



# OFFICE OF AGRICULTURAL WATER POLICY

## **Agriculture Best Management Practices**

Darrell Smith  
Assistant Director

# Florida Agriculture

- Occupies over 18 million acres
  - approximately 52% of the state's total land use
  - most land is unimproved, only 8.2% irrigated
- Provides for biological diversity, aquifer recharge, flood control, wetland preservation, wildlife habitat
- Consists of 40,000 private farms
  - generates \$100 *billion* in farm-related economic activity
  - 750,000 associated jobs
- Farmland provides net economic benefit to the public
  - For every \$1.00 paid in property tax agriculture only requires \$0.29 in public services



# Overview

- **Best Management Practices**
  - BMP Manuals
  - Agriculture Participation and Projects
  - Irrigation and Nutrient Management Focus
  - Mobile Irrigation Labs
  - Education/Outreach Programs
  - Conservation Tillage and Cropping Systems
- **Water Supply Planning**



# FDACS

## Office Of Agriculture Water Policy

- Established in 1995 by the Legislature
- Agriculture Water Policy Issues
- Water Quality and Conservation
- Lead for agriculture in working with DEP on TMDL program
- Water Supply Planning
- Field Staff in each of the WMDs



# Best Management Practice

“**Best management practice**” means a practice or combination of practices determined by the coordinating agencies, **based on research**, field-testing, and **expert review**, to be the **most effective** and **practicable** on-location means, including economic and technological considerations, for improving water quality in agricultural discharges.



# Major FDACS-OAWP BMP Programs

- Citrus
- Vegetable & Agronomic Crops
- Container Nursery
- Sod
- Cow/Calf
- Specialty Fruit & Nut
- Commercial Equine



# Manual Overview

- **Nutrient Management**
- **Irrigation Management**
- **Sediment and Erosion Control**
- **Stormwater Management**
- **Water Resources Protection**
- **Integrated Pest Management**

