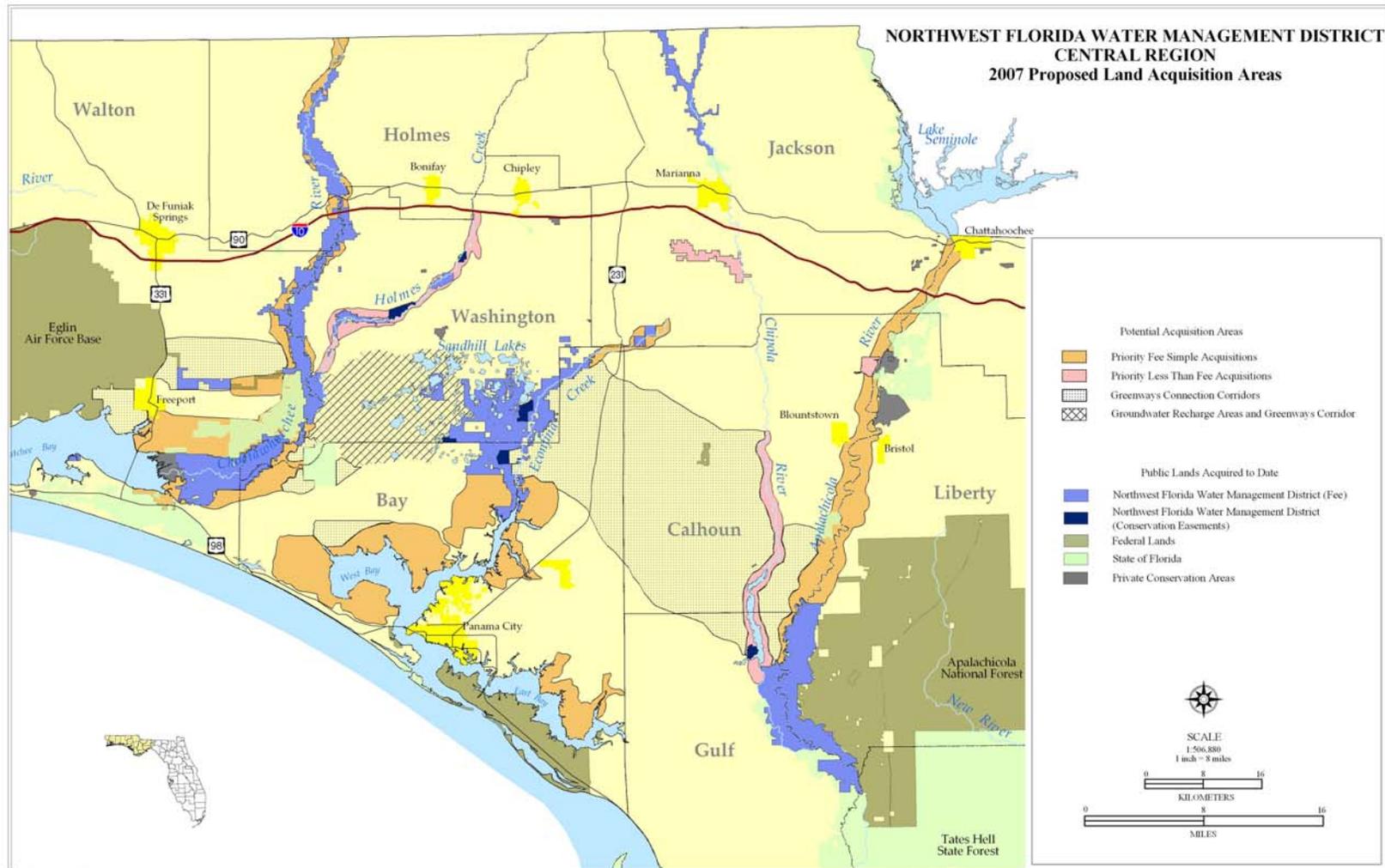
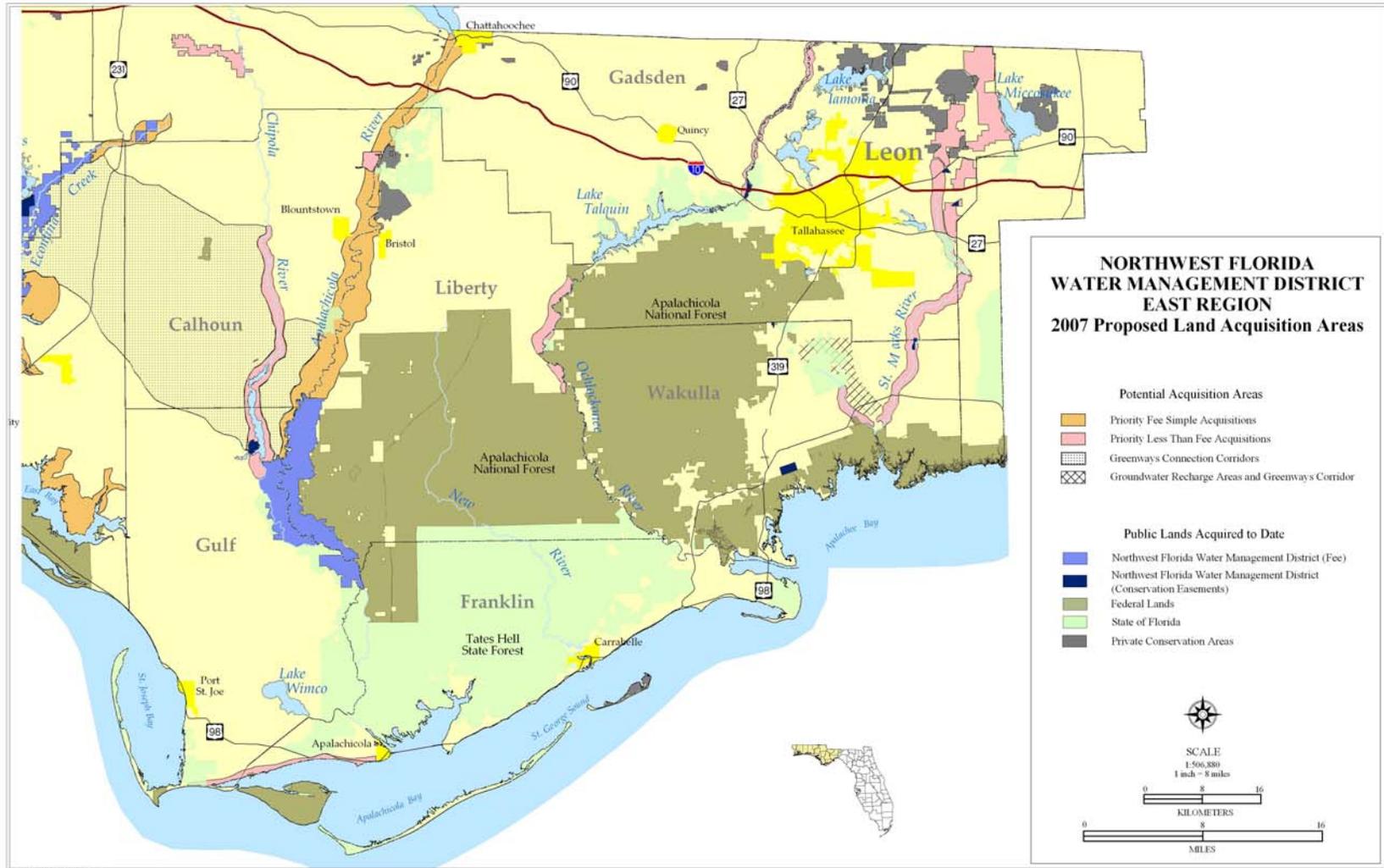


Figure 6.1.c. 2007 Proposed Land Acquisition Areas (East Region)



Florida Forever Land Acquisition Project

Perdido River

The Perdido River serves as the state line, separating Florida from Alabama. The Perdido has been designated an Outstanding Florida Water and Special Water system, a canoe trail, and a recreation area. The upper part of the river is a shifting sand river system, which are unique to portions of Northwest Florida, south Alabama, southern Mississippi and extreme Louisiana, 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 any floodplain area along the Perdido River, whether in fee or less than fee, will significantly protect the water resources of the area as well as enhance water quality protection efforts for the Perdido Bay system.

The District owns approximately 5,454 acres along the river. Priority purchases will be concentrated on parcels adjacent to existing District lands around the river mouth and designated tributaries.

Public Access

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

Land Acquisition

Approximately 637 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Florida Forever Land Acquisition Project

Southwest Escambia County Ecosystem

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

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

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

Public Access

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

Land Acquisition

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

Groundwater Recharge Area

Designated area has groundwater recharge potential.

