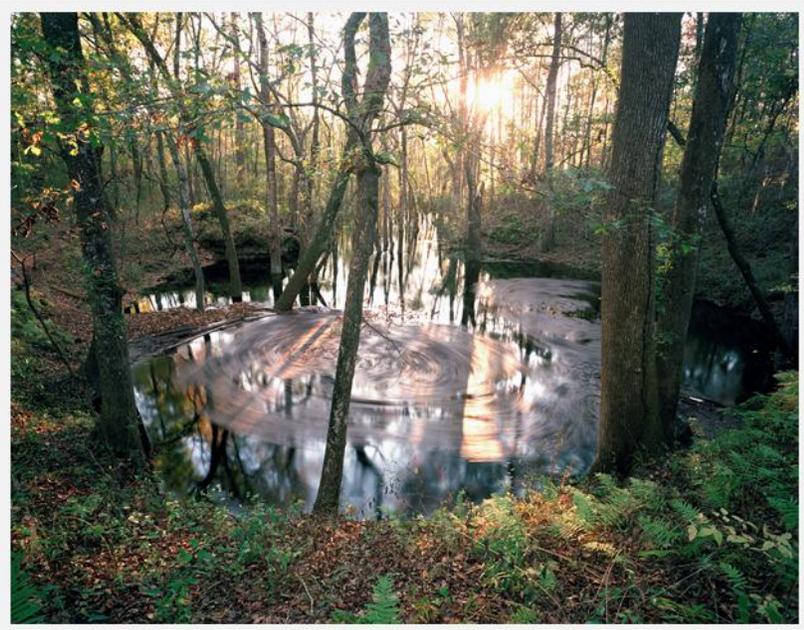
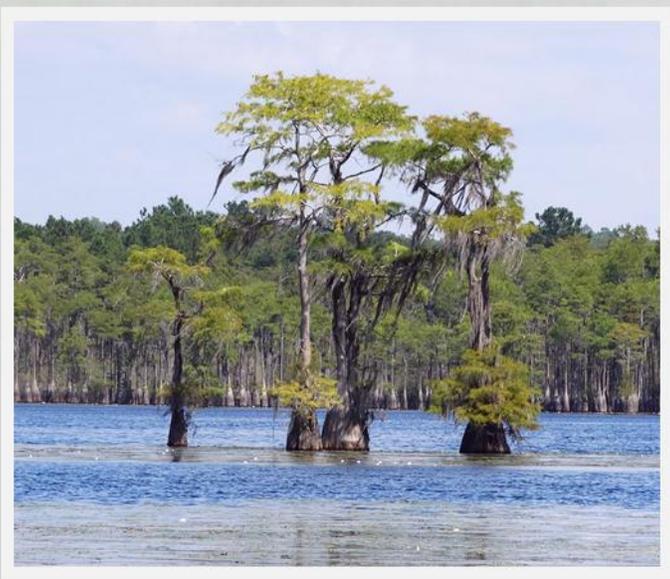


STRATEGIC WATER MANAGEMENT PLAN

November 2015



NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT



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Cover Art: (clockwise from top left): Cypress stand at Sand Hill Lakes Mitigation Bank (D. Clayton); Alternative water supply intake station on Deer Point Lake in Bay County (county staff); Fisher Creek, St. Marks River watershed (James Valentine photo); and a retrofitted center pivot agricultural irrigation system in Jackson County (A. Chelette).

Executive Summary

The Strategic Water Management Plan (SWMP or Strategic Plan) describes statutory responsibilities of the Northwest Florida Water Management District (NWFWM District) and the agency’s current priorities. These responsibilities and priorities encompass the activities the District plans to undertake over a five-year planning horizon to accomplish its mission: to implement the provisions of Chapter 373, Florida Statutes (F.S.), in a manner that best ensures the continued welfare of the residents and natural systems of northwest Florida.

The District’s four areas of responsibility include water supply, water quality, flood protection and floodplain systems, and natural systems. To meet these responsibilities, the District will implement the six strategic priorities listed below.

Strategic Priorities for Fiscal Years 2016-2020

- ◆ **Springs Protection and Restoration:** *Protect and restore water quality and flows within the major spring systems of northwest Florida.*
- ◆ **Minimum Flows and Levels (MFLs):** *Develop and implement science-based MFLs that protect water resources and associated natural systems.*
- ◆ **Apalachicola-Chattahoochee-Flint River Basin:** *Protect Apalachicola River and Bay water quality and freshwater inflow.*
- ◆ **Water Supply:** *Ensure sufficient water is available for all existing and future reasonable-beneficial uses and natural systems.*
- ◆ **Watershed Protection and Restoration:** *Protect and restore watershed resources and functions.*
- ◆ **Flood Protection and Floodplain Management:** *Maintain natural floodplain functions and minimize harm from flooding.*

A snapshot of major planned activities and implementation schedule within each strategic priority area are summarized below. Several activities achieve multiple priorities.

Activities	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
Springs Protection and Restoration					
Econfina WMA Streambank Restoration Projects	Construction	Completion			
Holmes Creek WMA Streambank Restoration Projects	Construction	Completion			
Jackson Blue Spring Basin Agricultural BMPs	Ongoing	→		Completion	
Sod-Based Crop Rotation Demonstration Project	Initiation	→		Completion	
Land Acquisition, Jackson Blue Spring Basin	Completion				