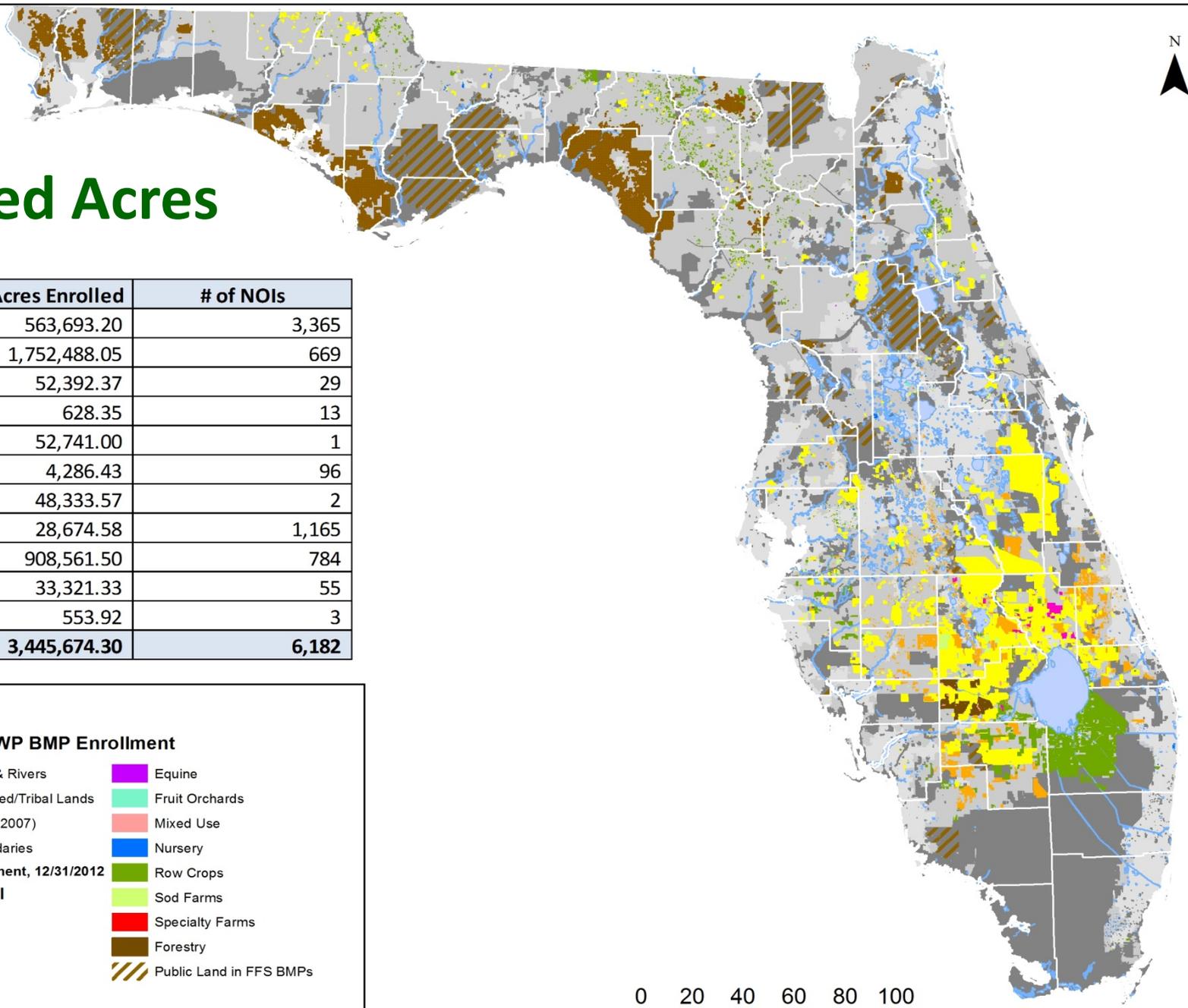


# Enrolled Acres

Usage	Acres Enrolled	# of NOIs
Citrus	563,693.20	3,365
Cow/Calf	1,752,488.05	669
Dairies	52,392.37	29
Equine	628.35	13
Forestry	52,741.00	1
Fruit Orchards	4,286.43	96
Mixed Use	48,333.57	2
Nursery	28,674.58	1,165
Row Crops	908,561.50	784
Sod Farms	33,321.33	55
Speciality Farms	553.92	3
<b>Total</b>	<b>3,445,674.30</b>	<b>6,182</b>

## Statewide OAWP BMP Enrollment

-  Major Lakes & Rivers
-  Public/Managed/Tribal Lands
-  Urban Areas (2007)
-  County Boundaries
-  Equine
-  Fruit Orchards
-  Mixed Use
-  Nursery
-  **OAWP BMP Enrollment, 12/31/2012**
-  Row Crops
-  Sod Farms
-  **Usage, by Parcel**
-  Citrus
-  Specialty Farms
-  Cow/Calf
-  Forestry
-  Dairies
-  Public Land in FFS BMPs



# Suwannee River Partnership

- **Crop Management Tools**
- **Irrigation System Efficiency Improvements**
- **Subsurface Drip Irrigation Demonstrations**
- **Weather Stations**
- **Computer controlled Irrigation Systems**



# Suwannee River Partnership

## BMP Tools & Equipment



UF/NRCS Advanced Irrigation Management Demonstration :: 83 Farms, LLC

Farm : 83 Farms, LLC Field Name : Bruce Pivot #1

[Customize](#)

