

Water Resource Planning in Northwest Florida

Paul Thorpe Northwest Florida Water Management District

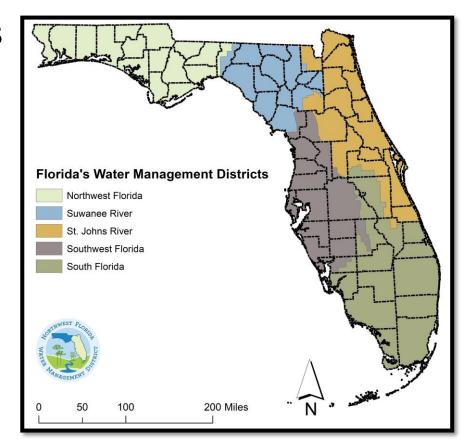
October 23, 2019



Florida Water Resources Act of 1972

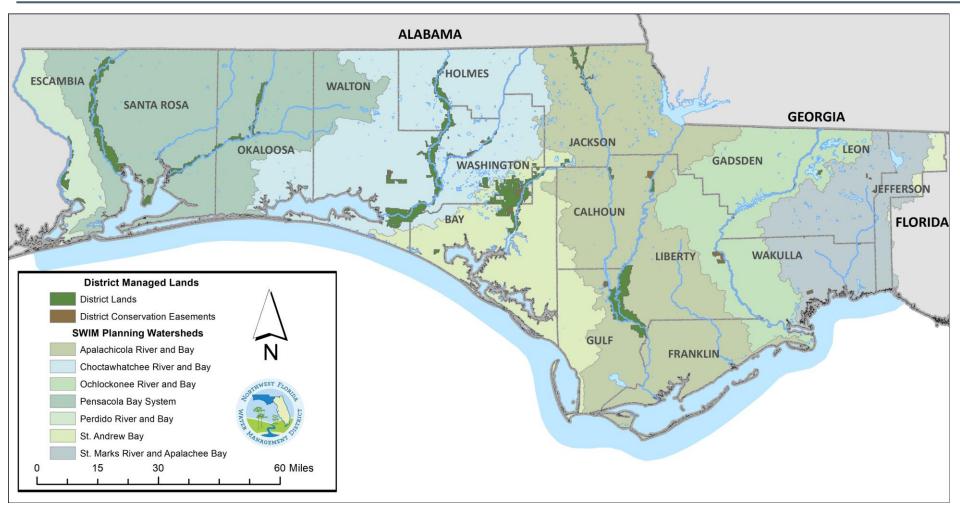
Chapter 373, Florida Statutes

"Because water constitutes a public resource benefiting the entire state, it is the policy of the Legislature that the waters in the state be managed on a state and regional basis."





