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# Strategic Water Management Plan

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November 2014

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*Northwest Florida Water  
Management District*

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Program Development Series 14-02

***NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT***

# **Strategic Water Management Plan**

**Fiscal Year 2014-2015 Update**

***NOVEMBER 2014***



Program Development Series 14-02

# NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT



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## TABLE OF CONTENTS

1. <b><u>INTRODUCTION</u></b>	<b><u>1</u></b>
2. <b><u>STRATEGIC PRIORITIES FOR FY 2015-2019</u></b>	<b><u>8</u></b>
3. <b><u>MONITORING AND REPORTING</u></b>	<b><u>18</u></b>
4. <b><u>FINANCIAL RESOURCES</u></b>	<b><u>20</u></b>
5. <b><u>REFERENCES</u></b>	<b><u>21</u></b>

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# 1. Introduction

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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, Water Resources, Florida Statutes (F.S.), in a manner that best ensures the continued welfare of the residents and natural systems of northwest Florida.

## ***Strategic Priorities for Fiscal Years 2015-2019***

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- ❖ ***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.*

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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.

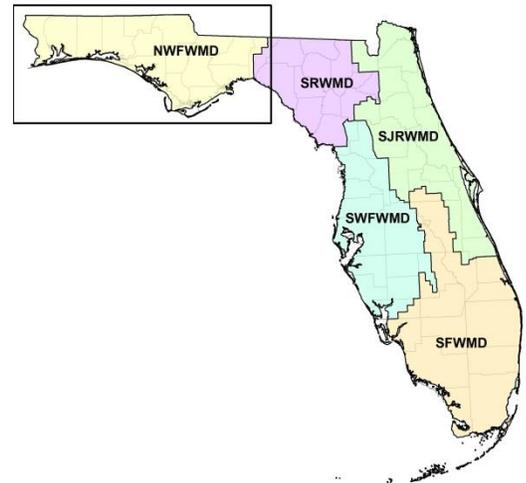
**About the Northwest Florida Water Management District**

The NFWMD 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. Northwest Florida Water Management District**

A nine-member board appointed by the Governor and confirmed by the Senate governs the NFWMD. The agency 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.