Florida Forever Land Acquisition Project

Escambia River Basin

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

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 River State Forest. In all, nearly 50 miles of the river corridor is remote and undeveloped. As a result, the Blackwater is considered one of Florida's best preserved waterways. Acquisition by the Florida Division of Forestry will bring into public ownership much of the lower, least protected portion of river floodplain and estuary. The District will assist in these acquisitions as needed.

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

Public Access

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

Land Acquisition

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

Florida Forever Land Acquisition Project

Yellow/Shoal River Basin

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

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

Public Access

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

Land Acquisition

Approximately 40,000 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

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

Florida Forever Land Acquisition Project

Lafayette Creek

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

Public Access

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

Land Acquisition

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

Florida Forever Land Acquisition Project

Choctawhatchee River/Holmes Creek Basin

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

Due to the river corridor's undeveloped nature, the basin provides habitat for a variety of native wildlife, including several endangered plant and animal species. The river is also serves as a breeding and migratory area for both the Gar and the Atlantic Sturgeon. The District owns approximately 60,636 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 54,950 acres have been identified for fee simple acquisition on the Choctawhatchee River, and 7,000 acres have been identified for possible less-than-fee acquisition on Holmes Creek. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Florida Forever Land Acquisition Project

West Bay Buffer

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

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

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

Public Access

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

Land Acquisition

Approximately 48,000 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Florida Forever Land Acquisition Project

Econfina Creek

Econfina Creek is the major contributor to the Deer Point Lake, which serves as the public water supply for Bay County, including Panama City, Panama City Beach and neighboring communities. The proposed purchases along the creek contain several spring-run streams, which are imperiled biological communities. The slope forest communities that border considerable lengths of the creek contain some of the highest species diversities encountered in Florida. The sand hills portion of the project features high rolling pinelands, steephead ravines and numerous sandhill upland lakes. Much of the sand hills area is of excellent quality, with nearly intact ground cover of wiregrass and dropseed. At least 18 species of rare or endangered plants inhabit the sand hills area. Because of the upland nature of the sand hills sites, the region is being developed with little regulatory restriction. The District currently owns 43,581 acres in fee and less-than-fee, including the 2,155-acre Sand Hill Lakes Mitigation Bank. Priority purchases will be concentrated on parcels adjacent to existing District lands.

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 36,625 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

Groundwater Recharge Areas

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

Florida Forever Land Acquisition Project

Sandy Creek Basin

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

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

Public Access

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

Land Acquisition

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

Florida Forever Land Acquisition Project

Chipola River Basin

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

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

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 NFWFMD, have made extensive investments in acquiring and protecting lands throughout the basin. This project would provide an important addition to these efforts.

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

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

Public Access

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

Land Acquisition

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

Florida Forever Land Acquisition Project

Upper Apalachicola River Basin

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

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 51,449 acres have been identified for possible fee acquisition and 1,551 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

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 10 miles to join the St. Marks River at the town of St. Marks. The St. Marks River starts east of Tallahassee as a tiny stream, widens considerably below Horn Spring, and then disappears underground at Natural Bridge. Reemerging as a much stronger river at St. Marks Spring, it flows 11 miles to its confluence with the Wakulla River. While the lower reach of the river below the town of St. Marks is protected and preserved as part of the St. Marks National Wildlife Refuge, much of the remainder of the two river watersheds is threatened by active riverfront development and in the adjacent highlands. The St. Marks supports one of the most heavily used inshore saltwater fisheries in north Florida, the viability of which is largely dependent on the quality of freshwater flowing into the estuarine system. Both the Wakulla Springs State Park and the St. Marks National Wildlife Refuge are major refuges for numerous biological species. Much of the remaining privately owned land is timberland that is under intense development pressure. The District presently has 1,181 acres under less-than-fee acquisition in the area.

BluePrint 2000

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

Land Acquisition

Approximately 45,650 acres have been identified for possible less-than-fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will be dependent on such considerations as: (1) Governing Board policy, (2) Threats to the resource, (3) Availability of willing sellers, (4) Tract size, (5) General market conditions, (6) Available staff resources and (7) Availability of funds.

6.2 Land Management and Acquisitions – 2006

**Northwest Florida Water Management District
Table 6.1 Acquisitions Completed in 2006**

Property Name	Date Purchased	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Fee Simple Acquisitions						
Peaden	02/03/06	81.30	\$ 478,750	\$5,888.68	Florida Forever	Econfina Creek
Patronis	04/14/06	145.58	\$ 0	\$ 0	Exchange	Econfina Creek
Moore Etal	04/21/06	95.10	\$ 250,800	\$2,637.22	Florida Forever	Econfina Creek
International Paper	05/31/06	5,456	\$12,085,069	\$2,215.00	Florida Forever/ DOT Mitigation	Perdido River
Sirles	07/14/06	10	\$ 48,000	\$4,800.00	Florida Forever	Econfina Creek
Davis	10/24/06	59.31	\$ 0	\$ 0	Exchange	Choctawhatchee River
SUB-TOTAL		5,847.29	\$12,862,619			

Property Name	Date Purchased	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Less-Than-Fee Acquisitions						
Haddock	02/03/06	331.9	\$ 298,500	\$899.36	Florida Forever	Holmes Creek
Patronis	04/14/06	30.9	\$ 0	\$ 0	Exchange	Econfina Creek
SUB-TOTAL		362.80	\$ 298,500			
GRAND TOTAL		6,210.09	\$13,161,119			

Northwest Florida Water Management District
Table 6.2 Surplusing Completed in 2006

Property Name	Date Surplused	Acres	Cost	Cost Per Acre	Funding Source(s)	Water Management Area
Patronis	04/14/06	851.1	\$0	\$0	Exchange	Econfina
Davis	10/24/06	18.67	\$0	\$0	Exchange	Choctawhatchee
Escambia County	11/17/06	1.22	\$0	\$0	Donated	Perdido

Northwest Florida Water Management District
Table 6.3 Projected Funding, Staffing and Resource Management for Fiscal Year 2006-2007

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	34,919		\$ 452,168	\$ 427,669
	Escambia Conservation Easements	19		\$ 2,943	\$ 1,749
	Garcon Point	3,245		\$ 142,015	\$ 120,851
	Yellow/Escribano	17,725		\$ 428,018	\$ 370,956
	Blackwater	380		\$ 13,321	\$ 10,471
	Perdido	5,456		\$ 565,718	\$ 506,231
	Region Total	61,744	2	\$1,604,183	\$ 1,437,927
Central	Choctawhatchee	60,636		\$ 885,700	\$ 524,217
	Choctawhatchee/Holmes Conservation Easements	1,444		\$ 27,943	\$ 1,749
	Econfina	38,994		\$2,078,293	\$ 1,921,931
	St. Andrews/Econfina Conservation Easements	2,433		\$ 2,943	\$ 1,749
	Carter Restoration	2,155		\$ 469,966	\$ 413,177
	Region Total	105,662	5	\$3,464,845	\$ 2,862,823

**Northwest Florida Water Management District
Table 6.3 Projected Funding, Staffing and Resource Management
for Fiscal Year 2006-2007 (Continued)**

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Eastern	Upper Chipola	7,377		\$ 97,688	\$ 86,883
	Apalachicola	35,506		\$ 127,374	\$ 103,918
	Apalachicola/Chipola Conservation Easements	816		\$ 2,943	\$ 1,749
	Lake Jackson	516		\$ 77,464	\$ 57,094
	St. Marks Conservation Easements	1,181		\$ 2,943	\$ 1,749
	Ochlocknee Conservation Easements	312		\$ 2,943	\$ 1,749
	Region Total	45,708	1	\$ 311,355	\$ 253,142
	Regional Totals	213,114	8	\$ 5,380,383	\$ 4,553,892
	Management Administration		4	\$ 669,680	\$ 524,217
	Grand Total	213,114	12	\$6,050,063	\$ 5,078,109

**Northwest Florida Water Management District
Table 6.4 Land Management Activity During 2006
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						4		1	3						3
Garcon Point	150				150						90	90			3
Blackwater River															
Yellow River						23		9	14						3
Choctawhatchee River	791		791			706		706			895		895		12
Perdido River	197		197												6
Econfina Creek	632		408		224	791	230	408		153	707			707	5
St. Andrews															
Carter Restoration	63	63									325			325	
Devils Swamp Restoration	73	73													
Upper Chipola River															
Apalachicola River															
Lake Jackson	85	85				2	2				159			159	113
Totals	1,991	221	1,396		374	1,526	232	1,124	17	153	2,176	90	895	1,191	145

**Northwest Florida Water Management District
Table 6.5 Land Management Activity During 2006
Access and Recreation Management**

Water Management Area	Primitive Campsites							Trails						Group Use Permits	Maps/Brochures Printed				Weather Pavilions
	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	Issued	Birding	Nature Trail	General Purpose	Information Signs	Installed	
Escambia River	13	9	8	9	1	8	5				2		23	3				40	
Garcon Point				3						3						5,400		20	
Blackwater River						1												10	
Yellow River	8	3	4	5		3	2		50				18					20	
Perdido River		1		1		1	1		9									60	
Choctawhatchee River	8	9	12	11		10	8		15				37					80	4
Econfina Creek	10	13	8	17	4	3	12	40	22	18	2		22	130				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	5				6	
Totals	42	36	35	51	5	29	29	51	106	28	10	11	111	138		5,400		478	13

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6.3 Florida Forever Capital Improvement Projects

Introduction

This section describes restoration, stormwater retrofit, and water resource development projects funded pursuant to the Florida Forever Five Year Work Plan, as referenced in section 373.199(7), F.S. 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 2005-06 Work Plan

The 2005-06 NFWFMD work plan listed five 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 project activities approved for funding under this program.