**Farm Info**

Farm: 83 Farms, LLC  
Field Name: Bell Pivot

Address:  
7580 County Road 136  
Live Oak, FL 32060  
USA

Contact:  
Phone: 386-590-7701

**Field Status**

- Bell Pivot
- Bruce Pivot #1

**Modules**

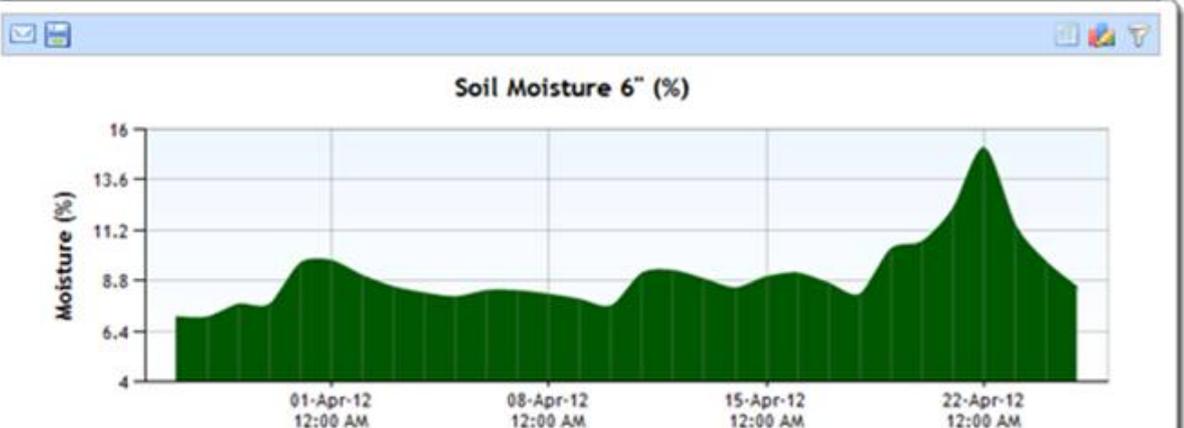
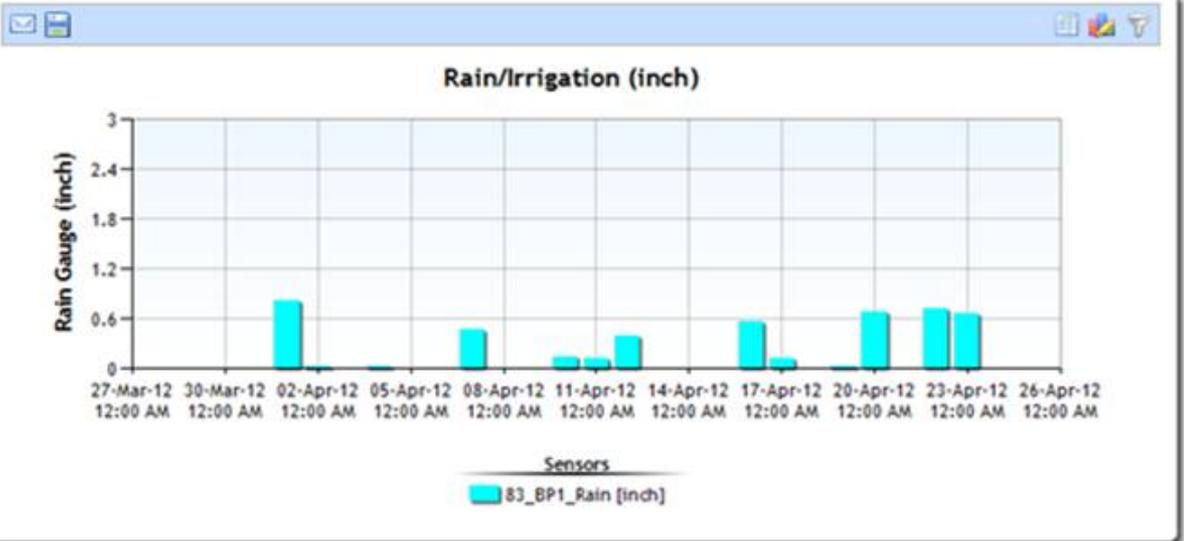
**Data Modules:**

- [Graph](#)
- [Weather Data](#)
- [GeoMap](#)

**Custom Modules:**

- [Crop Recommendations](#)