Activities	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
Claiborne Aquifer Investigation	Initiation	Completion			
Septic-to-Sewer Retrofit Projects	Ongoing			Completion	
Minimum Flows and Levels					
St. Marks River Rise	Ongoing			Assessment Complete	
Wakulla Springs and Sally Ward Spring	Ongoing				
Coastal Region II Floridan Aquifer	Ongoing				
Jackson Blue Spring	Ongoing				
ACF Basin Management					
Interstate Coordination and Technical Support	Ongoing				
Apalachicola Bay Water Quality Projects	Ongoing	Completion			
Water Supply					
Ground, Surface and Well Regulatory Programs	Ongoing				
Regional Water Supply Planning Updates	Ongoing				
Water Supply Development Assistance	Ongoing				
Reuse and Conservation Planning	Ongoing				
Watershed Protection and Restoration					
Environmental Resource Permitting	Ongoing				
Regional Wetland Mitigation	Ongoing				
SWIM Plan Updates	Initiation			Completion	
St. Andrew Bay Water Quality Projects	Completion				
Flood Protection and Floodplain Management					
Environmental Resource and Dam Safety Regulatory Programs	Ongoing				
Regional Wetland Mitigation	Ongoing				
Land Management	Ongoing				
Flood Hazard Mapping, Assessment and Planning	Ongoing				
Coastal remapping studies	Ongoing			Completion	

Progress on projects and assessment of success is reported in an annual performance review via the March 1 Consolidated Annual Report (www.nfwfwater.com/data-publications/reports-plans/consolidated-annual-reports/).

1. Introduction

The Strategic Water Management Plan (SWMP or Strategic Plan) describes statutory responsibilities of the Northwest Florida Water Management District (NFWFMD or District) and the agency's current priorities. These responsibilities and priorities encompass those activities the District plans to undertake over a five-year planning horizon to accomplish its mission: to implement the provisions of Chapter 373, Florida Statutes (F.S.), in a manner that best ensures the continued welfare of the residents and natural systems of northwest Florida. This guidance document is complementary to and implemented by the District's annual budget.

The following provides a brief overview of the resources of the District, including a strengths and weaknesses assessment and general information on the strategic planning process. Section 2 summarizes the strategies employed to accomplish these priorities and outlines success indicators, funding sources, deliverables, and milestones, as well as associated activities planned over the five-year planning horizon. Section 3 provides the implementation schedule of major tasks from 2016-2020, followed by monitoring and reporting of progress (Section 4), financial resources (Section 5) and a list of referenced information.

About the Northwest Florida Water Management District

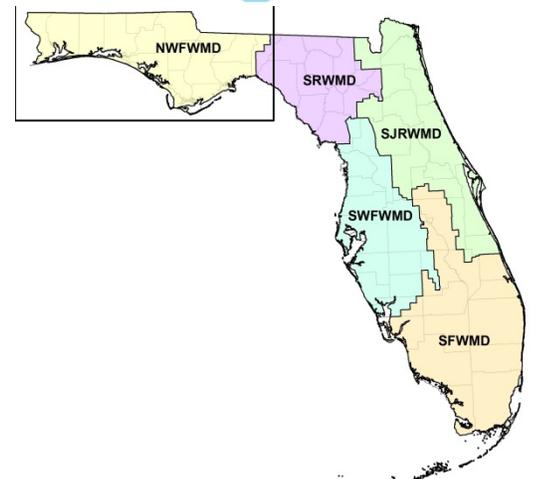
The NFWFMD is one of five water management districts established by the Florida Water Resources Act of 1972 (Chapter 373, F.S.). Its geographic region extends from the St. Marks River watershed in Jefferson County to the Perdido River in Escambia County (Figure 1).



A nine-member board appointed by the Governor and confirmed by the Senate governs the NFWFMD. The District works with federal, state, and local governments; water supply utilities; non-governmental stakeholders; and private citizens to accomplish its statutory areas of responsibility, as described below.

Mission

The District's mission, as established by the Governing Board, is to implement the provisions of Chapter 373, Water Resources, F.S., in a manner that best ensures the continued welfare of the residents and natural systems of northwest Florida.



Statutory Areas of Responsibility

Section 373.036, F.S., sets forth four interrelated areas of responsibility (AORs) for the water management districts: Water Supply, Water Quality, Flood Protection and Floodplain Management, and Natural Systems. Goals for each of these AORs are:

Water Supply	Promote the availability of sufficient water for all existing and future reasonable-beneficial uses and natural systems.
Water Quality	Protect and improve the quality of the District's water resources.
Flood Protection and Floodplain Management	Maintain natural floodplain functions and minimize harm from flooding.
Natural Systems	Protect and enhance natural systems.

Characteristics

The District is comprised of seven primary rivers and watersheds, six of which extend to portions of Alabama and Georgia (Figure 2). The Apalachicola River is the largest river in the state and, along with the Choctawhatchee and Escambia rivers, comprise three of five largest rivers in Florida by volume of flow. The District contains more than 270 springs, including five first-magnitude springs: Wakulla Springs, Jackson Blue Spring, Gainer Springs Group, St. Marks Rise, and the Spring Creek Springs Group.



Figure 2. Surface Water Improvement and Management (SWIM) Watersheds in the District

The Floridan aquifer is the primary groundwater supply for consumptive use throughout the District, while the sand-and-gravel aquifer is the primary source in Escambia and Santa Rosa counties. Bay County relies on surface water from Deer Point Lake Reservoir and the City of Port St. Joe utilizes the Gulf County Fresh Water Supply Canal from the Chipola River to meet water supply needs.

Much of the District’s non-urban land is devoted to forestry and agriculture, with areas of concentrated development corresponding to population centers. Private forest lands cover much of the District, and prominent public lands include military bases, state and national forests, national wildlife refuges, state parks, and District lands. In recent decades, substantial areas have been transformed from forested and rural in character to suburban and urban. More recently, some rural areas of the District are experiencing increases in agricultural activity.

As of 2014, there were an estimated 1,407,014 permanent residents in northwest Florida (University of Florida 2015), with much of the population concentrated along the coastal region from Escambia through Bay counties, as well as in Tallahassee and the surrounding area (Table 1). Population is projected to grow to 1,701,020 by 2040 (University of Florida 2015), reflecting a nearly 26 percent increase over 30 years.