Local government capital improvement grant projects completed during fiscal year 2005-2006 include the following:

- Deer Point Lake Dirt Road Stabilization (Phase II). 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.
- Ten Mile Creek Restoration. This project provided for restoration and stabilization of the creek to reduce sedimentation and improve water quality conditions utilizing natural stream channel design methods. Both the District and Escambia County provided \$500,000 in funding towards this project.
- Campus Circle Stormwater Improvements. The District provided funding to assist the City of Tallahassee in constructing an urban stormwater retrofit including the installation of a stormwater treatment unit, for water quality improvement and flood protection in the St. Marks River watershed. The project was accomplished with a \$430,000 Florida Forever grant together with over \$3,070,000 in local funding.
- Clear Creek Restoration. Through this project, banks were contoured and vegetation was planted to stabilize a major eroding gully that discharged sediments to the adjacent stream and Pensacola Bay. The District provided \$90,000 while local sources provided over \$122,443 towards the project.
- Hammock Point Water Quality Improvement. This project reduced sediment loading from an unpaved road and installed stormwater treatment systems in the Choctawhatchee River and Bay watershed. The District provided a grant for \$259,032 and Walton County contributed over \$275,117 towards the project.
- Holmes County Unpaved Roads. This project provided for non-point source pollution abatement and the reduction of sedimentation into an unpaved stream crossing in Holmes County. The project was accomplished with a \$450,000 grant from the District as well as \$163,385 of in-kind local funding.

- Lands Store Road Stormwater Improvement. This project reduced non-point source pollution and sediment loading of an unpaved road directly discharging to the Apalachicola River. The District provided a \$350,000 grant while Calhoun County provided \$43,000 in matching funds.
- Choctawhatchee/Apalachicola Watershed Unpaved Roads. This initiative of the Orange Hill Soil and Water Conservation District provided for sedimentation reduction through stabilization of eight priority unpaved road stream crossings. The grant provided \$320,000 in assistance, matched by \$100,000 in local funding.
- A number of other projects, including major retrofit projects within the Lake Jackson, St. Marks River, and St. Joseph Bay watersheds, are nearing completion.

Current Capital Improvement Project Plan

Table 6.6 lists capital improvement projects proposed for funding during FY 2006-2007. 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
Stormwater and 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.	\$1,075,000
Fuller Road Okecheepkee Regional Stormwater System	Cooperative project with Leon County to construct regional stormwater treatment facility to retrofit an area developed prior to implementation of current regulatory requirements.	Engineering design phase complete. Local government funds will be used along with Florida Forever.	\$600,000
Sand Hill Lakes Mitigation Bank 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.	\$375,000
Competitive Local Grant Program	Competitive grants for cooperative local grant projects. Approved projects described below.	Funding includes ongoing projects and 15 new projects approved by the Governing Board in January 2007.	\$17,143,352
Total			\$19,643,352

In January 2007, the District's Governing Board approved additional local government capital improvement grant projects for funding under the Florida Forever program. Current and previously approved projects are listed in Table 6.7. Implementation of these projects will substantially assist in overall implementation of approved NFWFMD SWIM plans for the Apalachicola, Choctawhatchee, Pensacola, St. Andrew, and St. Marks watersheds. It should be noted that substantial additional funding has been provided for 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
Santa Rosa Island Authority	Little Sabine Bay Circulation Project	Pensacola Bay/Santa Rosa Sound	Stormwater treatment systems and sediment removal.	2003	\$375,000
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
Blueprint 2000 Intergovernmental Agency	Gibby Pond Regional Stormwater Facility	St. Marks River/Lake Munson	Construct retrofit regional stormwater treatment facility.	2004	\$732,160
Leon County	Killearn Lakes Restoration Project	Ochlockonee River/Lake Iamonia	Water quality/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
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

Table 6.7 NFWFMD Local Government Florida Forever Capital Improvement Grant Projects					
Recipient	Project	Watershed	Description	Year Approved	Grant Amount
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
Blueprint 2000 Intergovernmental Agency	Capital Cascades Upper Pond	St. Marks River/Lake Munson	Construct retrofit for urban stormwater facility	2006-07	\$600,000
City of Port St. Joe	Fourth Street Stormwater Pond	St. Joseph Bay	Construct urban stormwater retrofit	2006-07	\$300,000
Escambia County	Jones Swamp Ecosystem Restoration	Jones Swamp/ Pensacola Bay	Wetland and stream restoration	2006-07	\$500,000
Orange Hill Soil and Water Conservation District	Lower Choctawhatchee Stream Crossing Stabilization	Choctawhatchee River and Bay	Unpaved road/ stream crossing stabilization and sediment removal at ten sites.	2006-07	\$495,000
Walton County	Morrison Springs Stormwater Improvements	Choctawhatchee River and Bay	Stormwater improvements to a second magnitude spring.	2006-07	\$500,000
City of Springfield	Robindale Subdivision Stormwater Improvements	Martin Lake/ St. Andrews Bay	Construct urban stormwater retrofit	2006-07	\$500,000
City of Tallahassee	Sharer Road Stormwater Improvements	Meginnis Creek/ Lake Jackson	Construct retrofit for urban stormwater facility	2006-07	\$500,000

Table 6.7 NFWMD Local Government Florida Forever Capital Improvement Grant Projects					
Recipient	Project	Watershed	Description	Year Approved	Grant Amount
Washington County	Chain Lake Road Stabilization	Pine Log Creek/ Choctawhatchee River and Bay	Unpaved road/ stream crossing stabilization and sediment removal.	2006-07	\$262,500
City of Fort Walton Beach	Lower Choctawhatchee Bay Stormwater Initiative	Santa Rosa Sound/ Choctawhatchee Bay	Stormwater retrofit for four sites along Choctawhatchee Bay	2006-07	\$306,435
Choctawhatchee Basin Alliance	Santa Rosa Sound Ecosystem Restoration	Santa Rosa Sound Choctawhatchee Bay	Stream restoration and stormwater enhancement	2006-07	\$199,000
Calhoun County	John Redd Road Stormwater Improvements	Apalachicola River	Sediment abatement and stabilization for Apalachicola River and floodplain.	2006-07	\$793,109
City of Vernon	Vernon Stormwater Retrofit	Holmes Creek/ Choctawhatchee River & Bay	Stormwater retrofit for water quality improvements to Holmes Creek.	2006-07	\$200,000
Washington County	River Road Stabilization	Choctawhatchee River and Bay	Sediment abatement and stabilization for adjacent wetlands	2006-07	\$450,000
City of Panama City	St. Andrews Bay Yacht Club Stormwater Improvements	St. Andrews Bay	Stormwater retrofit for water quality improvements	2006-07	\$81,000
City of Destin	Destin Harbor Water Quality Improvements	Choctawhatchee River and Bay	Stormwater retrofit for water quality improvements	2006-07	\$201,950
City of Freeport	Storage facilities for public access reuse project	Choctawhatchee River and Bay	Construct storage facilities for public access reuse project	2006-07	\$1,450,000
Total					\$17,143,352

The distribution of approved Florida Forever Capital Improvement Grant projects, along with other District capital improvement projects, is presented in Figure 8.2, within Chapter 8.

