

# Solving the Water Puzzle

A science-based collaborative approach



# Florida's Water Management Districts

- Special districts
  - *Not state agencies*
  - *Ad valorem taxing*
- Governing Board
  - *Appointed by Governor*
  - *Confirmed by Senate*
  - *Unpaid volunteers*



# SWFWMD Areas of Responsibility



Water Supply



Water Quality



Natural Systems



Flood Protection

## MISSION

**Protect Water  
Resources**

**Meet Water  
Needs**

**Reduce Flood  
Risks**

# Regulation

- **Water Use**
  - Actual need?
  - Protect existing users
  - Protect water resources
- **Environmental Resource**
  - Reduce flooding risk and pollution from new development
  - Protect wetlands
- **Well Construction Permits**
  - State standards
- **Water Shortage Orders**



# Permits

## Water Use Permits

- Is the water actually needed?
- Is the water available without:
  - Affecting an existing user? Harming the water resources?

## Environmental Resource Permits

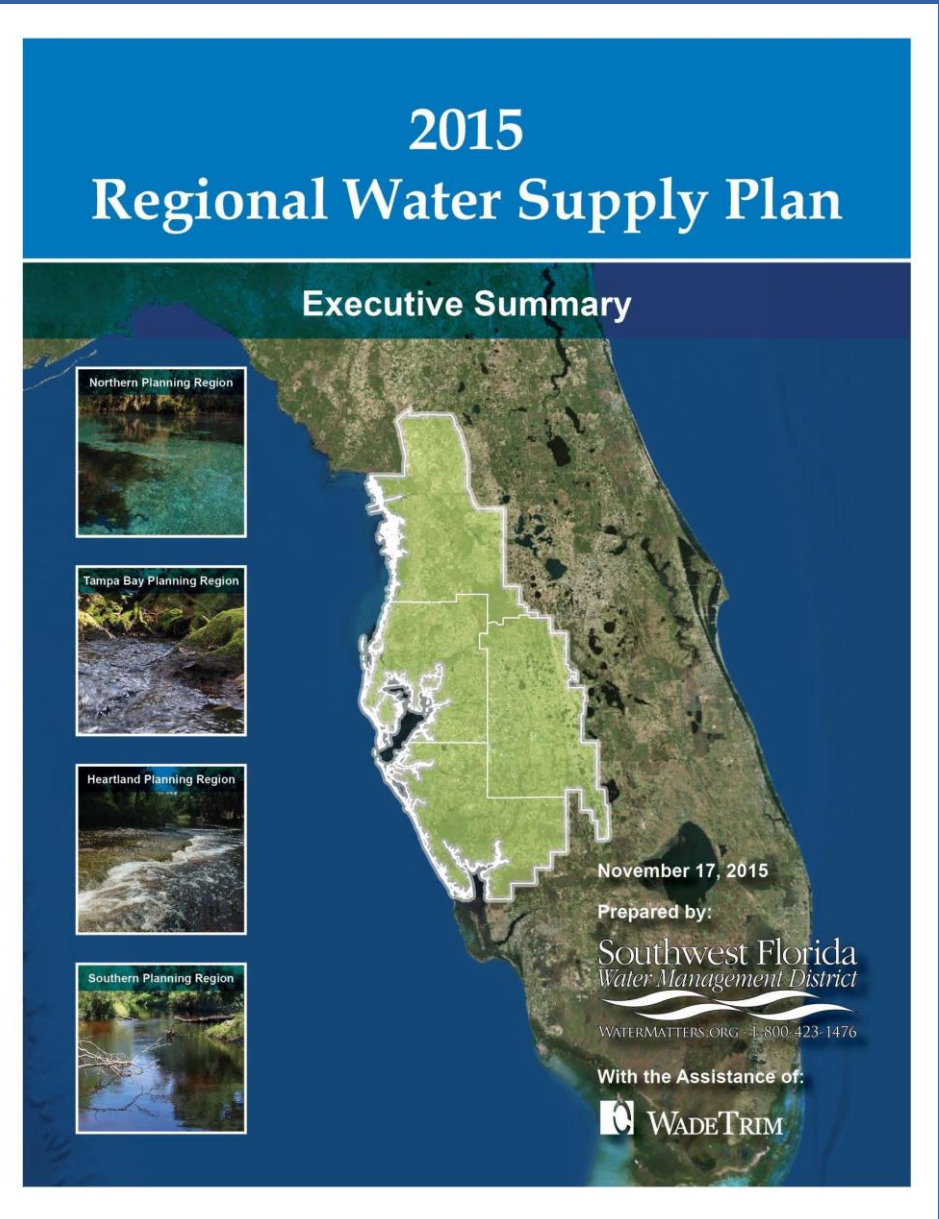
- Ensure new development doesn't:
  - Increase the risk of flooding
  - Worsen water quality
  - Decrease wetland functions