Changes in land use and intensity and population growth presents potential water resource challenges, including increased demand for water supplies, stormwater runoff and nonpoint source pollution, increased risks from flooding, reduced groundwater recharge, and fragmentation of wetlands and other sensitive habitats.

Table 1. Population and Growth by County

County	2010 Population Estimate	2014 Population Estimate	2040 Population Projection ¹	Percent Change 2010 - 2040
Bay	168,852	170,781	211,800	25%
Calhoun	14,625	14,592	16,600	14%
Escambia	297,619	303,907	324,900	9%
Franklin	11,549	11,794	12,100	5%
Gadsden	46,389	48,096	51,900	12%
Gulf	15,863	16,543	18,000	13%
Holmes	19,927	20,025	21,600	8%
Jackson	49,746	50,231	51,800	4%
Jefferson ²	6,250	8,758	9,720	56%
Leon	275,487	281,292	346,400	26%
Liberty	8,365	8,668	11,000	32%
Okaloosa	180,822	190,666	225,400	25%
Santa Rosa	151,372	159,785	229,300	51%
Wakulla	30,776	31,285	42,300	37%
Walton	55,043	59,793	98,600	79%
Washington	24,896	24,959	29,600	19%
Total	1,357,581	1,401,175	1,701,020	25.94%

¹ Medium growth scenario

² Estimated population within NFWFMD

Sources: 2010 estimates by U.S. Census Bureau; 2014 estimates and 2040 projections by UF BEBR 2015

Strengths, Opportunities, and Challenges

A strength of the District is the development of effective partnerships and cooperative relationships with other governmental and private organizations with complementary functions and authority. Another asset is its extensive water management lands that protect water quality; floodplains; water recharge areas; and ecosystem health and productivity. The District has also made substantial investment in developing alternative and inland water sources to meet water supply needs and interconnecting utilities for system reliability.

Many opportunities exist to: expand water conservation and efficiency; further develop reuse of reclaimed water and other alternative water supply sources; protect undeveloped floodplains and important recharge areas; and adopt new technology and data sources.

Northwest Florida faces continuing challenges with respect to water and related resources across all four AORs. Examples of such challenges are coastal saltwater intrusion, out-of-state water withdrawals, and nonpoint source pollution.

Current strengths, opportunities, and challenges are outlined in Table 2.

Table 2. NFWFMD Strengths, Opportunities, and Challenges

Strengths	<ul style="list-style-type: none"> • Partnership and cooperation with other governmental and private organizations with complementary functions and authority • Extensive water management lands and other public lands that protect water quality, floodplains, water recharge, and ecosystem health and productivity • Ability to leverage external funding • Technical capability and long-term outlook • Improved Consumptive Use Permitting regulations for state-wide consistency and permit streamlining • Development of alternative water supplies and inland and coastal interconnects
Opportunities	<ul style="list-style-type: none"> • Continued development of alternative water supply sources • Potential for additional water conservation • Potential to acquire undeveloped floodplain and recharge areas • Potential for reuse system development and expansion to meet nonpotable demands, provide beneficial aquifer recharge, and enhance water quality • MFL establishment for priority waterbodies; enhanced data collection and technical analyses • Federal and other external funding sources that can match and extend existing funds • New technology and data sources
Challenges	<ul style="list-style-type: none"> • Out-of-state water withdrawals and wastewater discharges • Diminished water quality at some of the District’s signature springs • Saltwater intrusion in some coastal population centers • Rising demands for potable water for people, business, and agriculture • Extreme weather events (e.g., droughts, floods, and tropical storms) • Nonpoint source pollution • Fragmentation of wetlands and other water-related habitats • Hydrologic and water quality data gaps • Infrastructure funding limitations, particularly on the part of financially disadvantaged small local governments

Strategic Planning Process

The SWMP reflects priorities of the Governing Board through a five-year planning horizon. The plan is implemented annually through the District’s adopted budget.

Annual Progress Review and Strategic Plan Update

The SWMP Annual Work Plan Report is incorporated in the Consolidated Annual Report, released each year by March 1. To meet the requirements of section 373.036, F.S., this report includes qualitative and quantitative evaluation of the success indicators, deliverables, and milestones identified in Section 2. The Strategic Plan is updated based on these results and in consideration of emerging issues and the District’s annual budget.

Operational Plans and Rules

The SWMP is designed as a functional plan to address the District’s statutorily defined AORs and guide, at a high level, how the agency will carry out major activities over a five-year planning horizon. It is important to recognize that many of these activities are implemented through subordinate plans, adopted rules, and programs that directly execute the strategies outlined in the SWMP (Table 3). Thus, the SWMP reflects an integrated approach to the major water resource challenges facing the District.

Table 3. Operational Documents

Plan / Regulation	Purpose (Primary Statute)	Horizon
Strategic Water Management Plan	Establish strategic priorities for a next five-year period; District-wide plan for water supply, flood protection, water quality, and natural systems (373.036, F.S.)	Five years; updated annually
Incorporates:		
Regional Water Supply Plans	Identify water sources, demands, and alternative water supply sources (373.709, F.S.)	20 years; updated every five years
Water Resource Development Work Program	Development of water sources within regional water supply planning areas (373.536; 373.709 F.S.)	Five years; updated annually
Water Supply Assessment	Estimates and projections of District-wide water demand and source assessments (373.036, F.S.)	20 years; updated every five years
Florida Forever Land Acquisition Work Plan	District-wide land acquisition plan (373.199, F.S.)	Five years; updated annually
Florida Forever Capital Improvements Plan	Short-range plan for implementation of approved capital improvement projects (373.199, F.S.)	Five years; updated annually
NWFWMD-FEMA Cooperating Technical Partner Risk MAP Business Plan	Risk Map, flood mapping and related activities plan for the Northwest Florida Water Management District (373.036, F.S.)	Five years; updated annually
Umbrella, Watershed-based Regional Mitigation Plan	District-wide wetland mitigation (373.4137, F.S.; 33 U.S.C. 1344); also incorporates the In Lieu Fee Program and Instrument and the Sand Hill Lakes Mitigation Bank	Updated annually
SWIM Priority List	Prioritize watersheds and waterbodies for SWIM plan development (373.453, F.S.)	Updated annually
SWIM Plans (multiple)	Watershed protection, management, and restoration (373.451-459, F.S.)	Continuous; updated as needed
Hydrologic Monitoring Plan	Surface and ground water hydrologic and water quality monitoring (373.036; 373.451-459, F.S.)	Continual; updated as needed
Minimum Flows and Levels (MFLs) Priority List	Priority list for development of MFLs (373.042, F.S.)	Updated annually
Ch. 40A-1, FAC	General and Procedural (373.044, F.S.)	Continuous