**Custom Links**

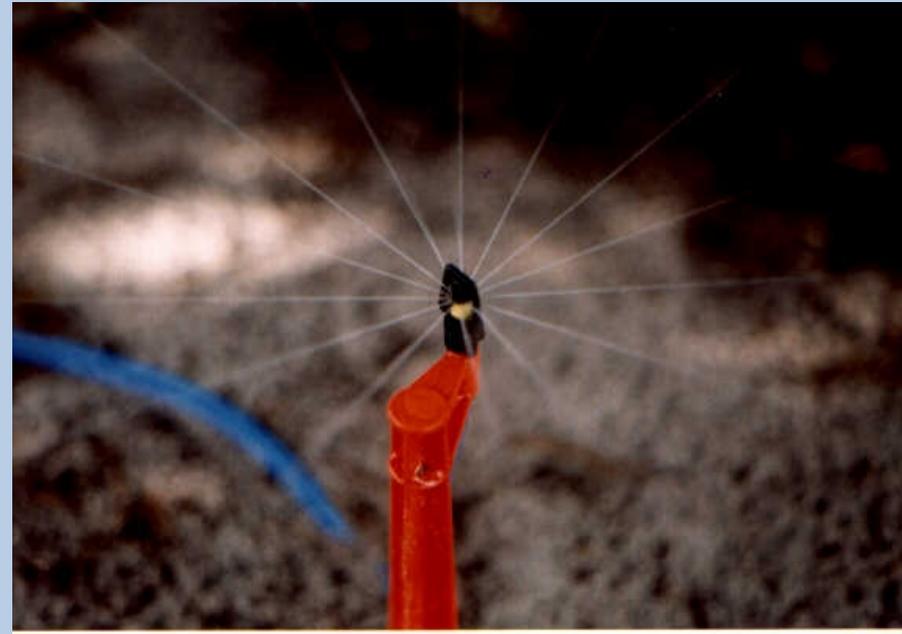


# Drip and Micro Irrigation

## Drip Irrigation



## Micro-Irrigation



# Improving Irrigation System Management

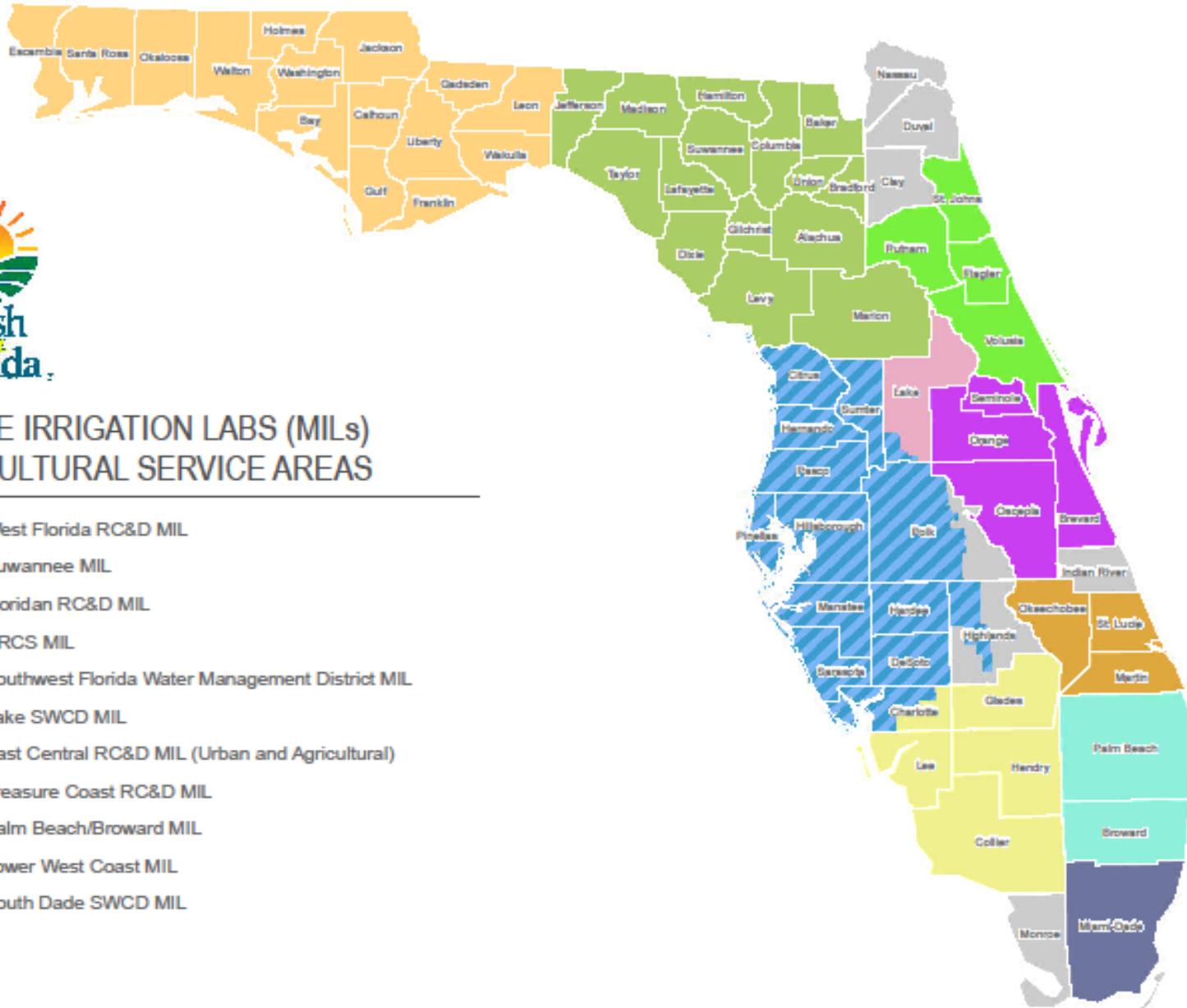