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VII. Mitigation Donation Annual Report

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

Because the Northwest Florida Water Management District does not currently implement Environmental Resource Permitting (ERP) and because section 373.4137, F.S., is specifically excluded from this report, this annual requirement is fulfilled separately by DEP. It is anticipated that Wetland Resource Protection aspects of ERP will be implemented within the Northwest Florida Water Management District, jointly by the District and DEP, no earlier than January 2008. After that time, this report will be revised to include a report on any cash donations accepted as mitigation, as regulated by the District. The District may also receive funds in the future through its agreement with the U.S. Army Corps of Engineers under the Umbrella Watershed Based Regional Mitigation plan. Thus far no donations have been received or planned through this agreement.

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

Introduction

Section 373.036(7)(d), F.S., provides that Districts may include in the Consolidated Annual Report additional information on the status or management of water resources as deemed appropriate. Northwest Florida Water Management District water resource protection and restoration efforts 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 and project planning are provided for major riverine-estuarine watersheds as indicated below (Figure 8.1).

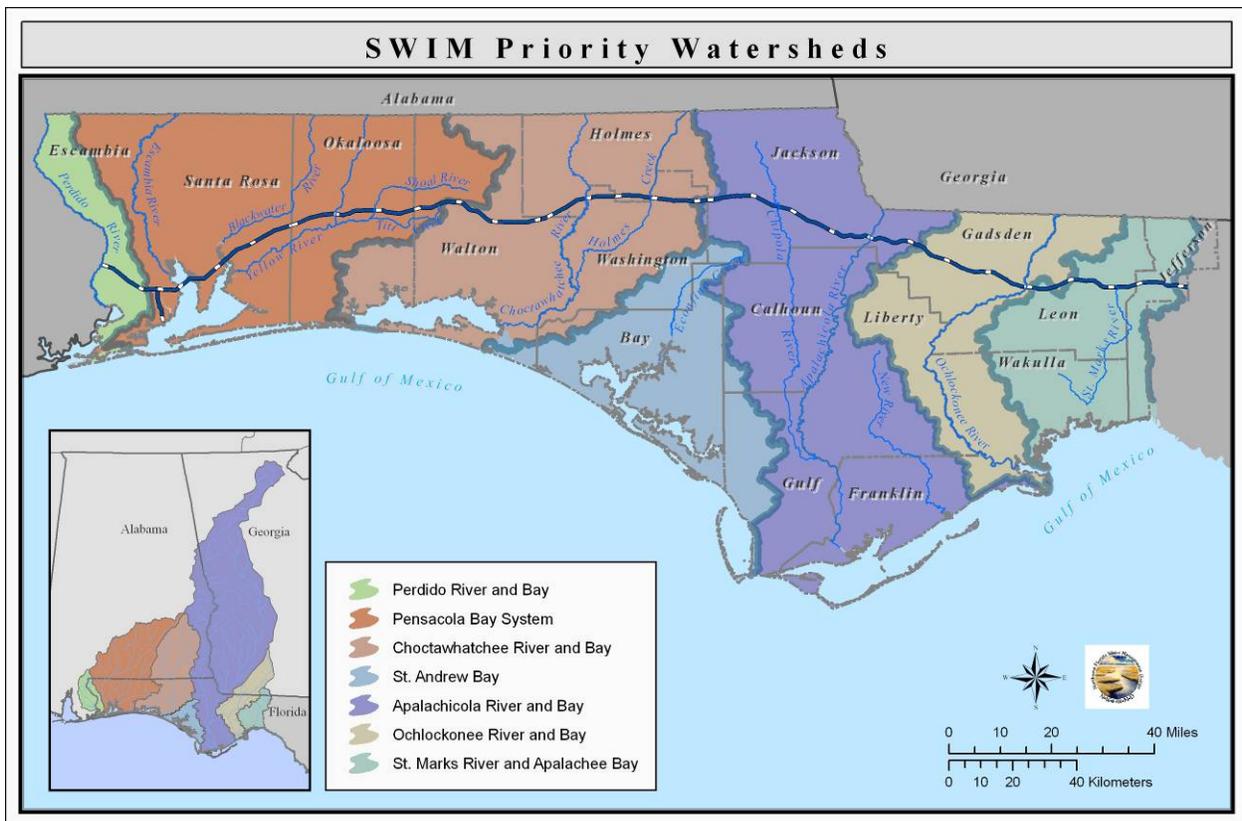


Figure 8.1 NFWMD SWIM Priority Watersheds

As a planning framework, the SWIM program helps support interrelated District programs, including regional wetland mitigation, Florida Forever capital improvements, land acquisition, flood map modernization, and ETDM. Plan implementation is accomplished through a variety of activities. 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 watershed protection in support of regional 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.), Water Protection and Sustainability Program funding (s. 403.890, 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 2006. The District's designated priority waterbodies are listed in Table 8.1. In addition to respective watersheds, the list identifies major tributaries and waterbodies. All other tributaries, sub-embayments, and contributing watershed areas are also considered as being within the listed priority waterbodies.

Table 8.1 NFWFMD SWIM Priority List	
Apalachicola River and Bay Watershed	
Apalachicola River	New River
Apalachicola Bay	Lake Seminole
Chipola River	
Pensacola Bay Watershed	
Escambia River	Escambia Bay
Blackwater River	East Bay
Yellow River	Blackwater Bay
Shoal River	Western and Central Santa Rosa Sound
East Bay River	Big Lagoon
Pensacola Bay	
Choctawhatchee River and Bay Watershed	
Choctawhatchee River	Eastern Santa Rosa Sound
Holmes Creek	Choctawhatchee Bay
St. Andrew Bay Watershed	
St. Andrew Bay	St. Joseph Bay
North Bay	Deer Point Lake Reservoir
West Bay	Econfina Creek
East Bay	
St. Marks River and Apalachee Bay Watershed	
St. Marks River	Lake Lafayette
Wakulla River & Wakulla Springs	Lake Munson
Lake Miccosukee	Apalachee Bay
Ochlockonee River and Bay Watershed	
Ochlockonee Bay	Lake Jackson
Ochlockonee River	Lake Iamonia
Perdido River and Bay Watershed	
Perdido River	Perdido Bay

Currently approved SWIM plans include the following:

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

Related Programs

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.

SWIM Activities and Program Implementation Update

Table 8.2 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 8.2 SWIM Activities and Program Implementation		
SWIM Program Activities	Purpose	Estimated FY 06/07 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	\$4,000,000
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	\$100,000
Pensacola Bay System		
Urban Stormwater Retrofit	Urban Stormwater Retrofit	\$90,000
Bayou Chico Restoration	Estuarine Restoration	\$600,000
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$150,000

Table 8.2 SWIM Activities and Program Implementation

SWIM Program Activities	Purpose	Estimated FY 06/07 Funding
Choctawhatchee River and Bay Watershed		
Urban Stormwater Retrofit	Urban Stormwater Retrofit	\$2,000,000
Freeport Public Access Reuse	Development of public access reuse capability, incl. storage and ancillary facilities, to limit pollutant loading to Choctawhatchee Bay.	\$3,000,000
Ecological Restoration	Wetland and riparian habitat restoration	\$450,000
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$125,000
St. Andrew Bay Watershed		
Regional Stormwater Retrofit	Urban Stormwater Planning and Retrofit	\$1,900,000
Henry Davis Park Retrofit	Urban Stormwater Retrofit	\$850,000
RMA Baywatch Program	Long-term Water Quality Monitoring	\$500,000
West Bay Hydrologic Restoration	Wetland hydrologic restoration	\$400,000
Detailed Elevation Imagery	Development of detailed basin data and watershed modeling	\$156,000
St. Marks River/Apalachee Bay Watershed		
Tram Road Public Access Reuse Facility	Public access reuse project for springshed protection and water quality improvement. Water Protection & Sustainability Program funding.	\$1,000,000
Ochlockonee River and Bay Watershed/Lake Jackson		
Regional Stormwater Retrofit	Lake Jackson Urban Stormwater Retrofit – Florida Forever Capital Improvement Funding.	\$600,000

Watershed Resource Restoration Capital Improvement Summary Table

Summary information on watershed resource restoration projects ongoing during 2005-2006 is presented in Table 8.3. The table compiles information concerning projects implemented through the SWIM, regional wetland mitigation, and Florida Forever capital improvement grant programs. These projects are implemented in cooperation with numerous local governments, as well as state and federal agencies. The current projects 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 8.3 NFWFMD Watershed Restoration Capital Improvements