Plan / Regulation	Purpose (Primary Statute)	Horizon
Ch. 40A-2, FAC	Regulation of Consumptive Uses of Water (373.203-250, F.S.)	Continuous
Ch. 40A-21, FAC	Water Shortage Plan (373.246(1), F.S.)	Continuous
Ch. 40A-3, FAC	Regulation of Wells (373.302-342, F.S.)	Continuous
Ch. 40A-44, FAC	Regulation of Agricultural and Forestry Surface Water Management Projects (373.403-443, F.S.)	Continuous
Ch. 40A-6, FAC	Works of the District (373.084-087, F.S.)	Continuous
Ch. 62-330, FAC	Environmental Resource Permitting (373.4131, F.S.)	Continuous

2. Strategic Priorities for 2016-2020

Implementation of the District's strategic priorities is accomplished through coordinated activities within each of the agency's major divisions: Land Management and Acquisition, Resource Management, Regulatory Services, and Administration. This section summarizes each of the strategic priorities, together with indicators, funding sources, milestones, and deliverables that support each goal within the planning horizon. Milestones are events or dates signifying important points in progress toward each goal, and deliverables are work products from individual tasks or projects.

Springs Protection and Restoration

Springs protection and restoration is carried out through the District's SWIM, MFL, Land Management and Acquisition, and Groundwater and Surface Water Permitting programs. Current initiatives and priorities include the following:

- Jackson Blue Spring Basin Agricultural Best Management Practices – The District continues a major initiative to help agricultural producers in the Jackson Blue Spring basin integrate best management practices (BMPs) into their farming operations. These practices, implemented in cooperation with the Florida Department of Agriculture and Consumer Services (DACs), the Florida Department of Environmental Protection (DEP), and the Jackson Soil and Water Conservation District, are expected to continue conserving water and improving water quality without compromising production yields. Through FY 2014-2015, the program has assisted 33 producers and up to 32 more are anticipated with additional FY 15-16 funding.
- Sod-based crop rotation demonstration project – The District has partnered with the University of Florida Institute of Food and Agricultural Sciences (IFAS) to complete evaluations and outreach on best management practices for sod-based rotation systems for the last 11 years. With funding from DEP, this project expands this effort to a pilot project providing funding for up to four producers to convert up to 160 irrigated acres and implement the sod-based rotation through a complete four-year rotation cycle. The goal of the project is to reduce water use (by up to 60%) and nutrient application rates (up to 50%) while increasing crop yields (by 15-40%) to lands within the Jackson Blue Spring basin.
- Land acquisition – The District received state grant funds for land acquisition to protect Jackson Blue Spring and the Gainer Springs Complex. Two fee-simple or less-than-fee simple projects for approximately 992 acres are planned for the Jackson Blue Spring area in Jackson County. A three-acre acquisition along Econfina Creek, along with associated streambank restoration, is planned in northern Bay County.
- Septic to Sewer Retrofit Projects – The District continues partnerships with Leon and Wakulla counties for three major septic to central sewer retrofit projects in the Wakulla Spring groundwater contribution area. The Woodside Heights project in southern Leon County will connect a total of 200 homes to the City of Tallahassee's Advanced Wastewater Treatment (AWT) facility. The Magnolia and Wakulla Gardens projects in Wakulla County will connect up to 716 homes to central sewer services. The county is upgrading its Otter Creek WWTF to AWT as part of this project. A new project with Jackson County will begin in late 2015 for the Indian Springs sewer extension project to eliminate up to 125 septic tanks in the Jackson Blue Spring groundwater contribution area. Jackson County will partner with the City of Marianna WWTF on the project. Combined, these projects are estimated to reduce nitrogen loading to first magnitude springs by 28,870 lbs/yr.