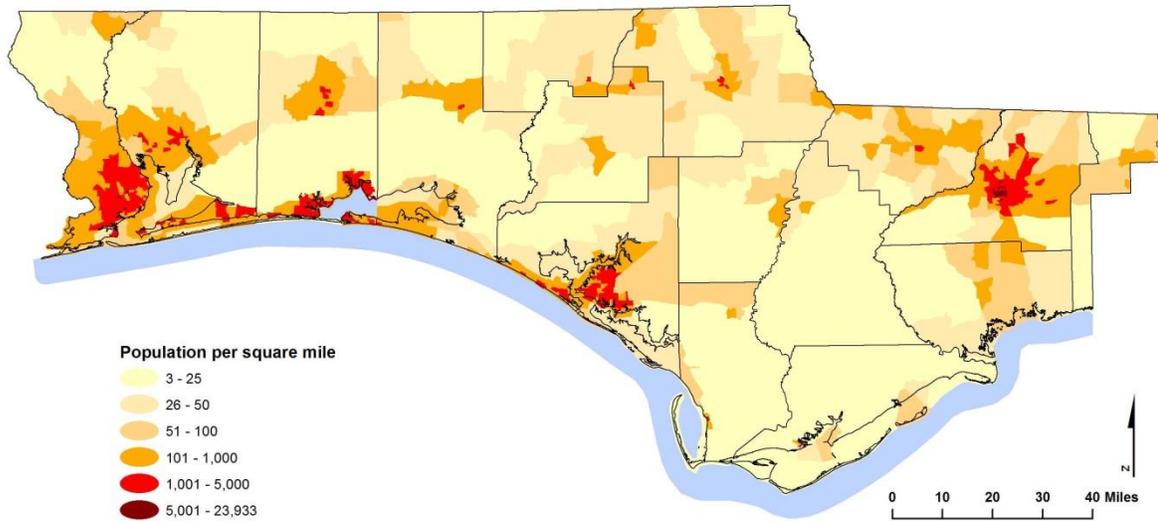
**Statutory Areas of Responsibility**

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

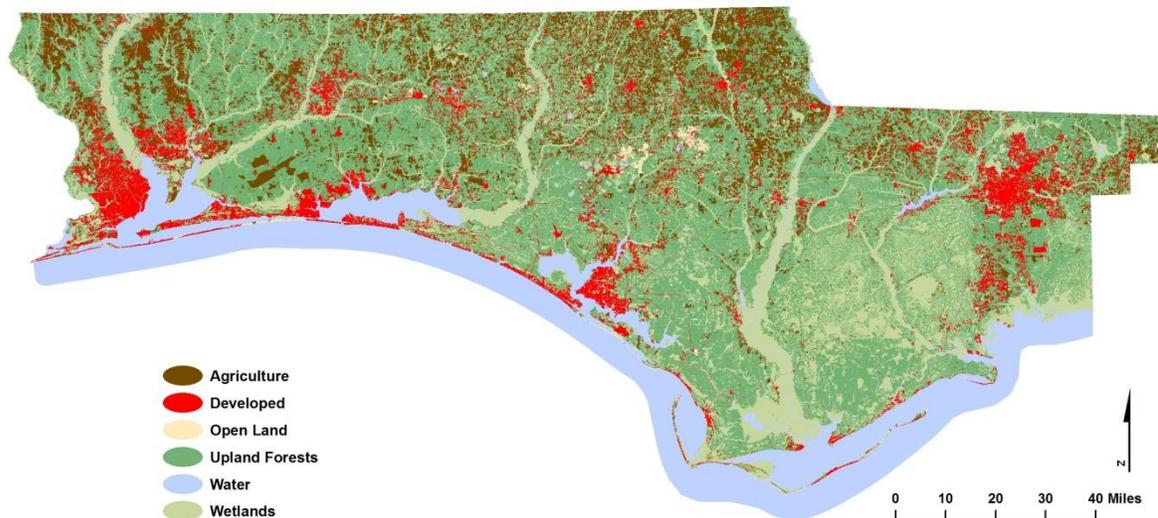
<b>Water Supply</b>	Promote the availability of sufficient water for all existing and future reasonable-beneficial uses and natural systems.
<b>Flood Protection and Floodplain Management</b>	Maintain natural floodplain functions and minimize harm from flooding.
<b>Water Quality</b>	Protect and improve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

### Characteristics

As of 2013, there were nearly 1.4 million permanent residents in northwest Florida, with much of the population concentrated along the coastal region from Escambia through Bay counties, as well as in Tallahassee and the surrounding area (Figure 2). Much of the District’s non-urban land is devoted to forestry and agriculture, with areas of concentrated development corresponding to population centers (Figure 3). 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.



**Figure 2. 2010 Population Density Based on Census Blocks**



**Figure 3. 2010 Land Use and Land Cover**

Portions of northwest Florida experienced significant population growth from 2000 to 2008. Growth slowed in 2009 and 2010 (University of Florida 2013), resuming in 2010, but apparently moderated from prior levels. The District-wide population estimate for 2013 was 1,387,289 (University of Florida 2014), a 1.6 percent increase over the 2010 population. Population is projected to grow to

1,645,933 by 2035 (University of Florida 2013), a 21 percent increase over 20 years. 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. Such growth presents potential water resource challenges throughout the region, 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	2000 Population Estimate	2010 Population Estimate	2035 Population Projection <sup>1</sup>	Percent Change 2010 - 2035
Bay	148,217	168,852	209,100	24%
Calhoun	13,017	14,625	16,900	16%
Escambia	294,410	297,619	319,300	7%
Franklin	11,057	11,549	12,000	4%
Gadsden	45,087	46,389	50,500	9%
Gulf	13,332	15,863	16,400	3%
Holmes	18,564	19,927	21,600	8%
Jackson	46,755	49,746	50,700	2%
Jefferson <sup>2</sup>	7,741	10,417	11,433	10%
Leon	239,452	275,487	332,700	21%
Liberty	7,021	8,365	11,300	35%
Okaloosa	170,498	180,822	216,400	20%
Santa Rosa	117,743	151,372	218,800	45%
Wakulla	22,863	30,776	41,900	36%
Walton	40,601	55,043	87,200	58%
Washington	20,973	24,896	29,700	19%
Total	1,217,331	1,361,748	1,645,933	20.9%

<sup>1</sup>Medium growth scenario

<sup>2</sup>Estimated population within NFWFMD. 2010 reflects updated methodology.

Sources: Population estimates by U.S. Census Bureau. Population projections by UF 2013.