**Well Construction Permits – Apply online**



# Planning

- Needs
- Sources
- Costs

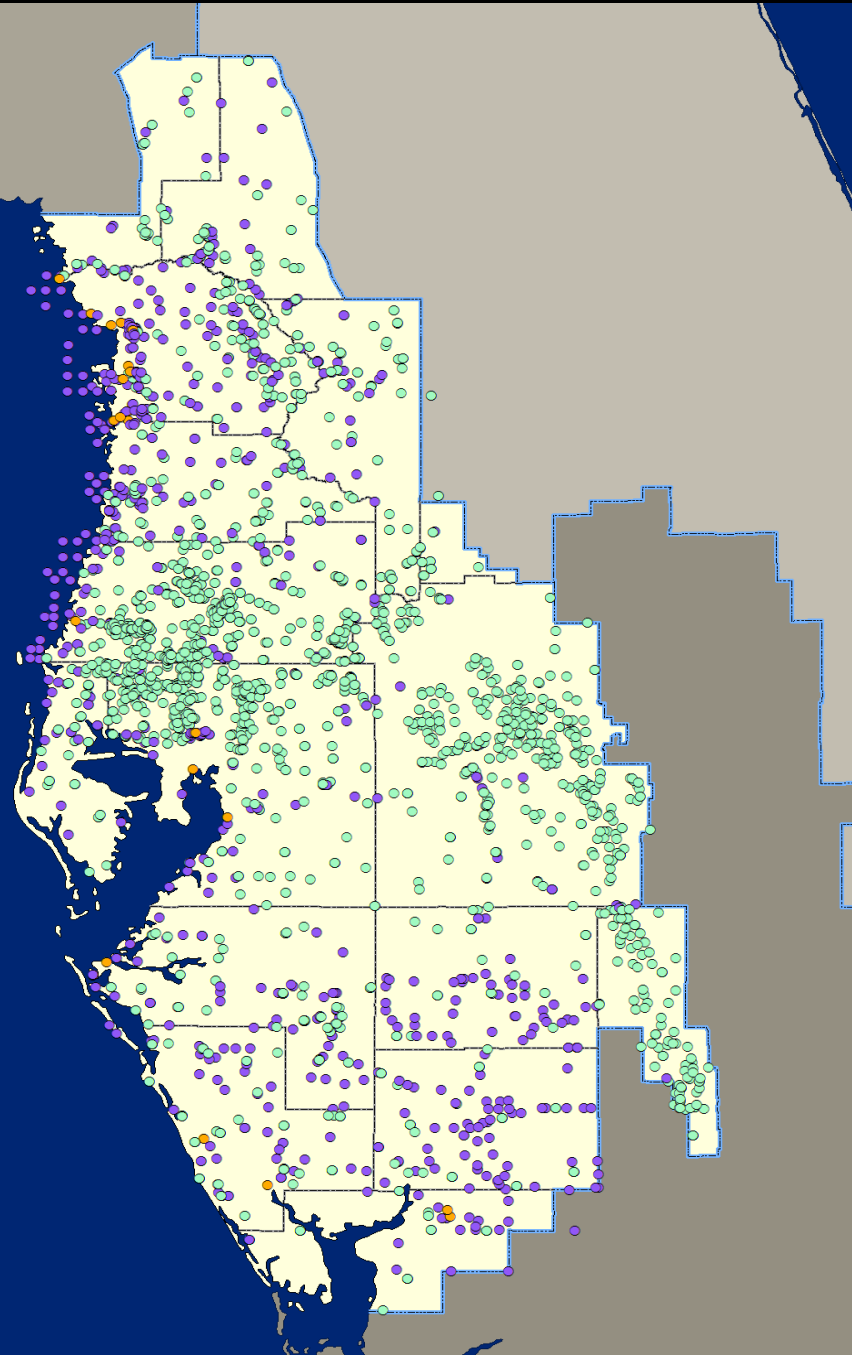


# Data Collection

Active Data Collection Sites - April 2017

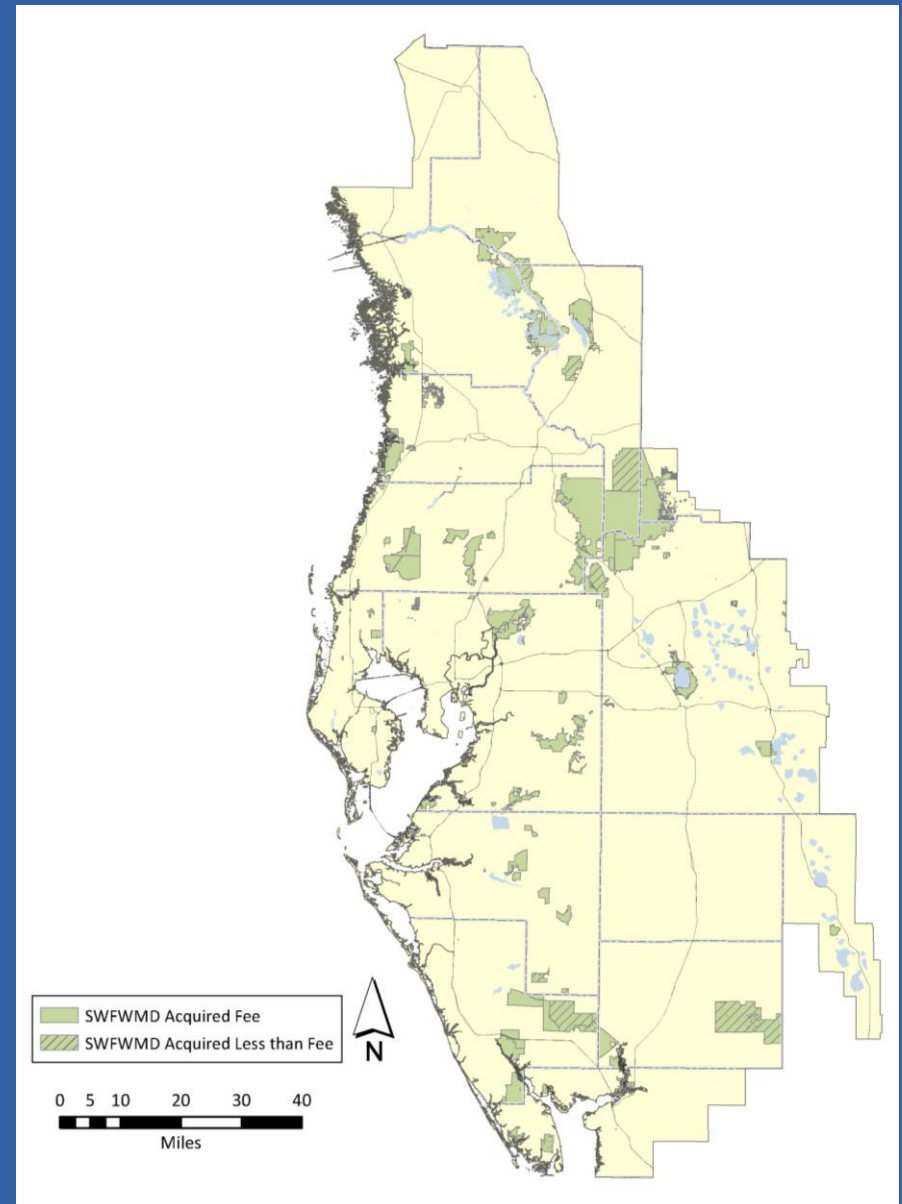
• > 3300

- Hydrologic Data
- Water-Quality Data
- Hydrologic & Water-Quality Data



# Land Acquisition and Management

- > 450,652 acres
  - 106,000 easements
- Protect and restore
- Most open to public
- Recreation Guide
  - *WaterMatters.org*