- Williford Spring Restoration – The District has completed the majority of restoration and public access improvements for Williford Spring within the Econfina Creek Water Management Area (WMA) in Washington County. Construction included sediment removal and extensive bank restoration using non-structural designs and was completed in August 2015. Activities to be completed in FY 2015-2016 include signage installation and minor plant stabilization.
- Devil’s Hole Spring Streambank Restoration – Also in the Econfina Creek WMA, the Devil’s Hole spring public access site has experienced bank erosion due to intensive use, which has degraded aquatic habitat. The project involves stabilizing the east and west banks of Econfina Creek in the area of Devil’s Hole Spring. Visitor facilities will be constructed to direct use to boardwalks, a canoe dock, and an overlook in order to protect a unique geologic formation and prevent streambank degradation.
- Walsingham Streambank Restoration – In partnership with the U.S. Fish and Wildlife Service and funding from the Florida Fish and Wildlife Conservation Commission, the District plans to complete streambank and habitat restoration work at Walsingham Park in Washington County. Similar to other restoration efforts, this project involves taking a non-structural approach to improving shoreline habitats and reducing erosion.
- Holmes Creek Streambank Restoration – Three restoration sites are located along Holmes Creek in Washington County within the Choctawhatchee River and Holmes Creek WMA. Streambank restoration and protection activities are planned at Hightower Springs and Spurling landings. Each site will receive vegetated retaining walls utilizing geotextiles and native vegetation, stormwater facilities, access road and parking improvements, and protective fencing. Restoration activities at Live Oak Landing were mostly completed in 2015, with a fishing pier to be constructed in cooperation with Washington County in FY 2015-2016.
- Cotton Landing Streambank Restoration – Also in the Holmes Creek WMA, a project at Cotton Landing public access site will stabilize approximately 125 linear feet of shoreline to reduce erosion and provide stormwater treatment. Streambank stabilization will be accomplished with a combination of bioengineering methods that employ primarily natural materials and techniques, such as vegetated retaining walls and native material revetments and root wads to protect the bank, dissipate and deflect flow, and create fish habitat. In addition to shoreline restoration and stormwater runoff management, boardwalks and access points will be installed to prevent future water quality and habitat impacts while facilitating public access and compatible use.
- Claiborne Aquifer Evaluation – The District is beginning an investigation into the Claiborne aquifer within the Jackson Blue Spring contribution area in late 2015. The project involves constructing test and monitoring wells and modeling to determine the aquifer’s viability as a potential alternative water source to offset demand in the Floridan aquifer, making additional water available to springs.
- Water Quality and Flow Monitoring – The District is continuing water quality monitoring at Wakulla, Jackson Blue, Pitt, Econfina Blue, and Williford springs and measuring continuous spring flows at Jackson Blue, Sally Ward, and Wakulla springs and the Spring Creek springs group in coastal Wakulla County.
- Land Management – The Econfina Creek WMA is more than 41,000 acres of District-owned and managed land that protects groundwater recharge, spring flow, and water quality within the Econfina Creek springs complex, which includes first magnitude Gainer Springs. This in turn protects water supply and water quality in the downstream Deer Point Lake Reservoir, the main source of drinking and industrial water supply for Bay County.

- Groundwater and Surface Water Regulation – Permitting of ground and surface water withdrawals is a tool for preventing significant impacts to the water resources contributing to spring systems and water supplies.

Strategic Priority 1: Springs Protection and Restoration. Improve water quality and flows within the major spring systems of northwest Florida.

Indicators:	(1) Project accomplishment (percent completion on schedule) (2) Trends in nitrate concentrations (3) Trends in spring flows
Funding sources:	(1) State Legislative Appropriations (2) Land Acquisition Trust Fund (3) General Fund Reserves
Milestones:	(1) Completion of spring streambank restoration projects (2016) (2) Implementation of funded BMPs for farmers in the Jackson Blue Spring basin and Mobile Irrigation Lab evaluations (2015-2016) (3) Completion of Leon, Wakulla and Jackson County septic to sewer retrofit projects (2017)
Deliverables:	(1) Mobile Irrigation Lab evaluation reports (2) Water quality data (3) Spring discharge data

Minimum Flows and Levels

Implementation of an effective MFL program is a major component of the overall effort to ensure the long-term protection and sustainability of regionally significant water resources. A minimum flow or level is defined as the limit at which further withdrawals of water would be significantly harmful to the water resources or the ecology of the area. The MFL program integrates other efforts, including consumptive use permitting, regional water supply planning, and watershed management. The District has developed work plans and initiated enhanced data collection efforts to complete MFL technical assessments for Jackson Blue Spring, St. Marks River Rise, Sally Ward Spring, Wakulla Spring, and the coastal Floridan aquifer in Okaloosa, Santa Rosa, and Walton counties. Over the next five years, enhanced data collection, groundwater and surface water modeling, and development of technical assessments will continue for these five waterbodies.

The MFL program is implemented according to the MFL priority list and schedule, which is updated annually and submitted to DEP for review. The current schedule may be found online at www.nwfwater.com/water-resources/minimum-flows-levels/.

Strategic Priority 2: Minimum Flows and Levels. Develop and implement science-based MFLs that protect water resources and associated natural systems.

Indicators: (1) MFL technical assessment accomplishment (number and percent complete per the approved schedule)

(2) Waterbodies meeting their adopted MFLs (number and percentage)

Funding sources: (1) General Fund Reserves
(2) State Legislative Appropriations

Milestones: (1) Completion of technical assessment for the St. Marks River Rise (2018), Wakulla Spring (2020), Sally Ward Spring (2020) and coastal Floridan (2020)

Deliverables: (1) Completed MFL technical assessments according to the approved schedule

Apalachicola-Chattahoochee-Flint (ACF) River Basin

An ongoing District priority is working with state agencies and local governments to protect the economic and ecological viability of the Apalachicola River and Bay and its surrounding watershed in Florida. Priorities over the current five-year period include continued technical assistance to the Governor and DEP in the ongoing legal case between the states of Florida and Georgia over freshwater allocation in the ACF river basin and implementation of several cooperative water quality improvement projects in coastal Franklin County. The District has developed an updated hydrodynamic model for Apalachicola River and Bay, including a freshwater flow model for the Apalachicola River and delta and Tates Hell Swamp, to help support resource assessments and evaluations of potential actions. Additionally, the District has completed several hydrologic restoration projects in Tates Hell Swamp to enhance the quality, quantity and timing of freshwater inflows to Apalachicola Bay. The agricultural BMP program, springs restoration projects, and land acquisition projects to improve the health of Jackson Blue Spring also support longstanding water conservation and water quality protection efforts.

Strategic Priority 3: Apalachicola-Chattahoochee-Flint River Basin. Protect Apalachicola River and Bay water quality and freshwater inflow.