### ***Strengths, Opportunities, and Challenges***

The District's strengths can be found in the development of effective partnerships and cooperative relationships with other governmental and private organizations with complementary functions and authority, as well as its extensive water management lands that protect water quality, floodplains, water recharge areas, and ecosystem health and productivity. The District has also made substantial progress developing alternative and inland water sources to meet water supply needs and interconnecting utilities for system reliability.

There are opportunities to expand water conservation and efficiency, to further develop reuse of reclaimed water and other alternative water supply sources, to protect undeveloped floodplains and important recharge areas, and to 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**

<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Partnership and cooperation with other governmental and private organizations with complementary functions and authority</li> <li>• Extensive water management lands and other public lands that protect water quality, floodplains, water recharge, and ecosystem health and productivity</li> <li>• Ability to leverage significant external funding</li> <li>• Technical capability and long-term outlook</li> <li>• Updated Chapter 40A-2 F.A.C. rules for Consumptive Use Permitting in 2014 for state-wide consistency and permit streamlining</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Alternative water supply sources</li> <li>• Potential for additional water conservation</li> <li>• Potential for reuse system development and expansion to meet nonpotable demands, to provide beneficial aquifer recharge, and to enhance water quality</li> <li>• Enhanced data collection, technical analyses, and MFL establishment for priority waterbodies</li> <li>• Federal and other external funding sources that can match and extend existing funds</li> <li>• New technology and data sources</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Out-of-state water withdrawals and wastewater discharges</li> <li>• Diminished water quality at some of the District’s signature springs</li> <li>• Saltwater intrusion in some coastal population centers</li> <li>• Rising demands for most water use categories, including public supply</li> <li>• Periodic and discrete weather events (e.g., droughts, floods, and tropical storms)</li> <li>• Nonpoint source pollution</li> <li>• Fragmentation of wetlands and other water-related habitats</li> <li>• Hydrologic and water quality data gaps</li> <li>• Infrastructure funding limitations, particularly on the part of financially disadvantaged small local governments</li> </ul>

## ***Strategic Planning Process***

### **Strategic Water Management Plan**

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 (Table 3) that directly execute the strategies outlined in the SWMP. Thus, the SWMP reflects an integrated response to the major water resource challenges facing the District.

**Table 3. Operational Documents**

<b>Plan / Regulation</b>	<b>Purpose (Primary Statute)</b>	<b>Horizon</b>
<b>Strategic Water Management Plan</b>	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
<b>Incorporates:</b>		
<a href="#">Regional Water Supply Plans</a>	Identify water sources, demands, and alternative water supply sources (373.709, F.S.)	20 years; updated every five years
<a href="#">Water Resource Development Work Program</a>	Development of alternative sources within regional water supply planning areas (373.709, F.S.)	Five years; updated annually
<a href="#">Water Supply Assessment</a>	Estimates and projections of District-wide water demand and source assessments (373.036, F.S.)	20 years; updated every five years
<a href="#">Florida Forever Land Acquisition Work Plan</a>	District-wide land acquisition plan (373.199, F.S.)	Five years; updated annually
<a href="#">Florida Forever Capital Improvements Plan</a>	Short-range plan for implementation of approved capital improvement projects (373.199, F.S.)	Five years; updated annually
<a href="#">NWFWMF-FEMA Cooperating Technical Partner Risk MAP Business Plan</a>	Risk Map, flood mapping and related activities plan for the Northwest Florida Water Management District (373.036, F.S.)	Five years; updated annually
<a href="#">Umbrella, Watershed-based Regional Mitigation Plan</a>	District-wide wetland mitigation (373.4137, F.S., 33 U.S.C. 1344)	Updated annually
<a href="#">SWIM Priority List</a>	Prioritize watersheds and waterbodies for SWIM plan development (373.453, F.S.)	Updated annually
<a href="#">SWIM Plans (multiple)</a>	Watershed protection, management, and restoration (373.451-459, F.S.)	Continuous; updated as needed
<a href="#">Hydrologic Monitoring Plan</a>	Surface and ground water hydrologic and water quality monitoring (373.036; 373.451-459, F.S.)	Continual; updated as needed
<a href="#">Minimum Flows and Levels (MFLs) Priority List</a>	Priority list for development of MFLs (373.042, F.S.)	Updated annually
<a href="#">Ch. 40A-1, FAC</a>	General and Procedural (373.044, F.S.)	Continuous
<a href="#">Ch. 40A-2, FAC</a>	Regulation of Consumptive Uses of Water (373.203-250, F.S.)	Continuous
<a href="#">Ch. 40A-21, FAC</a>	Water Shortage Plan (373.246(1), F.S.)	Continuous
<a href="#">Ch. 40A-3, FAC</a>	Regulation of Wells (373.302-342, F.S.)	Continuous
<a href="#">Ch. 40A-44, FAC</a>	Regulation of Agricultural and Forestry Surface Water Management Projects (373.403-443, F.S.)	Continuous
<a href="#">Ch. 40A-6, FAC</a>	Works of the District (373.084-087, F.S.)	Continuous
<a href="#">Ch. 62-330, FAC</a>	Environmental Resource Permitting (373.4131, F.S.)	Continuous