Keeping Water and Fertilizer in the Root Zone



## MOBILE IRRIGATION LABS (MILs) AGRICULTURAL SERVICE AREAS

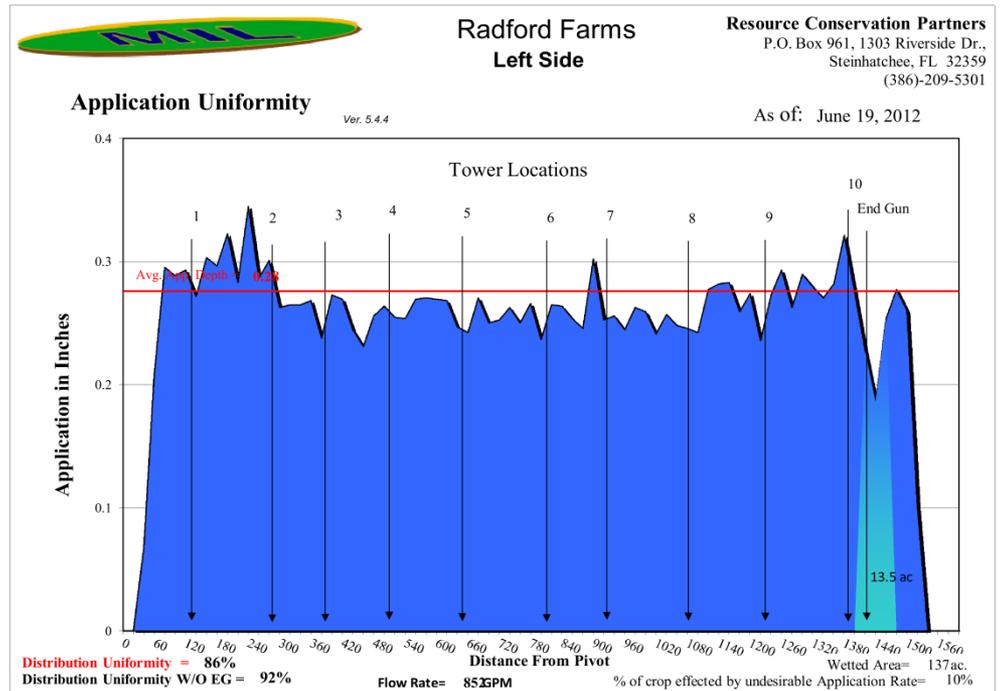
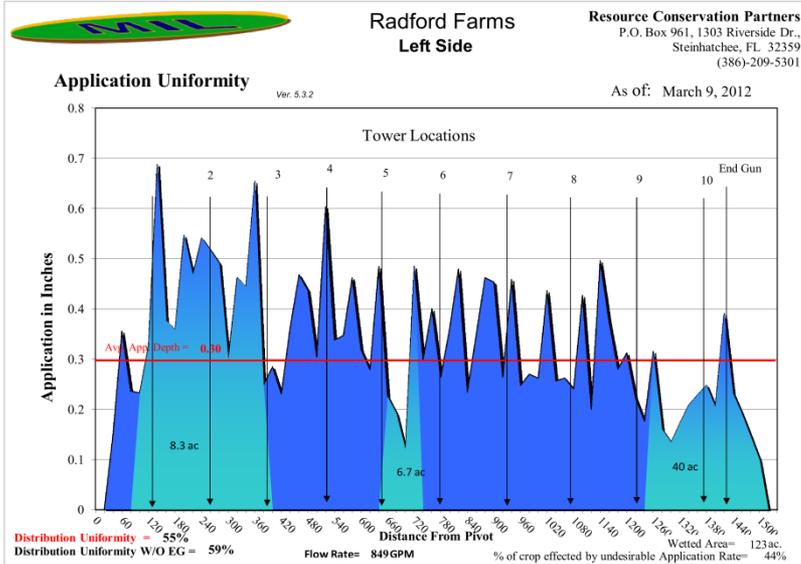
-  West Florida RC&D MIL
-  Suwannee MIL
-  Floridan RC&D MIL
-  NRCS MIL
-  Southwest Florida Water Management District MIL
-  Lake SWCD MIL
-  East Central RC&D MIL (Urban and Agricultural)
-  Treasure Coast RC&D MIL
-  Palm Beach/Broward MIL
-  Lower West Coast MIL
-  South Dade SWCD MIL