Indicators: (1) Cooperative project implementation (number and percent complete per the planned schedule)

(2) Area restored (acres)
(3) Stormwater treatment area (acres)

Funding sources: (1) State Legislative Appropriations
(2) Land Acquisition Trust Fund
(3) General Fund Reserves

Milestones: (1) Completion of four cooperative water quality improvement projects: Marine Street, U.S. 98 and 16th Street, Prado Outfall, and Avenue I stormwater retrofits (2016-2017)
(2) Continued participation in supporting state ACF Basin issues (2016-2020)

Deliverables: (1) Grant project completion reports

Water Supply

The District works to ensure availability of sufficient water for all existing and future reasonable-beneficial uses and natural systems through coordinated resource planning and regulation efforts. These include the following:

- Groundwater and Surface Water Permitting – The Division of Regulatory Services oversees review, issuance, renewal, and enforcement of ground and surface water use permits that allow for reasonable-beneficial uses of water while protecting existing users and the long-term viability of the resource.
- Regulation of Wells – The Division of Regulatory Services, Bureau of Groundwater Regulation coordinates the review, issuance, and enforcement of well permits and water well contractor licensing. Activities covered are well construction, repair, and abandonment. This program protects public health and resource sustainability, while also serving the regulated community.
- District-wide Water Supply Assessment – This assessment encompasses a periodic District-wide evaluation of current and future water demands and the sustainability and sufficiency of water supply sources.
- Regional Water Supply Planning – This activity provides for development and implementation of focused plans, developed in cooperation with regional stakeholders, to identify and develop alternative water supply sources to meet long-term water supply needs while also sustaining water resources and natural systems. In FY 2015-2016, work will begin on updating the Region II RWSP (Okaloosa, Santa Rosa and Walton counties). Other planning activities include completion of the annual water use report and continued coordination with DACS on statewide agricultural water use estimates and projections.
- Water Resource Development – The District implements regional-scale projects that increase the availability of water supplies to meet long-term water supply needs. Examples of such projects include planning for water reuse and conservation, data collection, and source modeling and evaluation. Upcoming efforts include completion of a district-wide reuse water inventory; completion of a conservation evaluation for Bay, Okaloosa, Santa Rosa, and Walton counties; development and refinement of groundwater flow models in the western district; and continued efforts in support of the statewide expansion of alternative water sources.
- Water Supply Development Assistance – Financial and technical assistance is provided to local governments and utilities for water supply development. This effort includes grant funding designed to meet local challenges while also accomplishing regional priorities for resource management.
- Land Management – Protection, restoration, and management of water management lands is a major component of the District’s effort to ensure the long-term sustainability of the region’s water supplies. For example, the Econfina Creek WMA was acquired to secure the primary recharge area for Floridan aquifer springs that provide substantial base flow to Econfina Creek, which is the major tributary of Deer Point Lake Reservoir – the primary source of potable water for Bay County.

Strategic Priority 4: Water Supply. Ensure sufficient water is available for all existing and future reasonable-beneficial uses and natural systems.

Indicators:	(1) RWSP water demands met (volume [MGD] and percentage) (2) Public supply uniform gross per capita water use (GPCD and trend) (3) Public supply uniform residential per capita water use (GPCD and trend) (4) Water reuse to offset the use of potable quality water and to achieve other related beneficial uses (volume [MGD] and trend) (5) Project accomplishment (percent completion on schedule)
Funding sources:	(1) Ad Valorem Tax Revenue (2) General Fund Reserves (3) Water Protection and Sustainability Program Trust Fund (4) State Legislative Appropriations
Milestones:	(1) District-wide Water Reuse Inventory (2015) (2) Conservation Evaluation for Regions II and III (2015) (3) Completion of local government water supply development grant projects (2015-2017) (4) Revision of well construction rule (tentative in 2016) (5) Completion of Coastal Groundwater Model (2016) (6) Region II RWSP Update (2017) (7) District-wide Water Supply Assessment Update (2018)
Deliverables:	(1) Water use data (2) RWSP Updates (3) District-wide Water Supply Assessment Update (4) Grant project completion reports

Watershed Protection and Restoration

Through the SWIM program, the District follows a watershed-based, cooperative approach to protect and restore water and habitat quality for regionally significant waterbodies. Currently, the District is focusing efforts on water and habitat quality within Apalachicola and St. Andrew bays. Efforts also continue to address priority needs for watersheds across northwest Florida. Among current initiatives and priorities are:

- Gulf of Mexico Restoration – The District continues to work in cooperation with DEP, the Florida Fish and Wildlife Conservation Commission (FWC), and other regional stakeholders in Gulf of Mexico restoration. These activities help to implement the federal RESTORE Act and to effectively use civil penalty funding from MOEX Offshore, LLC, (MOEX) settlement to mitigate damages incurred from the 2010 Deepwater Horizon oil spill. In addition and through grant funds from the National Fish and Wildlife Foundation, the District will be updating its SWIM plans for all seven watersheds over the next two years. This effort will help prioritize projects within each watershed as well as provide a useful tool for local governments.
- SWIM Program – The SWIM program provides the planning framework for watershed management, protection, and restoration District-wide. Plans have been approved for major riverine-estuarine watersheds from Pensacola Bay through the St. Marks River watershed. Current projects underway are to implement stormwater retrofits in cooperation with the cities of Apalachicola, Carrabelle, Parker, Callaway, and Mexico Beach. As noted above, current plans for each of the District’s major watersheds will be developed over the next two years.
- Land Management – The District has acquired 211,149 acres of land critical to the protection of water quality, flood protection and floodplain management, natural systems, and water supply.

In addition to protecting water and related resources, these lands provide for public access and recreation.

- Environmental Resource Permitting (ERP) – The ERP program integrates stormwater management and treatment and wetland permitting. Implementation of the program protects multiple watershed and wetland functions including water quality, fish and wildlife habitat, flood protection, shoreline stability, and aquifer recharge.
- Florida Department of Transportation (FDOT) Mitigation – In accordance with section 373.4137, F.S., the District assists FDOT in developing wetland mitigation for transportation infrastructure development in service areas not covered by private mitigation banks. In the process, wetland resources and functions are protected and restored on a landscape scale. Detailed information on the District’s wetland programs and mitigation projects, as well as information on private mitigation bank options, is available at www.nwfwmdwetlands.com.
- Spring Restoration and Protection – Activities described above for spring restoration and protection are major priorities for watershed management in northwest Florida.