## 2. Strategic Priorities for FY 2015-2019

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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 and goals, together with indicators, funding sources, deliverables, and milestones. Deliverables include work products and milestones within the planning horizon that support each goal. Table 4 on page 16 provides the current implementation schedule.

### *Springs Protection and Restoration*

Springs protection and restoration is carried out through the District's Surface Water Improvement and Management (SWIM), MFL, Land Management and Acquisition, Consumptive Use Permitting, and Environmental Resource Permitting programs. Current initiatives and priorities include the following:

- FY 2014-2015 Springs Protection and Restoration Initiative – New cooperative restoration and water resource development projects are planned to improve conditions in Wakulla Springs, Jackson Blue Spring, and springs associated with the Holmes Creek and Econfina Creek systems.
- Williford Spring Restoration – The District has initiated restoration activities for Williford Spring, within the Econfina Creek Water Management Area (WMA) in Washington County. These activities include sediment removal and extensive bank restoration using natural, non-structural designs. The use of precast pavers for the terrace and spring entry steps and construction of a watercraft docking point will enhance public use while preventing damage to the resource.
- Devil's Hole Spring Stream Bank Restoration – Also in the Econfina Creek WMA, the Devil's Hole site has experienced bank erosion from high public use, which has degraded aquatic habitat. The project will involve 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.
- Holmes Creek Stream Bank 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 will occur at Live Oak, 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. Individual sites are to receive other improvements including a spring observation deck.
- Jackson Blue Spring Basin Agricultural Best Management Practices – In FY 2013-2014, the District began a major initiative to help agricultural producers in the Jackson Blue Spring basin integrate an array of best management practices (BMPs) into their farming operations. These practices, implemented in cooperation with the Florida Department of Agriculture and Consumer Services (DACS), Florida Department of Environmental Protection (DEP), and the Jackson Soil and Water Conservation District, are expected to conserve water and improve water quality without compromising production yields.
- 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 and Wakulla springs and the Spring Creek springs group in coastal Wakulla County.

- Land Management – The District owns and manages more than 41,000 acres within the Econfina Creek WMA. These lands protect 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.
- Minimum Flows and Levels – Development of MFLs, as described below, is important to the long-term protection and, as needed, restoration of spring systems. In support of the MFL program, the District has begun intensive data collection for St. Marks River Rise, Wakulla Springs, and Sally Ward Spring. A work plan, which outlines the data needs, technical assessments, and project schedule, is also being developed for Jackson Blue Spring.
- Consumptive Use Regulation – Permitting of groundwater withdrawals is a tool for preventing significant impacts to the groundwater resources contributing to spring systems and water supplies.

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**Springs Protection and Restoration**

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Strategic Priority:	Protect and restore 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) Ecosystem Management and Restoration Trust Fund (2) Water Management Lands Trust Fund (3) General Fund Reserves (4) State Legislative Appropriations
Deliverables:	(1) Mobile Irrigation Lab evaluation reports (2) Water quality data (3) Spring discharge data
Milestones:	(1) Completion of Devil’s Hole spring stream bank restoration (2015) (2) Completion of Williford Spring restoration (2015-2016) (3) Implementation of funded BMPs for farmers in the Jackson Blue Spring basin and Mobile Irrigation Lab evaluations (2015-2016) (4) Completion of Holmes Creek streambank stabilization (2016)

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### ***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 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 restoration. The District has initiated efforts to greatly enhance data collection and complete MFL technical assessments for St. Marks River Rise, Wakulla Springs, and Sally Ward Spring. The District has also initiated development of work plans for Jackson Blue Spring and the coastal Floridan aquifer in Walton, Okaloosa, and Santa Rosa counties. Over the next five years, enhanced data collection and technical assessments will begin for the coastal Floridan Aquifer in Franklin County and in the region encompassing Walton, Okaloosa, and Santa Rosa counties, as well as for Jackson Blue Spring.