Northwest Florida Water Management District





Comprehensive Water Resource Management

Resource Regulation

Watershed Management

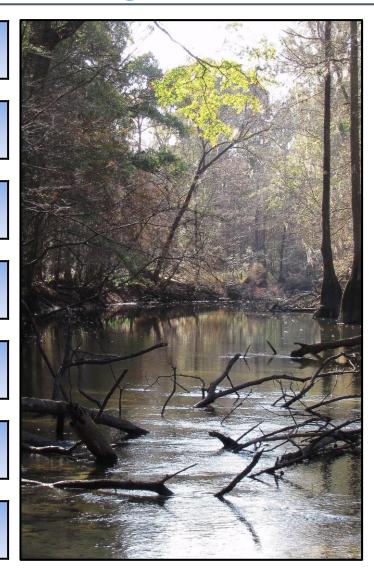
Minimum Flows and Water Levels

Water Supply Planning

Water Resource & Supply Development

Land Acquisition

Restoration





Integrated Water Resource Planning



Water Supply



Watershed Management



Minimum Flows and Levels



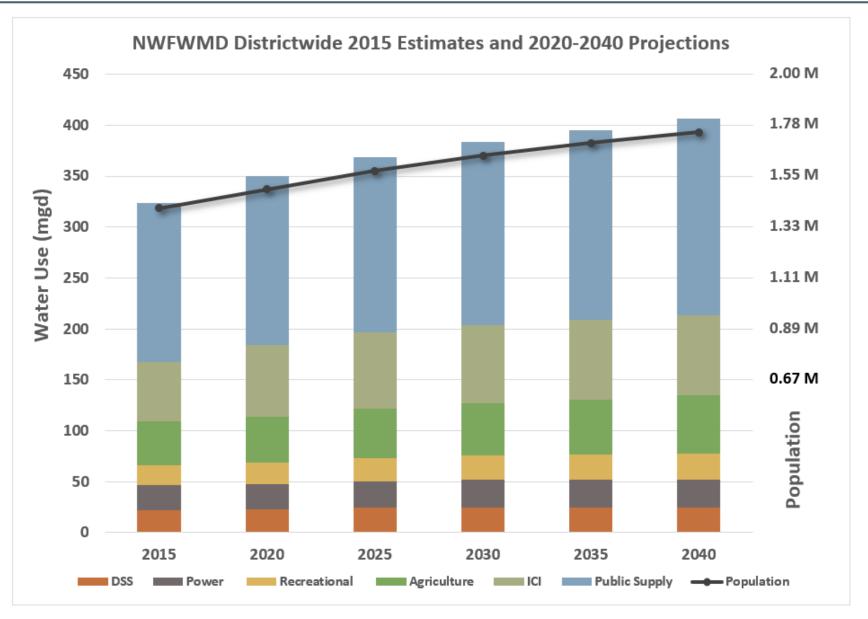
Land Management



Wetland Mitigation

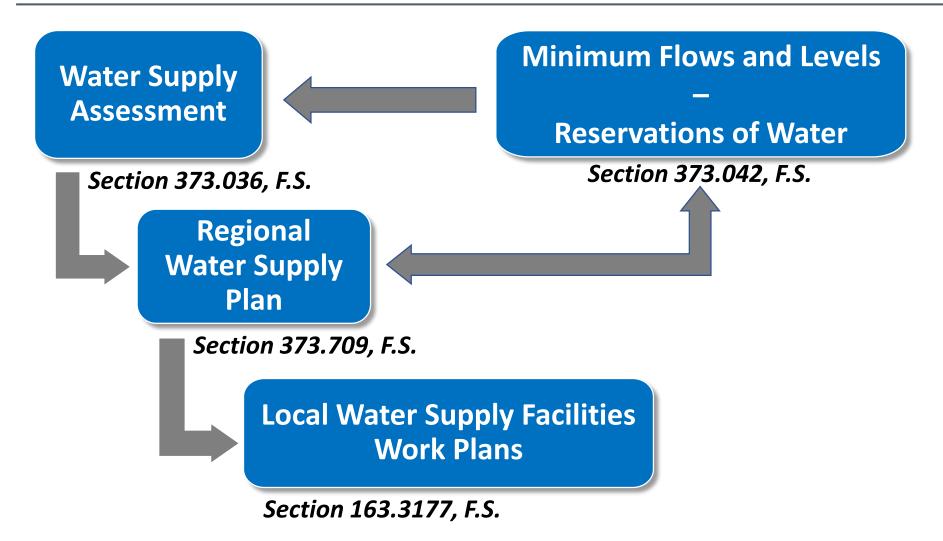


Water Supply Planning





Water Supply Planning (Northwest Florida)



Data, analysis, and planning documents updated every five years

Minimum Flows and Minimum Water Levels

Section 373.042, Florida Statutes

What is an MFL? Limit at which further withdrawals will cause significant harm to the water resources or ecology of the area.

Purpose: To protect water resources and associated ecology.

Provides information to support water supply planning and water use permitting evaluations.