As demonstrated by the set of priority activities described, watershed protection and restoration efforts address the full range of the District’s AORs. As such, there is significant overlap among the projects, indicators, deliverables, and milestones with the other strategic priorities described.

Strategic Priority 5: Watershed Protection and Restoration. Protect and restore watershed resources and functions.

Indicators:	<ul style="list-style-type: none"> (1) Balance of released mitigation credits, reflective of net functional lift achieved under the District’s Umbrella Mitigation Plan (credits) (2) Cooperative project implementation (number and percent complete per the planned schedule) (3) Area restored (acres) (4) Stormwater treatment area (acres)
Funding sources:	<ul style="list-style-type: none"> (1) State Legislative Appropriations (2) General Fund Reserves (3) FDOT Mitigation Funding (4) RESTORE Act and settlement funds (5) Florida Forever Trust Fund
Milestones:	<ul style="list-style-type: none"> (1) Completion of cooperative stormwater retrofit projects in the St. Andrew Bay Watershed: Parker Drainage and Water Quality Improvements, Callaway Stormwater Retrofit, and Mexico Beach Stormwater Retrofit (2015-2016) (2) Completion of four cooperative stormwater retrofit projects in the Apalachicola River and Bay watershed: Marine Street, US 98 and 16th Street basin, Prado Outfall basin, Avenue I basin (2016-2017) (3) Completion of updated SWIM plans (2017)
Deliverables:	<ul style="list-style-type: none"> (1) Annual Regional Wetland Mitigation Plan and Mitigation Monitoring Reports (2) SWIM Program Summary Report within the Consolidated Annual Report (3) Draft and updated SWIM plans (4) Grant project completion reports

Flood Protection and Floodplain Management

Flood protection and floodplain management are essential components of watershed protection. Several current initiatives and programs address flood protection. These include:

- Flood Hazard Mapping, Assessment and Planning – The District continues to work in cooperation with the Federal Emergency Management Agency (FEMA) on flood map modernization and the Risk Mapping, Assessment, and Planning (MAP) program. This effort includes collaboration with state and local agencies to deliver quality data to increase public awareness of and support for actions that reduce flood-related risks. Risk MAP projects for the lower Ochlockonee River, Apalachicola River, New River, Chipola River, Pensacola Bay, and Perdido River and Bay, are underway. In the near term, the District expects to continue detailed coastal remapping studies for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties.
- Land Acquisition and Management – District lands include extensive floodplains along the Apalachicola, Choctawhatchee, Escambia, Yellow, Perdido, Blackwater and other rivers and major streams. Tidal wetlands are also protected on the Pensacola, Perdido, and Choctawhatchee estuaries. These lands maintain floodplain functions and protect natural systems, water quality, property, and public safety, as well as provide public access and recreation. Substantial upland acreage owned by the District provides protective buffers.
- Environmental Resource Permitting – Among the important functions of the ERP program, as described above, is floodplain resource protection and thus protection of property and residents from potential flood damage through the regulation and management of surface water. Also included in ERP is permitting for dam design, construction, and maintenance.
- Regional Wetland Mitigation – Floodplain functions are protected on a landscape scale through implementation of the District’s regional wetland mitigation program for FDOT.
- Flood Information Portal – The District provides internet access to digital flood maps throughout northwest Florida through the Flood Information Portal: portal.nwfwmdfloodmaps.com.
- Light Detection and Ranging (LiDAR) website – High-resolution topographic elevation data is available to the public online through the District’s LiDAR web site: www.nwfwmdlidar.com.

Strategic Priority 6: Flood Protection and Floodplain Management. Protect floodplain functions for the benefit of human communities and natural systems

Indicators:	(1) Area of floodplain protected through fee or less-than-fee acquisition (acres) (2) Percent of the District with updated DFRIMs meeting FEMA standards and criteria
Funding sources:	(1) Federal Emergency Management Agency (2) State Legislative Appropriations (3) General Fund Reserves (4) FDOT Mitigation Funding
Milestones:	(1) Completion of coastal remapping studies for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties (2016)
Deliverables:	(1) Risk MAP regulatory and non-regulatory products according to discovery report for each study area (2) Florida Forever Work Plan Annual Report

3. Implementation

Table 4 identifies major planned activities within each strategic priority area and outlines the anticipated schedule of implementation over the five-year planning horizon. Some activities will apply to more than one strategic priority but are only shown once under the primary strategic priority in the table below.

Table 4. Anticipated Schedule of Major Tasks

Activities	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
Springs Protection and Restoration					
Williford Spring Restoration	Completion				
Econfina WMA Streambank Restoration Projects	Construction	Completion			
Holmes Creek WMA Streambank Restoration Projects	Construction	Completion			
Jackson Blue Spring Basin Agricultural BMPs	Ongoing			Completion	
Sod-Based Crop Rotation Demonstration Project	Initiation				Completion
Land Acquisition	Completion				
Claiborne Aquifer Investigation	Initiation	Completion			
Jackson County Septic-to-Sewer Retrofit Project	Initiation			Completion	
Leon County Septic-to-Sewer Retrofit Project	Ongoing			Completion	
Wakulla County Septic-to-Sewer Retrofit Project	Ongoing			Completion	
Minimum Flows and Levels					
Enhanced District-wide Monitoring	Ongoing				
St. Marks River Rise	Ongoing			Assessment Complete	
Wakulla Springs and Sally Ward Spring	Ongoing				
Coastal Region II Floridan Aquifer	Ongoing				
Jackson Blue Spring	Ongoing				
ACF Basin Management					
Interstate Coordination and Technical Support	Ongoing				
Apalachicola Bay Water Quality Projects	Ongoing	Completion			

Table 4. Anticipated Schedule of Tasks (Continued)