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.nfwwater.com/water-resources/minimum-flows-levels/](http://www.nfwwater.com/water-resources/minimum-flows-levels/).

<b>Minimum Flows and Levels</b>	
Strategic Priority:	Develop and implement science-based MFLs that are protective of natural systems and associated public resources.
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) Legislative Appropriations (3) Water Management Lands Trust Fund
Deliverables:	(1) Completed MFL technical assessments according to the approved schedule
Milestones:	(1) Completion of technical assessment for the St. Marks River Rise (2018)

### ***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; development of an updated three-dimensional hydrodynamic model of Apalachicola Bay to facilitate assessments of freshwater inflows, bay bathymetry, and boundary conditions; and implementation of several cooperative water quality improvement projects in coastal Franklin County. The District is also developing an updated freshwater flow model for the Apalachicola River and delta, as well as for Tates Hell Swamp. 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 BMP program for farmers in Jackson County to improve the health of Jackson Blue Spring also supports ACF basin sustainability through water conservation and water quality protection.

<b>Apalachicola-Chattahoochee-Flint River Basin</b>	
Strategic Priority:	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) Ecosystem Management and Restoration Trust Fund (2) Water Management Lands Trust Fund (3) State Legislative Appropriations (4) General Fund Reserves
Deliverables:	(1) Updated hydrodynamic model of Apalachicola Bay (2014)
Milestones:	(1) Complete hydrologic restoration activities in the Whiskey George basin of Tates Hell Swamp (2014) (2) Completion of four cooperative stormwater retrofit projects in the City of Apalachicola: Battery Park Basin, US 98 and 16th Street basin, Prado Outfall basin, and Avenue I basin (2015)

### ***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:

- **Consumptive Use Permitting** – This Division of Regulatory Services, Bureau of Groundwater Protection 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 Protection also 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 the public and the resource, 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.
- **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.

- 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 a major part of the baseflow of Econfina Creek, which is the major tributary of Deer Point Lake Reservoir – the primary source of potable water for Bay County.

During FY 2013-2014, both the five-year Water Supply Assessment update and the Regional Water Supply Plan update for Region III (Bay County) were completed. Additionally, the District has entered into cooperative funding agreements with local governments and utilities across northwest Florida to accomplish major investments in the region’s water supply infrastructure. This includes projects funded as part of the District’s Water Supply Development Community Assistance Initiative competitive grant program.

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### Water Supply

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**Strategic Priority:** Sufficient water will be available for all existing and future reasonable-beneficial uses and natural systems.

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**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)

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**Funding sources:**

- (1) Ad Valorem Tax Revenue
- (2) General Fund Reserves
- (3) Water Protection and Sustainability Program Trust Fund
- (4) State Legislative Appropriations
- (5) Water Management Lands Trust Fund

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**Deliverables:**

- (1) District-wide Water Supply Assessment Update
- (2) RWSP Updates

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**Milestones:**

- (1) District-wide Water Supply Assessment Update (2014)
- (2) Region III RWSP Update (2014)
- (3) Region II RWSP Update (2017)
- (4) Interim District-wide Reclaimed Water Evaluation (2015)
- (5) Adoption of more consistent rules statewide for permitting of individual water use (CUPCon) through coordination with FDEP and the other four WMDs (2014)
- (6) Revision of well construction rule (2015)
- (7) Initiation of new regulatory database system (eReg) (2015)

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### ***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:

- Land Management – The District has acquired 211,152 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. The program seeks to protect 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.
- 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) to mitigate damages incurred from the 2010 Deepwater Horizon oil spill.
- Tates Hell Swamp Restoration – The District continues to implement hydrologic and habitat restoration projects as detailed in the Tate’s Hell State Forest Hydrologic Restoration Plan. These projects restore wetlands and support estuarine water quality improvement.
- SWIM Program – The SWIM program provides the planning framework for watershed management, protection, and restoration District-wide. Plans have been approved for the major riverine-estuarine watersheds from Pensacola Bay through the St. Marks River watershed. Current projects are to implement stormwater retrofits in cooperation with the cities of Apalachicola, Carrabelle, Panama City, Parker, Callaway, and Mexico Beach.
- Spring Restoration and Protection – Activities described above for spring restoration and protection are major priorities for watershed management in northwest Florida.