Project Name	Purpose	Cooperator	Program	Status
Apalachicola River and Bay System				
Apalachicola River Restoration	Restoration of floodplain resources, including removal of approximately 350,000 cubic yards of dredge spoil and additional slough restoration.	NFWFMD	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, NFWFMD, 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 an unpaved road stream crossing and removal of direct sediment discharges into tributary stream.	Orange Hill SWCD	Florida Forever	Implementation
Lands Store Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharge into the Apalachicola River.	Calhoun County	Florida Forever	Complete
Lamb Eddy Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharge into the Chipola River.	Calhoun County	Florida Forever	Planning
Sawyer Lane Drainage Improvement	NPS/sedimentation abatement; shoreline habitat protection and restoration on Apalachicola Bay.	Franklin County	Florida Forever	Planning
John Redd Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharge into the Apalachicola River.	Calhoun 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	Complete
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 Improvement	Regional stormwater retrofit for 355 acres discharging into Pensacola Bay and Santa Rosa Sound.	Gulf Breeze	Florida Forever	Implementation
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	Planning
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
Jones Swamp Wetland & Floodplain Restoration	Wetland restoration project for approximately 4.2 acres of Jones Swamp.	Escambia County	Florida Forever	Planning
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	Complete
Hammock Point Water Quality Improvement	NPS pollution and sedimentation abatement for approximately 70 acres discharging into Choctawhatchee Bay.	Walton County	Florida Forever	Complete
Freeport Public Access Reuse Project	Development of public access reuse capability, incl. storage and ancillary facilities, to reduce pollutant loading to Choctawhatchee Bay.	City of Freeport	SWIM, Florida Forever	Planning
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

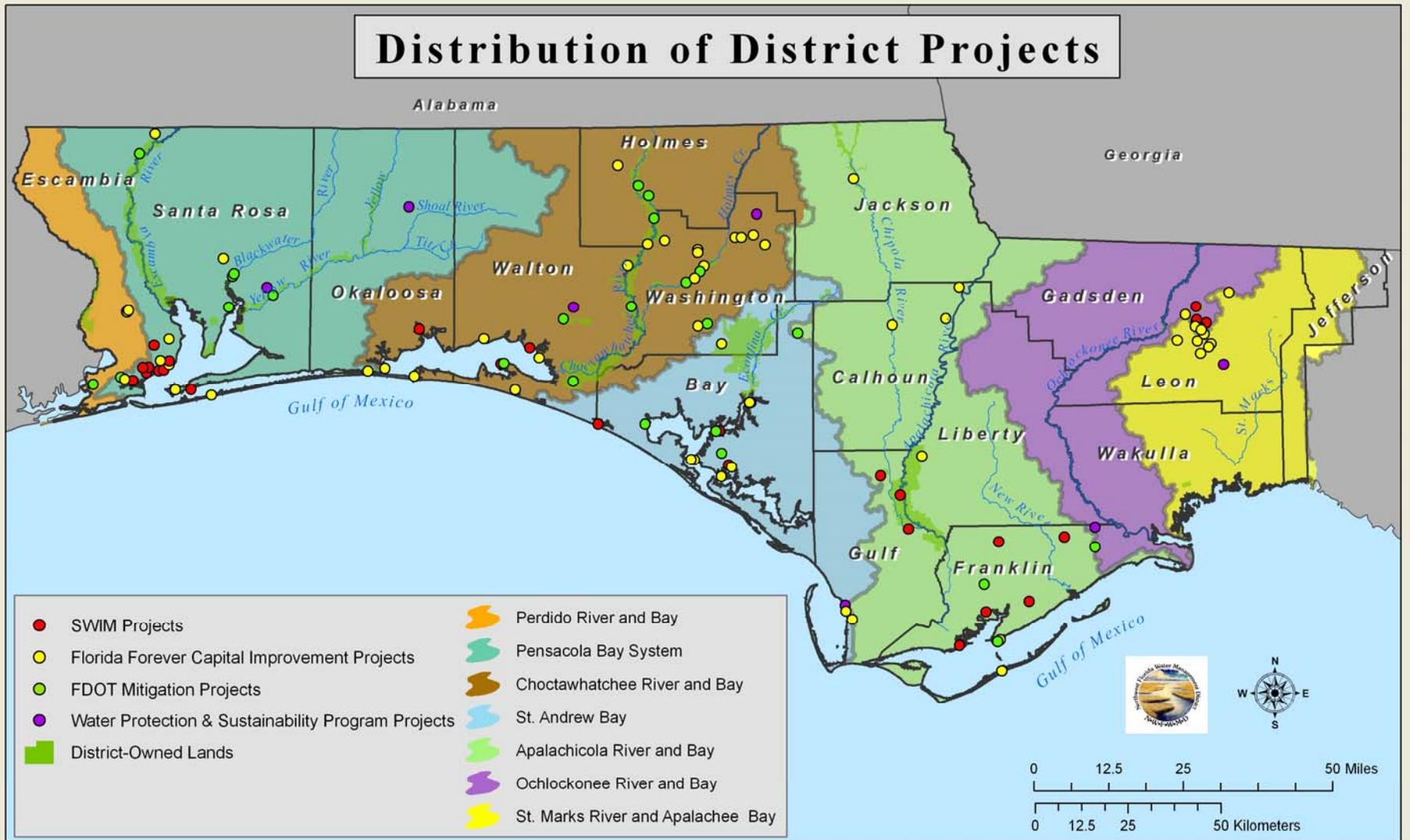
Project Name	Purpose	Cooperator	Program	Status
Unpaved roads/stream crossing BMPs	Stabilization of seven unpaved road stream crossings and removal of direct sediment discharges into tributary streams.	Orange Hill SWCD	Florida Forever	Implementation
Choctawhatchee Bay Stormwater Phase I	NPS pollution abatement and removal of direct sediment discharges from Choctawhatchee Bay.	Walton County	Florida Forever	Planning
Lower Choctawhatchee Stream Crossing Stabilization	Stabilization of ten unpaved road stream crossings and removal of direct sediment discharges into tributary streams.	Orange Hill SWCD	Florida Forever	Planning
Morrison Springs Stormwater Improvement	NPS pollution abatement and stormwater improvements at a second magnitude spring.	Walton County	Florida Forever	Planning
Santa Rosa Sound Ecosystem Restoration	Stream restoration and stormwater enhancement for a 63-acre urban watershed.	Choctawhatchee Basin Alliance	Florida Forever	Planning
Destin Harbor Water Quality Improvement	Stormwater retrofit for 30.6 acres of urban watershed discharging to Destin Harbor.	Destin	Florida Forever	Planning
Lower Choctawhatchee Bay Stormwater Initiative	Stormwater retrofit treating 283 acres of urban watershed at four sites that discharge into Choctawhatchee Bay.	Fort Walton Beach	Florida Forever	Planning
Chain Lake Road Stabilization	NPS pollution abatement and sediment removal of an unpaved stream crossing on Pine Log Creek.	Washington County	Florida Forever	Planning
River Road Stabilization	Stabilization of unpaved road and removal of direct sediment discharges into adjacent wetlands.	Washington County	Florida Forever	Planning
Vernon Stormwater Retrofit	Stormwater retrofit treating 15 acres directly discharging to Holmes Creek.	Vernon	Florida Forever	Planning
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 I & II	Stormwater retrofit for existing industrial port area discharging into St. Andrew Bay.	Panama City Port Authority	Florida Forever	Implementation

SWIM Program and Watershed Restoration Summary Report

Project Name	Purpose	Cooperator	Program	Status
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
Fourth Street Stormwater Pond	Stormwater retrofit treating 17 acres of an urban watershed directly discharging to St. Joseph Bay.	City of Port St. Joe	Florida Forever	Planning
Robindale Subdivision Stormwater Improvement	Stormwater retrofit project treating 53 acres that discharges to Martin Lake and St. Andrews Bay.	Springfield	Florida Forever	Planning
St. Andrews Bay Yacht Club Stormwater Improvement	Stormwater retrofit treating 25 acres discharging to St. Andrews bay and affecting approximately 28,000 square feet of seagrass.	Panama City	Florida Forever	Planning
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
Okeeheepkee 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	Implementation
Meginnis 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

Project Name	Purpose	Cooperator	Program	Status
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
Sharer Road Stormwater Improvement	Stormwater retrofit for approximately 1,500 acres of Meginnis Creek and tributary discharging to Lake Jackson.	Tallahassee	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	Complete
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	Complete
Capital Cascades Upper Pond	Stormwater retrofit for 693 acres and urban wetland creation in the Lake Munson Basin.	Blueprint 2000	Florida Forever	Planning
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 NFWMD Capital Project Distribution



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Appendix A. District Water Management Plan Annual Performance Measures