# Environmental Restoration

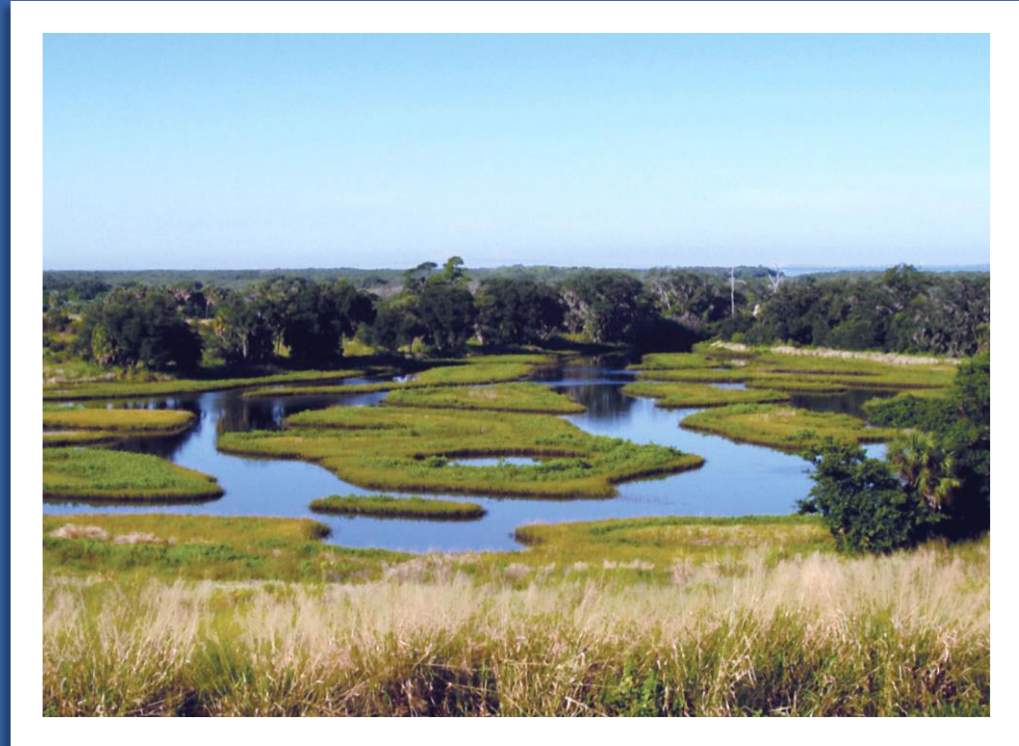
## SWIM Projects

### Water Quality

- Treat stormwater to reduce pollutants
- **> 140,000** acres of watershed treated