As is evident from 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.

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**Watershed Protection and Restoration**


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Strategic Priority:	Protect and restore watershed resources and functions.
Indicators:	<ol style="list-style-type: none"> <li>(1) Balance of released mitigation credits, reflective of net functional lift under the District’s Umbrella Mitigation Plan (credits)</li> <li>(2) Cooperative project implementation (number and percent complete per the planned schedule)</li> <li>(3) Contributing area for newly installed stormwater treatment (acres)</li> </ol>
Funding sources:	<ol style="list-style-type: none"> <li>(1) Ecosystem Management And Restoration Trust Fund</li> <li>(2) Water Management Lands Trust Fund</li> <li>(3) State Legislative Appropriations</li> <li>(4) General Fund Reserves</li> <li>(5) FDOT Mitigation Funding</li> <li>(6) RESTORE Act and MOEX funds</li> <li>(7) Florida Forever Trust Fund</li> </ol>
Deliverables:	<ol style="list-style-type: none"> <li>(1) Annual Regional Wetland Mitigation Plan and Mitigation Monitoring Reports</li> <li>(2) SWIM Program Summary Report within the Consolidated Annual Report</li> </ol>
Milestones:	<ol style="list-style-type: none"> <li>(1) In-Lieu-Fee Instrument fully permitted by U.S. Army Corps of Engineers (2014)</li> <li>(2) Completion of four cooperative stormwater retrofit projects in the Apalachicola River and Bay Watershed: Battery Park Basin, US 98 and 16th Street basin, Prado Outfall basin, and Avenue I basin (2015)</li> <li>(3) Completion of four cooperative stormwater retrofit projects in the St. Andrew Bay Watershed: Panama City Maple Ave., Bay Co. Ed Lee Rd., Parker Drainage and Water Quality Improvements, and Callaway Stormwater Retrofit (2015)</li> </ol>

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***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, Perdido Bay, Perdido River and Apalachee Bay – St. Marks River watersheds have been initiated. In the near term, the District expects to complete updated coastal DFIRMs for Franklin, Jefferson, and Wakulla counties and 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, Choctawhatchee,

and St. Andrew bay 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 storm water, including 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](http://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](http://www.nwfwmdlidar.com).

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**Flood Protection and Floodplain Management**

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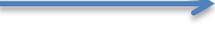
Strategic Priority:	Protect floodplain functions for the benefit of human communities and natural systems
Indicators:	(1) Area of floodplain protected through fee or less-than-fee acquisition (acres) (2) Percent of the District with updated DFRIMs meeting FEMA standards and criteria
Funding sources:	(1) Federal Emergency Management Agency (2) Ecosystem Management and Restoration Trust Fund (3) State Legislative Appropriations (4) General Fund Reserves (5) Water Management Lands Trust Fund (6) FDOT Mitigation Funding
Deliverables:	(1) Coastal DFIRMs for Franklin, Jefferson, and Wakulla counties (2014) (2) Risk MAP regulatory and non-regulatory products according to discovery report for each study area
Milestones:	(1) Completion of DFIRM updates for Franklin, Jefferson, and Wakulla counties (2014) (2) Completion of coastal remapping studies for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties (2016)

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**Implementation**

Table 4 identifies key planned activities within each priority area and outlines the currently anticipated schedule of implementation over the five-year planning horizon.

**Table 4. Anticipated Schedule of Tasks**

<i>Activities</i>	<i>FY 14-15</i>	<i>FY 15-16</i>	<i>FY 16-17</i>	<i>FY 17-18</i>	<i>FY 18-19</i>
<b>Springs Protection and Restoration</b>					
Williford Spring Restoration	Construction	Completion			
Devil’s Hole Spring Stream Bank Restoration	Initiation	Completion			
Holmes Creek stream bank restoration	Initiation	Completion			
Jackson Blue Spring Basin Agricultural BMPs	Ongoing				
<b>Minimum Flows and Levels</b>					
Enhanced District-wide Monitoring	Ongoing				
St. Marks River Rise	Ongoing				
Coastal Franklin County Floridan Aquifer		Initiation			
Coastal Region II Floridan Aquifer		Initiation			
Wakulla Springs and Sally Ward Spring	Ongoing				
Jackson Blue Spring			Initiation		
<b>ACF Basin Management</b>					
Interstate coordination and technical support	Ongoing				
Cooperative Water Quality Improvement Projects	Ongoing				
Updated hydrodynamic model	Completion				
Apalachicola Bay Water Quality Projects	Ongoing				