MFLs Shall Be Established for:

- Surface waterbodies and aquifers based on importance of waterbody and potential for significant harm to regional water resources or ecology.
- 1st magnitude and Outstanding Florida Springs
- 2nd magnitude springs on state or federal conservation lands



Northwest Florida MFL 2018 Priority List

Waterbody	Anticipated Rule Adoption
St. Marks River Rise (1st Magnitude)	2019
Wakulla Spring (1st Magnitude)	2021*
Sally Ward Spring (2 nd Magnitude)	2021
Floridan Aquifer, Coastal Region II	2021
Jackson Blue Spring (1st Magnitude)	2023*
Shoal River	2024
Gainer Spring Group	2025*
Sylvan Spring Group	2025
Williford Spring Group	2025
Econfina Blue Spring Group	2025
Devils Hole Spring	2025
Floridan Aquifer, Coastal Bay County	2027
Apalachicola River and Chipola River	Water Reservation**



Wakulla Spring



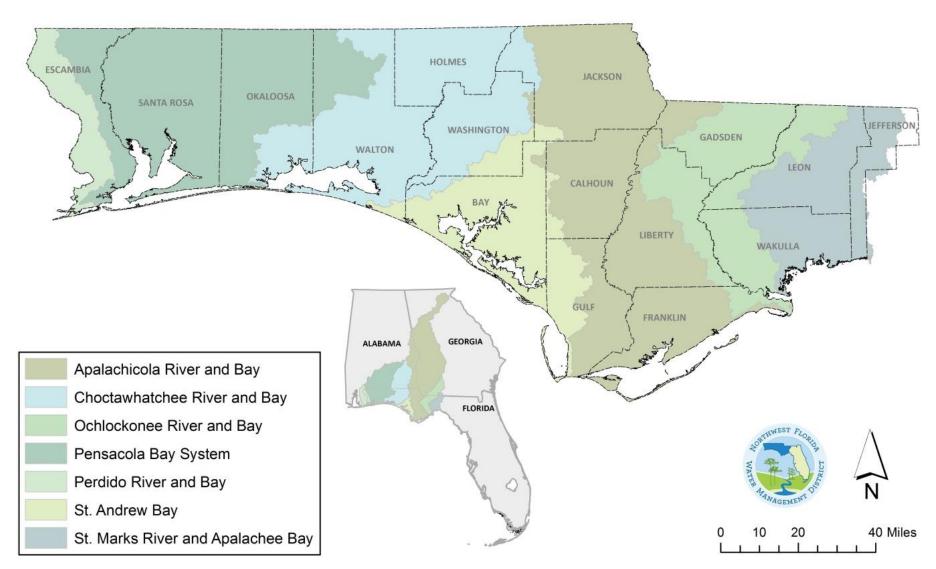
Shoal River

^{*}MFLs for Outstanding Florida Springs to be adopted by July 1, 2026.

^{**} Chapter 40A-2, Florida Administrative Code – Magnitude, duration and frequency of flows reserved for protection of fish and wildlife of the river, floodplain and Apalachicola Bay (established 2006)



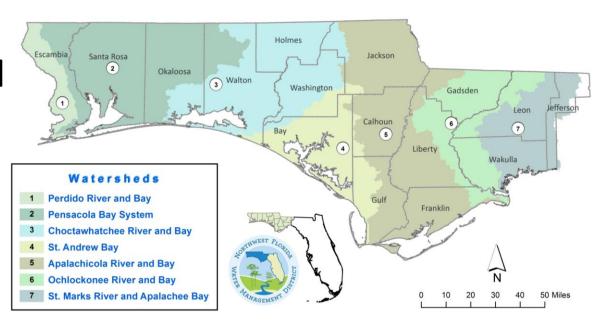
Watershed Management





Watershed Management

- Seven watershed plans
- Updated in 2017



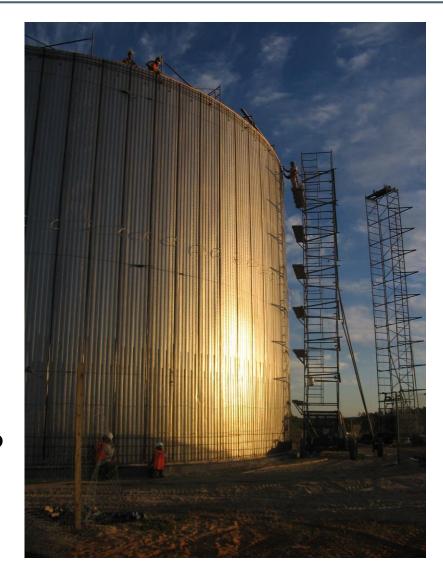
Pursuant to Florida's Surface Water Improvement and Management Act of 1987

(Sections 373.451-459, F.S.)