### Natural Systems

- Restore, enhance and preserve natural habitats
- **> 11,000** acres restored



# District Water Control Structures

*Total 81*

- Water Conservation
- Flood Control (only 18)
- Salinity Barrier



*Water Conservation  
Brogen Bridge*



*Flood Control  
Tampa Bypass Canal*

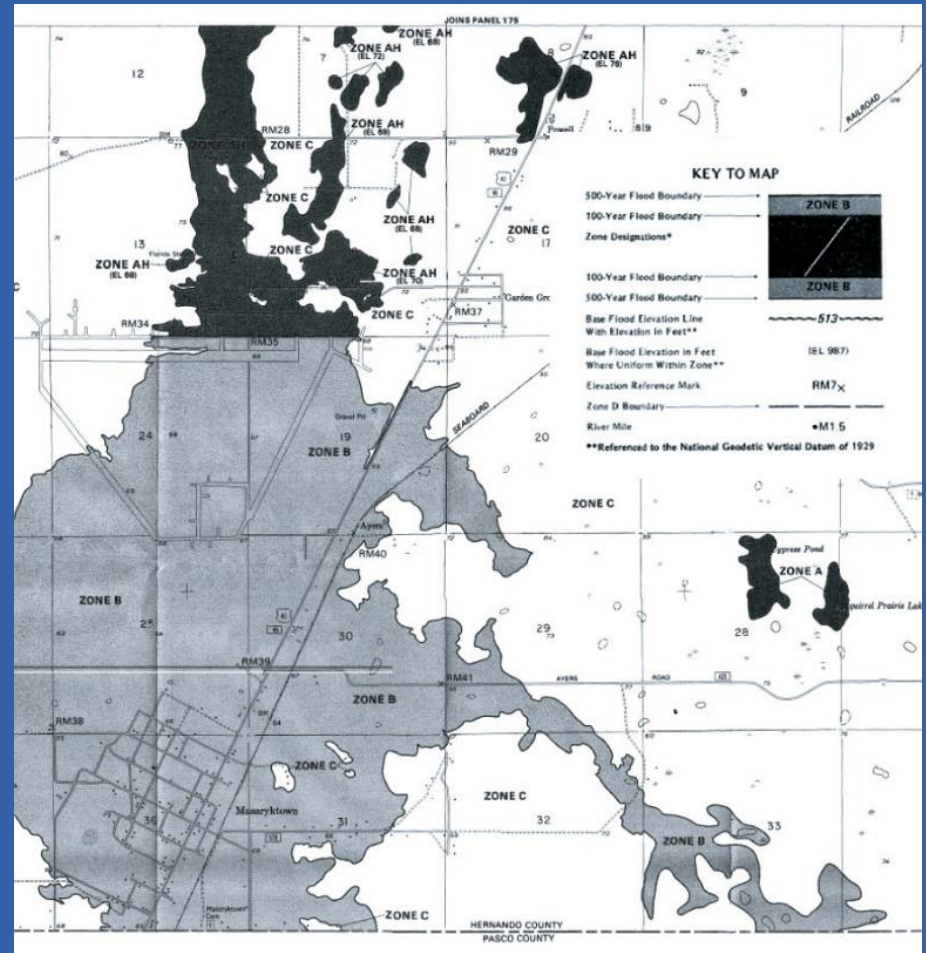


*Salinity Barrier  
Rocky Creek*

# Flood Protection

## Non-Structural

- Watershed Management Program
- FEMA mapping
- Land acquisition







# Funding Priorities

- Sustainable water supply
  - *Alternative water source development*
  - *Water storage (reservoirs)*
  - *Reclaimed water*
  - *Water conservation*
- FARMS
- Environmental restoration
  - *SWIM program*
- Stormwater improvements
  - *Water quality and flood protection*

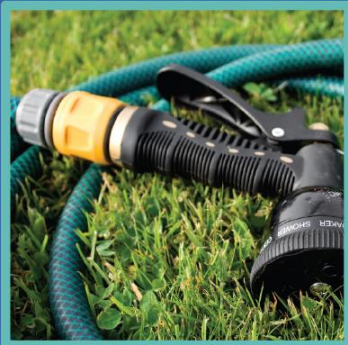
# Cooperative Funding Since 1988

- **\$1.5 billion** District-funded
- **\$2.9 billion** combined regional investment
- **Five-year avg. annual expenditure: \$72 million**