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

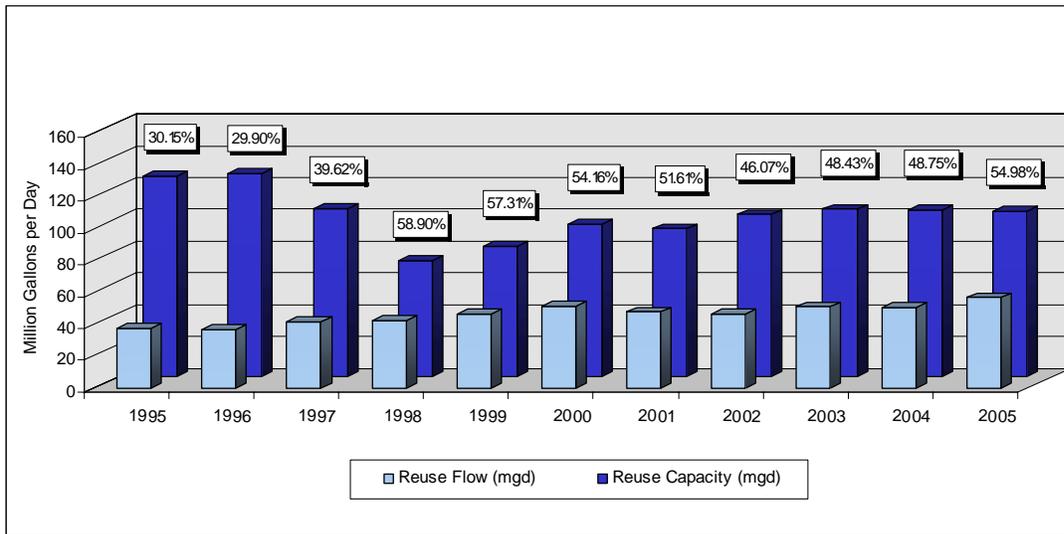
Water Supply

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

WS 1(a) Percentage of Domestic Wastewater Reuse

The state and water management districts continue to emphasize wastewater reuse. This resource as a result has become an important alternative to the use of potable supplies for such beneficial uses as landscape irrigation, industrial processing, and power generation. This measure is intended to identify on an annual basis the wastewater reuse capacity of facilities within the NFWMD and the proportion of wastewater effluent actually reused. Figure A.1 and Table A.1 show that in FY 2005-2006, nearly 54 percent of domestic wastewater reuse capacity in the NFWMD was utilized. Of this, approximately 16 percent was allocated to beneficial public access irrigation.

Figure A.1 Wastewater Reused as Percentage of Reuse Capacity



Source: FDEP, Division of Water Resource Management, 2005 Reuse Inventory.

Table A.1 Wastewater Reused as Percentage of Reuse Capacity by County

County	Reuse Capacity (mgd)	Reuse Flow (mgd)	Percent of reuse capacity used	Percent change in reuse capacity 2004-2005
Bay	7.19	1.59	22.11%	-2.84%
Escambia	13.37	5.59	41.81%	-
Franklin	0.71	0.32	45.07%	-
Gadsden	1.42	0.59	41.55%	-
Gulf	0.35	0.29	82.86%	-
Jackson	1.64	0.80	48.78%	3.14%
Jefferson	1.30	0.70	53.85%	-
Leon	28.65	20.30	70.86%	0.32%
Liberty	0.20	0.15	75.00%	-
Okaloosa	29.07	19.49	67.05%	0.10%
Santa Rosa	5.58	2.91	52.15%	4.89%
Wakulla	0.99	0.52	52.53%	-
Walton	13.37	3.80	28.42%	-7.86%
Washington	0.27	0.19	70.37%	-
Totals	104.11	57.24	-	-2.24%

Source: FDEP, Division of Water Resource Management, 2005 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.2. Water Supply Planning Region Summary by County

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

Source: NFWFMD Water Supply Projections 2005-2025.

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

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

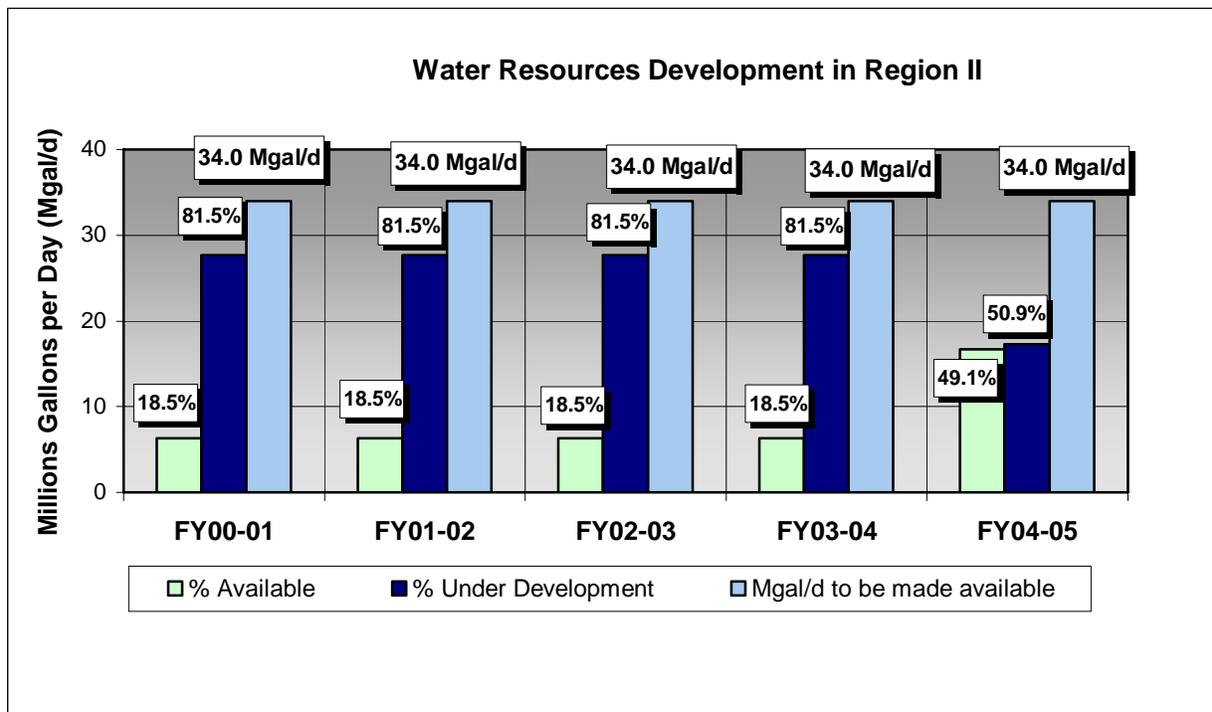
- 1) The estimated amount of water supply to be made available through the water resource development component of the regional water supply plan (RWSP);
- 2) Percent of estimated amount under development; and
- 3) Percent of estimated amount of water actually made available.

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

The Regional Water Supply Plan (RWSP) for Region II was initially approved in 2001. At that time, 34.0 Mgal/d of additional water supply was identified as being needed within the planning region by 2020. Approximately 16.7 Mgal/d have been recently developed through alternative

water supply development projects within the planning area, representing 49.1 % of the additional water supply needed by 2020 (Figure A.2). An additional 17.3 Mgal/d (50.9%) was under development or in the planning process.

Figure A.2 Water Resources Development in Region II, FY00-01 through FY04-05

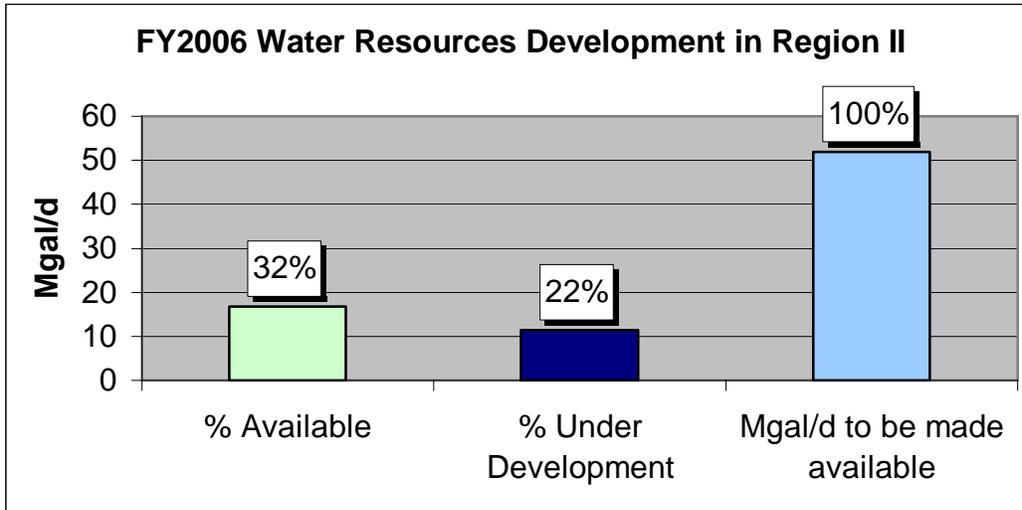


Source: NFWFMD Staff, 2005

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. Task and project accomplishment have resulted in the development of the inland Sand and Gravel Aquifer and the inland Floridan Aquifer serving coastal utilities, as indicated in Figure A.2 for FY04-05. These projects are defined as non-traditional or alternative sources for the coastal region in the Region II RWSP.