Activities	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
Water Supply					
Groundwater and Surface Water Permitting	Ongoing				
Regulation of Wells	Ongoing				
Regional Water Supply Planning	Region II RWSP update	Completion			
Water Supply Assessment			Update Initiation	Completion	
Region II Groundwater Model	Initiation			Completion	
Water Supply Development Assistance	Ongoing				
Reuse and Conservation Planning	Ongoing				
Watershed Protection and Restoration					
Environmental Resource Permitting	Ongoing				
Regional Wetland Mitigation	Ongoing				
SWIM Plan Updates	Initiation	 Completion			
St. Andrew Bay Water Quality Projects	Completion				
Flood Protection and Floodplain Management					
Environmental Resource Permitting	Ongoing				
Regional Wetland Mitigation	Ongoing				
Dam Safety Program	Ongoing				
Land Management	Ongoing				
Flood Hazard Mapping, Assessment and Planning	Ongoing				
Updated DFIRMs	Ongoing				
Coastal remapping studies	Ongoing	 Completion			

4. Monitoring and Reporting

Annual Work Plan Report

As required by section 373.036, F.S., the Strategic Plan provides for an annual performance review and identification of milestones and deliverables to assess implementation. The review is incorporated as Chapter One of the NFWMD March 1st Consolidated Annual Report (www.nfwwater.com/data-publications/reports-plans/consolidated-annual-reports/). Elements of the Strategic Plan addressed in the report are:

- a) Evaluation of progress toward accomplishing strategic priorities;
- b) Evaluation of indicators specified in Section 2;
- c) Accomplishment of milestones and deliverables; and
- d) Project-based accomplishments from the past fiscal year.

The evaluation of indicators serves several purposes within a strategic plan. Beyond providing an assessment of program implementation, identification and evaluation of indicators helps to further an understanding of resource conditions and to clarify objectives and intended results. Evaluating measures and indicators provides internal and external feedback for ascertaining whether a given project or program is achieving intended results and whether the underlying strategy is appropriate or should be revised.

Additional Periodic Reporting

The Consolidated Annual Report also includes several other annual reports on District programs:

- a) Minimum Flows and Levels Annual Report;
- b) Annual Five Year Capital Improvement Plan;
- c) Five Year Water Resource Development Work Program Annual Report;
- d) Alternative Water Supplies Annual Report;
- e) Florida Forever Work Plan Annual Report;
- f) Mitigation Donation Annual Report; and
- g) Surface Water Improvement and Management (SWIM) Program Summary Report.

In addition to the annual reporting described above, each of the state's water management districts completes and submits data for a set of common metrics on a quarterly basis to the Florida DEP. These metrics focus extensively on process efficiency, while also including a limited set of measures intended to reflect resource conditions and management (Table 5):

Table 5. Statewide Water Management District Performance Metrics

Permitting – CUP, ERP
For closed applications within the CUP and ERP permitting areas, median and mean time to process by permit type and total
For closed applications within the CUP and ERP permitting areas, the median and mean time in house by permit type and total, including those applications under legal challenge.
Within the CUP and ERP permitting areas, percentage of individually-processed open applications with > 2 RAIs
Within the CUP and ERP permitting areas, average number of RAIs for individually processed applications that closed in the last twelve months
Within the CUP and ERP permitting areas, percentage of individually processed open applications that have been in-house six months or longer
Within the CUP and ERP permitting areas, cost to process for all permit types
Within the CUP and ERP permitting areas, application to staff ratio for all permit types
Permit Process Time for Legislative Extensions and Emergency Orders (ERP only)
Cost to Process Legislative Extensions and Emergency Orders (ERP only)
Mission Support
Administrative costs as a percentage of total expenditures
Water Supply
District-wide, the quantity (mgd) and percentage of the 2010-2030 Public Supply increase in demand that has been met separately by non-water conservation projects, and by water conservation (only) projects
Uniform gross per capita water use (Public Supply) by District
Uniform residential per capita water use (Public Supply) by District
Natural Systems
Number of MFLs and Reservations, by water body type, established annually (fiscal year) and cumulatively
Number and percentage of water bodies meeting their adopted MFLs
For water bodies not meeting their adopted MFLs, the number and percentage of those water bodies with an adopted recovery or prevention strategy
MFL Priorities List Table
MFL Priorities List Table

5. Financial Resources

The state constitution limits the NFWMD to 1/20th (.05 mills) of the ad valorem taxing authority afforded to the other four water management districts. The District's current ad valorem tax millage rate, as set by the Governing Board, is 0.0378 mills. To meet its areas of responsibility, the District must rely on other sources of funding, when available, including the following:

- State legislative appropriations – management of District-owned lands, Environmental Resource Permitting, programmatic operations, water supply planning and development, research and data collection, watershed restoration and management, spring protection and restoration, and other state priorities
- Land Acquisition Trust Fund – land acquisition, management and restoration of natural systems, enhancement of public access and recreational opportunities on District-owned lands
- Florida Forever – land acquisition and capital improvements for watershed restoration
- Dedicated reserves – water supply development, land management, and regional wetland mitigation
- Federal grants – leverage District and state funding
- RESTORE Act funds – watershed planning and restoration
- Local government and water supply utility cost sharing – cooperative project implementation

Until recently, water resource development in northwest Florida has depended primarily on funding from the Water Management Lands Trust Fund (WMLTF). The WMLTF, however, was eliminated by the 2015 Florida Legislature through Senate Bill 2516-A. The Ecosystem Management and Restoration Trust Fund was also eliminated as part of this bill. The bill established the Land Acquisition Trust Fund to accomplish purposes set forth in Article X, Section 28 of the State Constitution.

The District's budget is adopted annually in September. The budget is submitted at a preliminary level in January of each year and as a proposed budget as the August 1 Tentative Budget Submission. The District's current adopted budget, as well as the Preliminary and Tentative budget submissions may be found online at www.nfwwater.com/business-finance/district-budget/.

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