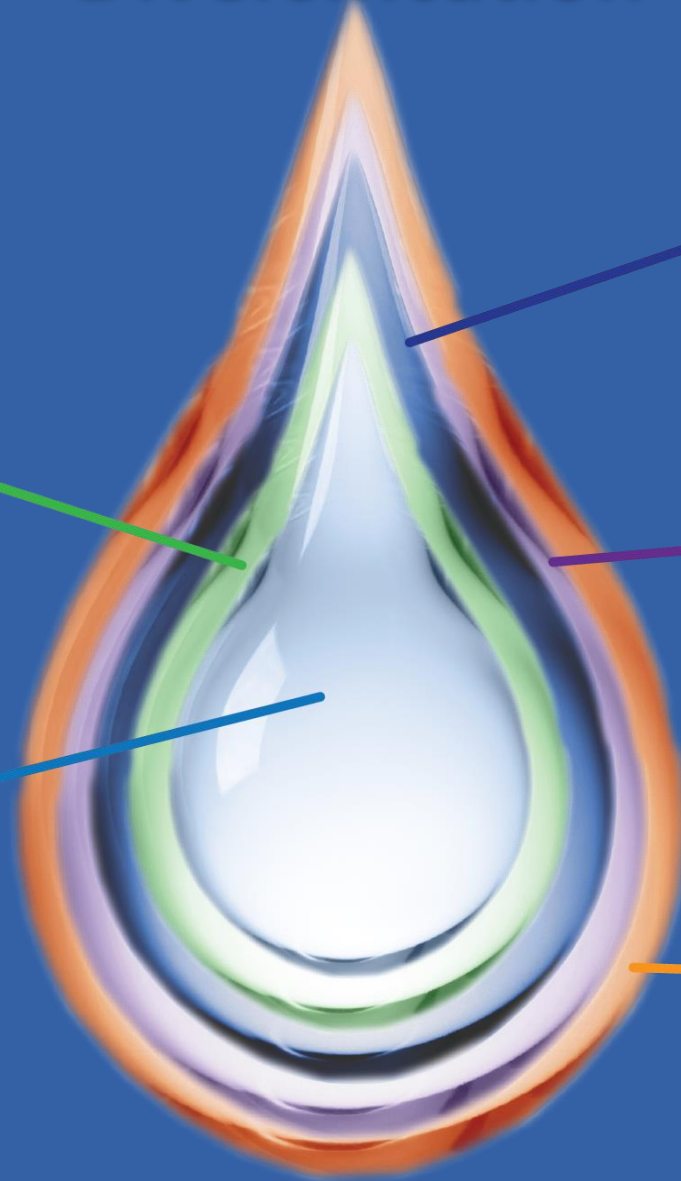
# Diversification



Conservation



Groundwater



Surface Water



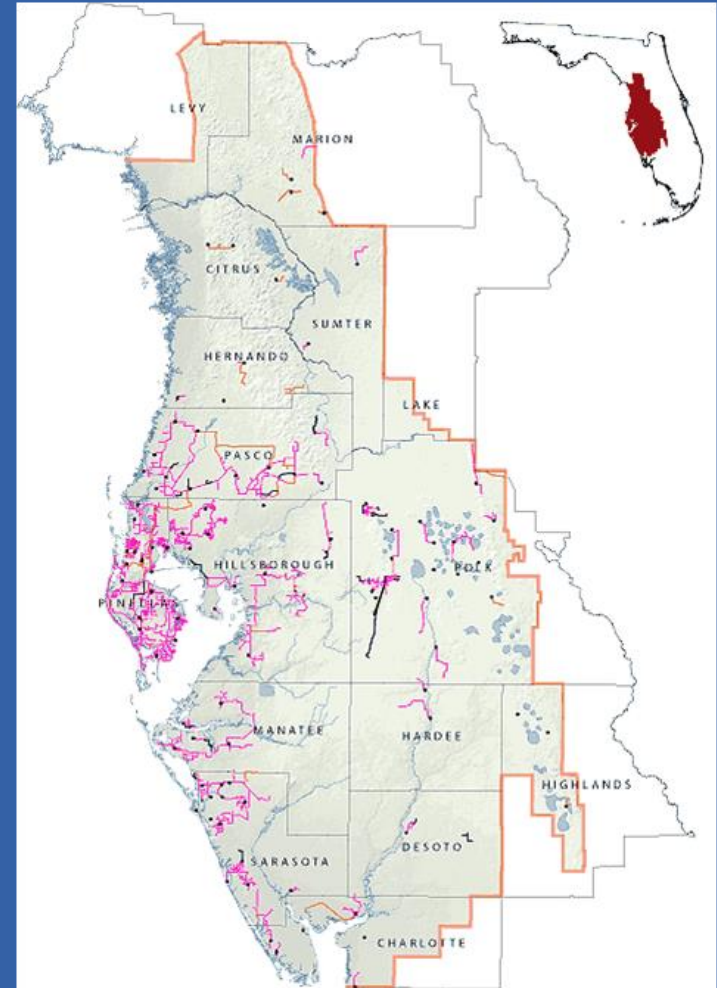
Reclaimed Water



Stormwater

# SWFWMD Reuse Funding and Benefits

- 364 projects funded since 1987
- 970 miles of pipelines
- 248 mgd reuse capacity
- 112-134 mgd of new water
- 13% of Districtwide water use



# Reclaimed Water Facts

- 116,000 residences
- 189 golf courses
- 478 parks
- 174 schools
- 8 power plants
- 2 additional power plants (2015)
- 8,700 acres of agriculture
- 43 Cooling Towers



# Shared Interests

1. Follow the science
2. Be open and inclusive
3. Collaborate on solutions