The updated RWSP for Region II estimates an additional 51.9 Mgal/d of alternative supplies that can be made available through implementation of the Water Resources Development component of the plan (Figure A.3). This figure does not include 25 Mgal/d of alternative surface water sources that are identified for needs beyond the 2025 planning horizon. Approximately 16.7 Mgal/d or 32% have already been made available to coastal utilities in Region II and another 11.4 Mgal/d or 22% are under development. Thus, approximately 54% of the total alternative sources identified in the WRD component are either under development or have already been developed; the remaining 46% are for future development as determined by future demand through 2025.

Figure A.3 Water Resources Development in Region II, FY05/06



Source: NFWFMD Staff, January 2007

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

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 2005-2006, the District continued water resource development efforts in support of future water supply development assistance in Region V. 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 have augmented available data to evaluate the availability of alternative inland sources to meet coastal needs. These efforts are aimed at alleviating saltwater intrusion concerns in the eastern coastal area of Region V. This project is expected to yield 3 Mgal/d. Additional assistance in Region V is being provided to the City of Port St. Joe to provide up to 6 Mgal/d of alternative surface supplies from the Gulf County Fresh Water Supply Canal.

Through alternative water supply development assistance funding under the new Water Protection and Sustainability Program, it is anticipated that a total of up to 77 Mgal/d will be made available within Region II and up to 9 Mgal/d will be made available in Region V. Specific water resource and water supply development projects 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. These, however, 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 surface water for its water supply, and the City of Port St. Joe is transitioning to a surface water source.

Within the state-designated Group 3 watersheds, which include 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

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.

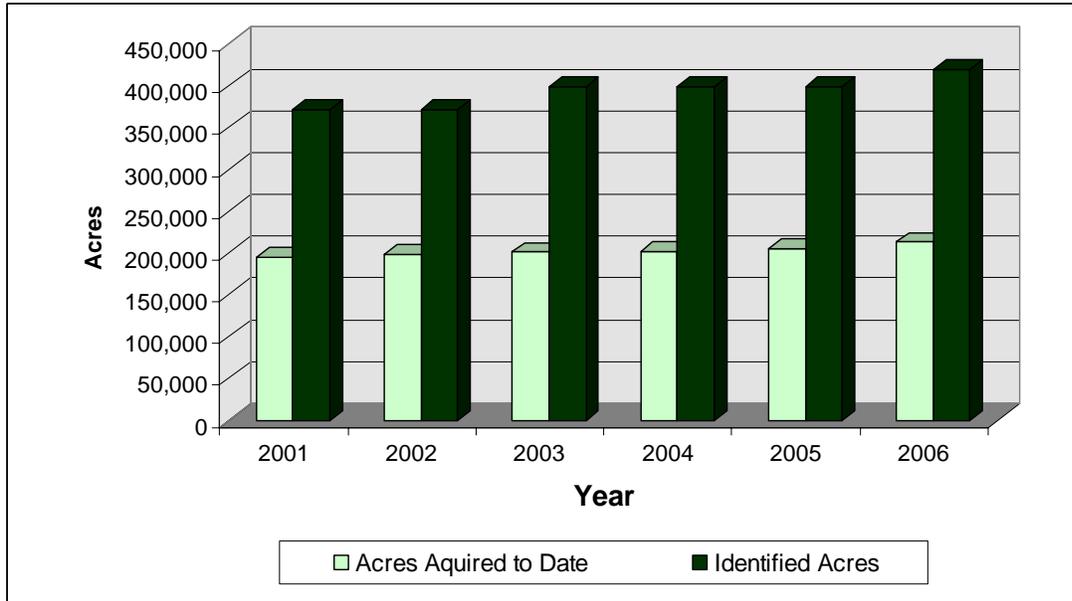
Flood Protection/Floodplain Management Objective 2: Promote non-structural approaches to achieve flood protection and to protect and restore the natural features and functions of the 100-year floodplain.

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 210,476 acres through fee and less-than-fee purchases of the 419,318 acres identified through the Florida Forever Work Plan (2005). This comprises over half (50.19 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 2001-2006



Source: NFWFMD Staff, November 2006

*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, fish and wildlife maintenance, agriculture, and navigation, utility and industrial use. This performance measure indicates the extent to which the water quality needed to support the designated use(s) is being attained. The TMDL program is implemented in northwest Florida by DEP. For more information on the TMDL program, visit <http://www.dep.state.fl.us/water/tmdl/index.htm>. The 2006 Integrated Assessment 305(b) report and 303(d) List Update can be accessed at http://www.dep.state.fl.us/water/tmdl/docs/2006_Integrated_Report.pdf.

Water Quality Objective 2: Protect and improve groundwater quality.

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

Groundwater is a major source of potable water for the 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. Limited historical data are also available for St. Marks Rise (Table A.3).

Table A.3. Nitrate Trends at Selected NFWMD Springs

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

Sources: NFWMD Water Resources Special Report 02-1; 05-1; 06-1

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. The District Governing Board declared a reservation on the water resources of the Apalachicola River, including the Chipola River, in January, 2006.

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

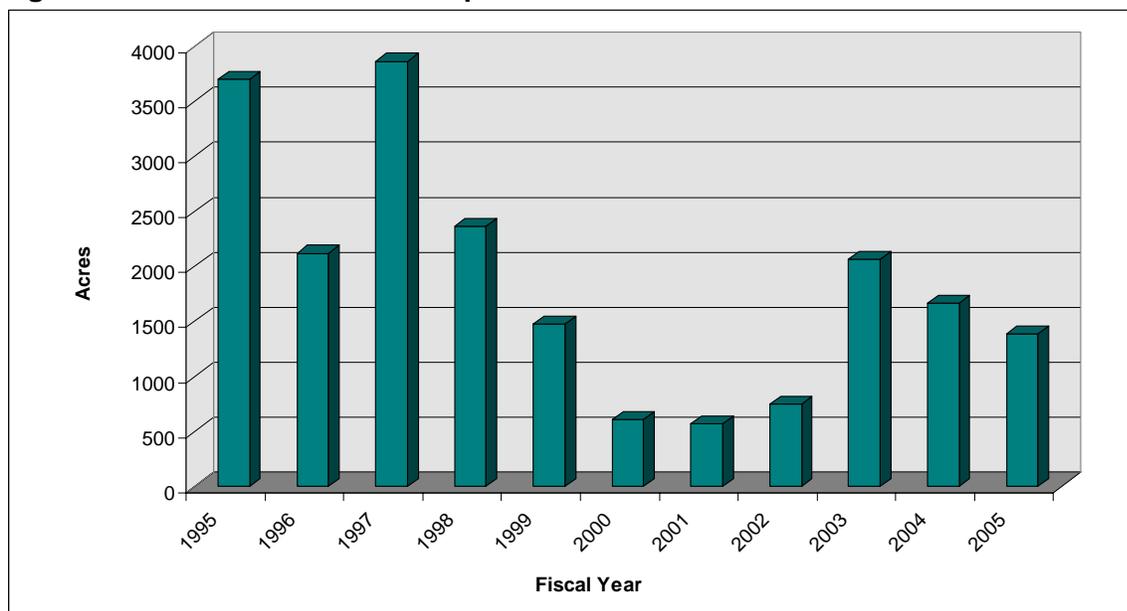
The Northwest Florida Water Management District does not currently implement the Environmental Resource Permitting program; however, legislation passed in 2006 has directed the NFWMD to develop and implement wetlands and environmental permitting no sooner than January 2008.