**Table 4. Anticipated Schedule of Tasks (Continued)**

<i>Activities</i>	<i>FY 14-15</i>	<i>FY 15-16</i>	<i>FY 16-17</i>	<i>FY 17-18</i>	<i>FY 18-19</i>
<b>Water Supply</b>					
Consumptive Use Permitting	Ongoing				
Regulation of Wells	Ongoing				
Water Supply Assessment				Update Initiation	Completion
Regional Water Supply Planning		Region II RWSP update		Completion	Region III RWSP update
Region II Groundwater Model	Initiation			Completion	
Water Supply Development Assistance	Ongoing				
Reuse Planning	Ongoing				
<b>Watershed Protection and Restoration</b>					
Environmental Resource Permitting	Ongoing				
Regional Wetland Mitigation	Ongoing				
Land Management	Ongoing				
Gulf of Mexico Restoration Support and Technical Assistance	Ongoing				
St. Andrew Bay Water Quality Projects	Ongoing				
Apalachicola Bay Water Quality Projects	Ongoing				
<b>Flood Protection and Floodplain Management</b>					
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	

## 3. Monitoring and Reporting

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### *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 1<sup>st</sup> Consolidated Annual Report ([www.nfwwater.com/data-publications/reports-plans/consolidated-annual-reports/](http://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 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**

<b>Permitting – CUP, ERP</b>
For closed applications within the CUP and ERP permitting areas, median time to process by permit type and total
For closed applications within the CUP and ERP permitting areas, the median 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)
<b>Mission Support</b>
Administrative costs as a percentage of total expenditures
Average travel expenditure per employee
Percentage of planned vehicle/vessel/equipment maintenance performed on schedule
Percentage of vehicles/vessel/equipment exceeding minimum replacement threshold
Average cost per vehicle for scheduled/preventive maintenance
Percent of planned and unplanned maintenance by number of maintenance work orders for vehicles/vessels/equipment
Contract Concessions - Renewals and Reprocurements
Contract Concessions - Savings
Percentage of office equipment exceeding minimum replacement threshold
Average age of fleet (one ton and under)
Average mileage of assigned vehicles (one ton and under) in fleet
Average mileage of assigned vehicles (over one ton) in fleet
Average mileage of pool vehicles (one ton and under) in fleet
Average age of fleet (one ton and under) at time of surplus
Average mileage of fleet (one ton and under) at time of surplus
<b>Water Supply</b>
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
<b>Natural Systems</b>
Number of acres and percentage of District lands evaluated for surplus
Number of acres and percentage of surplus lands sold, exchanged, or leased
Number of acres of surplus land approved for sale, trade or lease by the Governing Board
Cost/acre for lands managed by the District (not total acreage owned)
Cost/acre prescribed fire
Cost/acre for invasive plant control
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
<b>MFL Priorities List Table</b>
MFL Priorities List Table

## 4. Financial Resources

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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 0.039. To meet its areas of responsibility, the District must rely on other sources of funding, when available, including the following:

- Water Management Lands Trust Fund – management of District-owned lands, Environmental Resource Permitting, programmatic operations, water supply planning and development, research and data collection, and watershed management.
- Water Protection and Sustainability Program Trust Fund – alternative water supply development and water resource development
- Legislative special appropriations – spring protection and restoration, watershed restoration, and other state priorities
- Florida Forever – capital improvements for watershed restoration
- Dedicated reserves – water supply development, land management, and regional wetland mitigation
- Federal grants – leverage District and state funding
- Local government and water supply utility cost sharing – implement cooperative projects

In the near term, District reserve funds will be used to supplement other available financial resources to support recurring activities, including MFLs, regional water supply planning, and land management activities. Given the nonrecurring nature of the funding source, the District will continue to apply stringent controls over the use of these dollars in order to obtain the maximum benefit. General cost-saving measures continue to be developed and implemented in a strategic manner to maximize the amount of time these programs can be supported.

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/](http://www.nfwwater.com/business-finance/district-budget/).

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