Water Resource Grant Programs

- 88 grant-funded projects completed since 2012
- Over \$37 million in grants
- Over \$60 million leveraged in local, state, federal, and private funding
- Assisted 54 local governments and utilities
- \$9.8 million for agricultural BMP cost-share grants





Springs Restoration and Protection

- \$59.9 million in grant funding (including projects in progress):
 - \$10.5 million for agricultural
 BMPs and supporting projects
 - \$14.3 million for land acquisition
 - \$3.4 million for restoration
 - \$32.9 million for septic to sewer projects
 - \$1.5 million for advanced onsite systems
- Over \$28 million matching funds





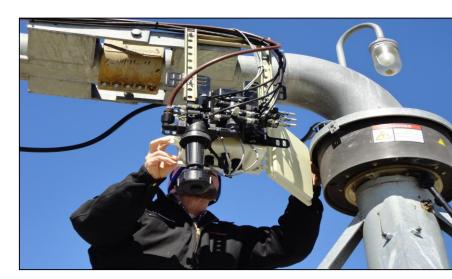


Agricultural BMP Cost-Share Program

- Program funding (since 2013): \$9,857,597
- 87 projects | 61 producers |
 28,346 acres
- 89 percent of irrigated acres within Jackson Blue BMAP area reached
- Nearly 8 million gallons per day saved since 2014
- Over 668,000 lbs. reduction in nitrogen



Center Pivot Retrofit



Variable Rate Irrigation System



Watershed Restoration and Protection





- Water quality
- Flood protection
- Stormwater retrofits

- Reuse of reclaimed water
- Sedimentation abatement
- Best Management
 Practices



Watershed Restoration and Protection







- Wetland restoration
- Hydrologic restoration
- Living shorelines

- Monitoring
- Assessment
- And more



Regulation

Water Use Permitting

Chapter 40A-2, Florida Administrative Code

Well Construction

Chapter 40A-3, Florida Administrative Code

Minimum Flows and Minimum Water Levels

Chapter 40A-8, Florida Administrative Code

Agriculture and Forestry Surface Water Management

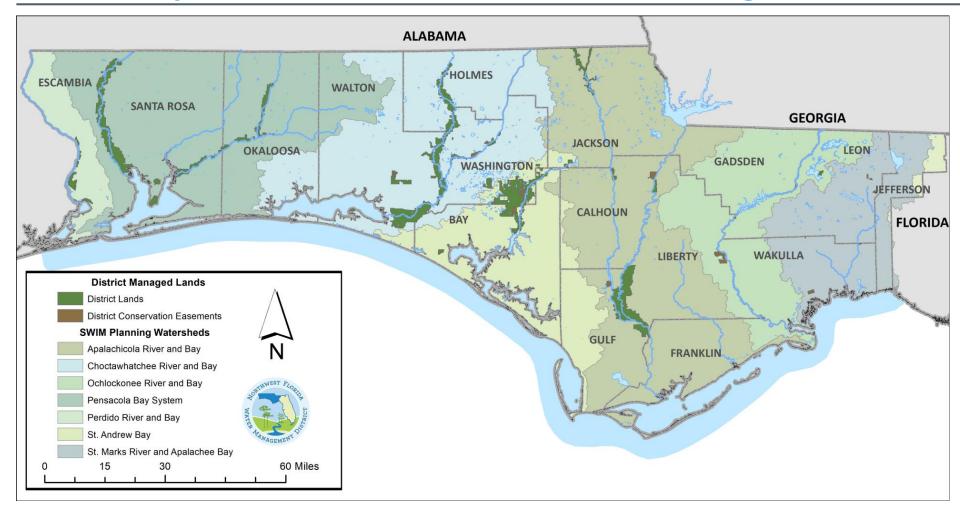
Chapter 40A-44, Florida Administrative Code

Environmental Resource Permitting

Chapter 62-330 Florida Administrative Code



Land Acquisition, Restoration, and Management



Land Acquisition, Restoration, and Management



- Water resource and water quality protection
- Aquifer recharge
- Source protection
 - Floodplain functions, long-term resiliency
 - Habitat restoration