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

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

Protection and management of natural surface waters cannot be accomplished without effectively managing invasive exotic aquatic plant species that can reduce the abundance and diversity of native plant populations, hinder navigation and recreational use, degrade water quality, impact fish and wildlife habitat, and impede water flow. Aquatic plant management operations conducted on publicly accessible natural waters in northwest Florida are funded and coordinated primarily by DEP, the Florida Fish and Wildlife Conservation Commission, and local governments. This performance measure is intended to monitor how well the responsible agencies are doing in managing invasive aquatic plants. The District does not have a program to manage invasive aquatic plants, so this measure actually monitors DEP aquatic plant management efforts. Among the invasive nonnative aquatic plants of concern in northwest Florida are hydrilla (*Hydrilla verticillata*), waterhyacinth (*Eichhornia crassipes*), and alligatorweed (*Alternanthera philoxeroides*). In 2005, the annual aquatic plant survey treated 1,390 acres of invasive aquatic plants (Figure A.9).

Figure A.9 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.

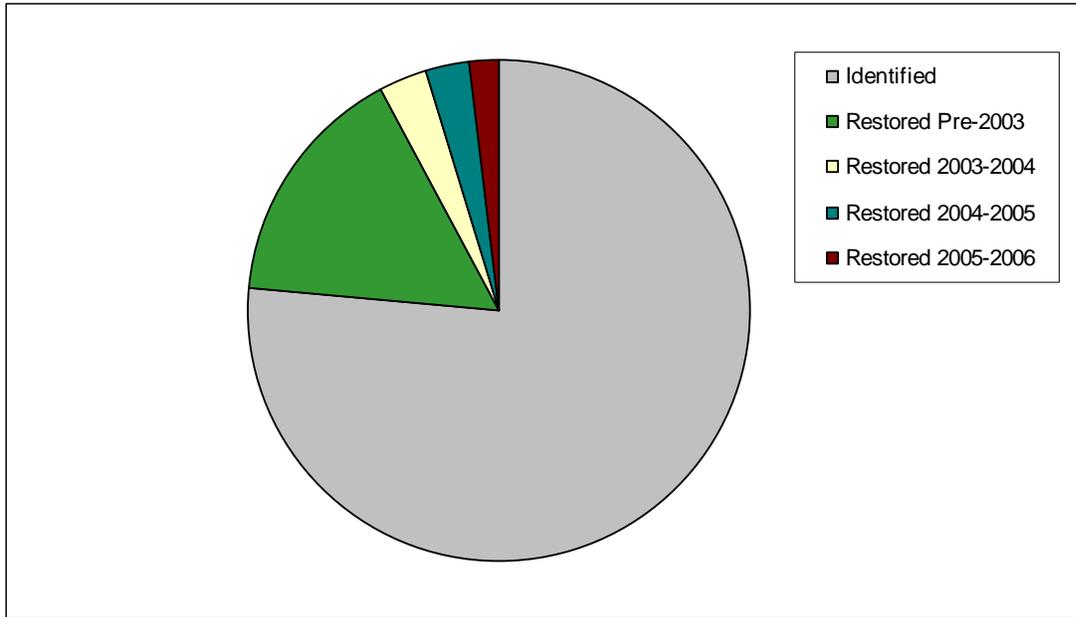
Due to funding limitations, the District has not completed a survey to specifically identify the spatial distribution of invasive exotic plant infestation on District lands. It is known, however, that invasive plant problems exist at varying levels on some District lands, including at Phipps Park (Lake 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 obtained a \$49,000 grant from DEP to treat exotic plants at Phipps Park and completed this project in June 2006. The entire 516-acre park was inspected and approximately 70% of the invasive non-native plant species located on site have been eliminated. Phipps Park contains the most invasive and exotic species of any District Lands with over 15 non-native species. Results of the project indicate the Champhor tree has become one of the most problematic invasive non-native species in the park. Japanese climbing fern and Coral ardisia remain present, but less dominant while Tung oil tree is still dominant in isolated locations. Additional exotic nonnative plant removal projects will be implemented as funding becomes available.

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 2005-2006, 771 acres were restored out of the 25,607 acres initially identified as needing restoration District-wide. An additional 2,664 acres were also identified as needing restoration along the Perdido River. An estimated 8,771 acres of restoration have been accomplished on District lands to date. It is estimated that about 1,553 acres of habitat restoration will be accomplished during 2006-2007.

Figure A.10 Restoration on District-Owned Lands through FY 2005-2006



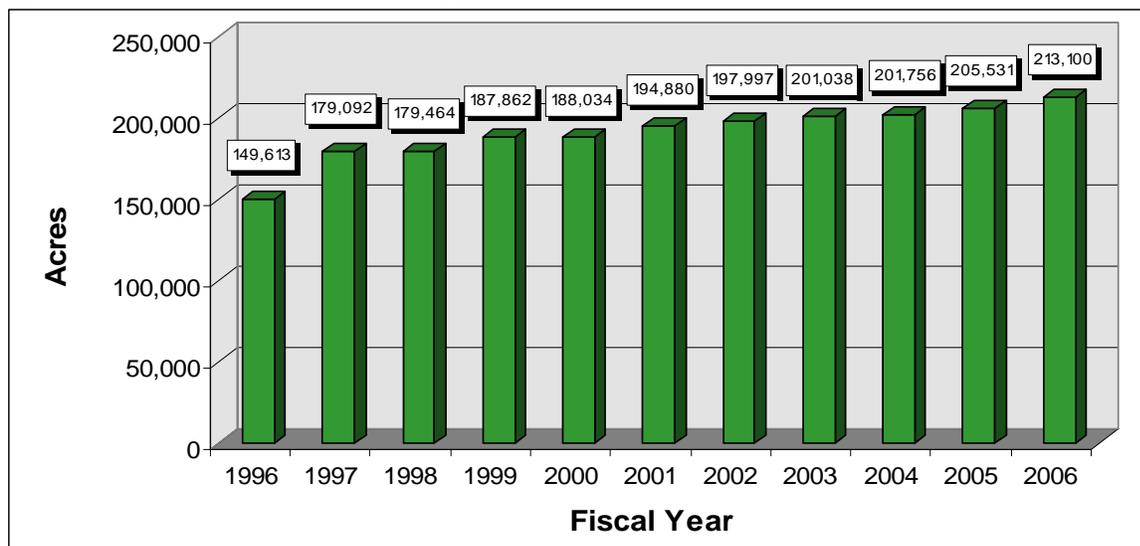
Source: NFWFMD Staff, November 2006.

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.

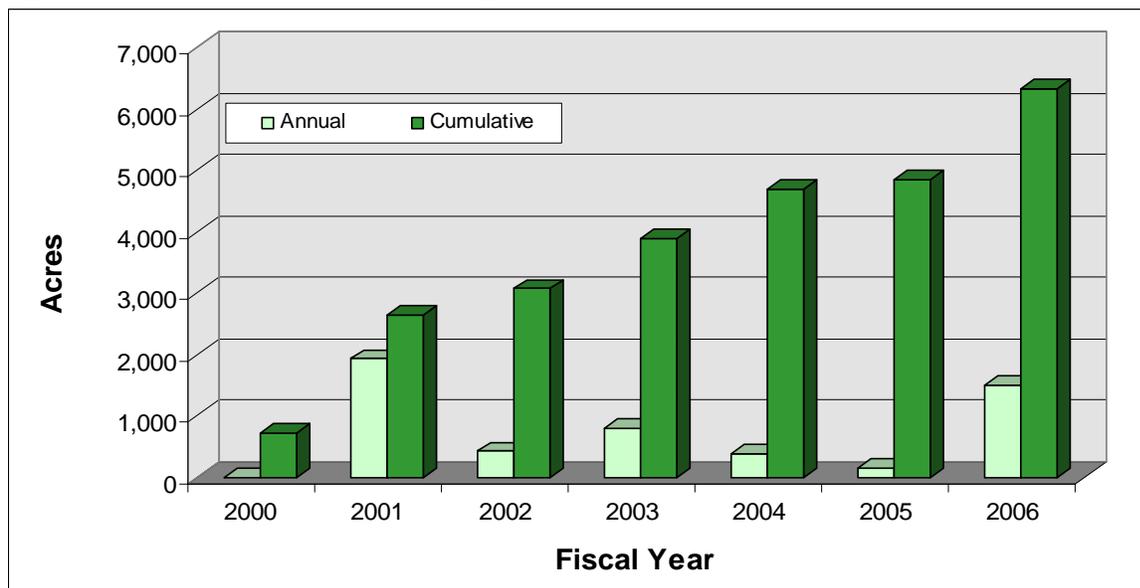
Figure A.11 Total Acres in Managed Conservation Areas



Source: NFWFMD Staff, October 2006.

“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 2005-2006, the District acquired 1,497 acres of less-than-fee property (Figure A.12).

Figure A.12 Acres Acquired Through Less-Than-Fee Simple Ownership



Source: NFWFMD Staff, October 2006.

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 2005-2006.

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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