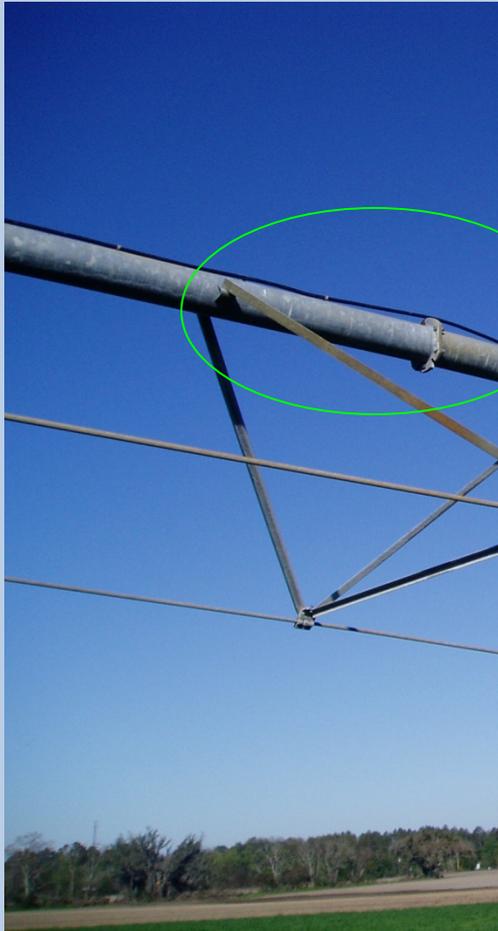
# Mobile Irrigation Labs



# MIL Pre and Post Evaluations



# Improve Irrigation Systems



# Conservation Crop Practices



High bio-mass cover crops  
reduce required irrigation by 2.5  
inch/acre

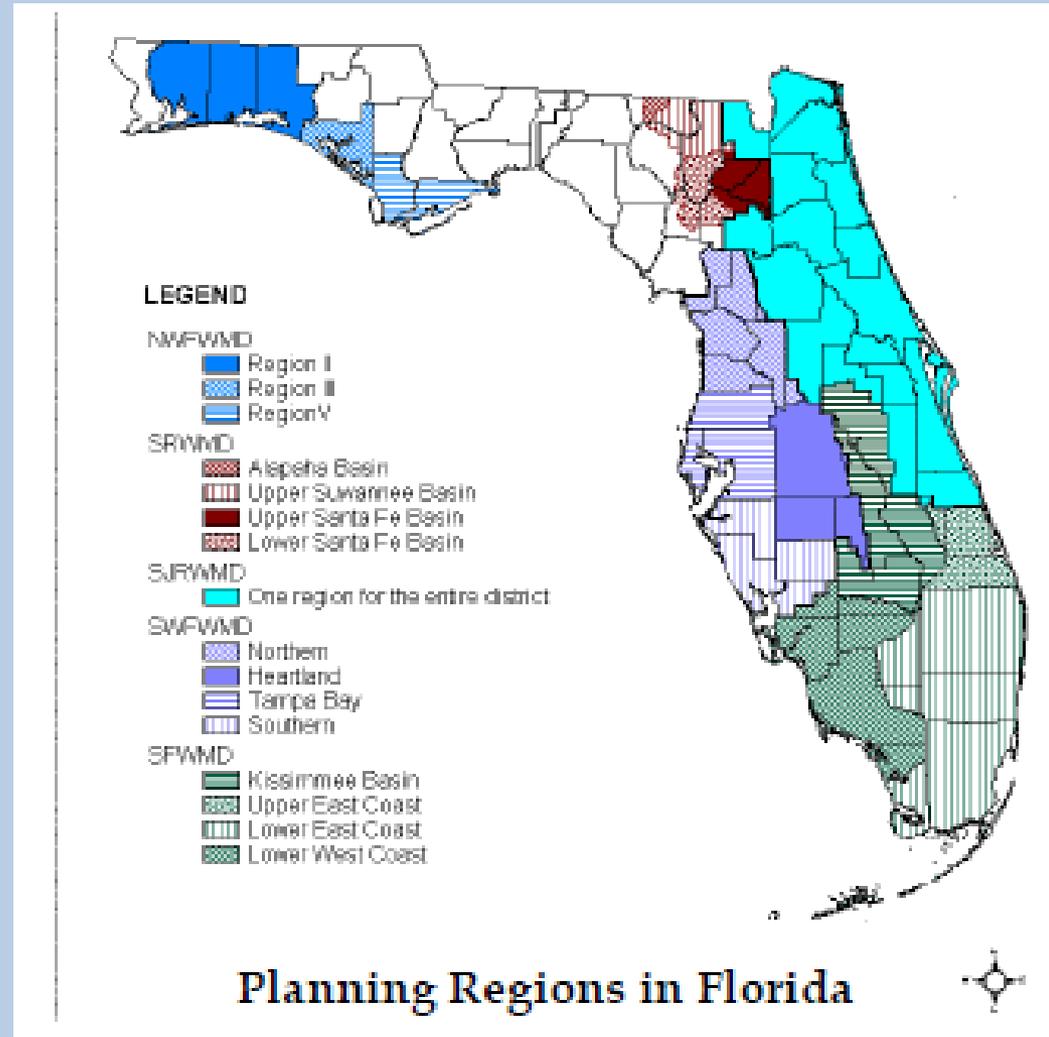
Sod-based rotation can reduce  
by 50% or more.



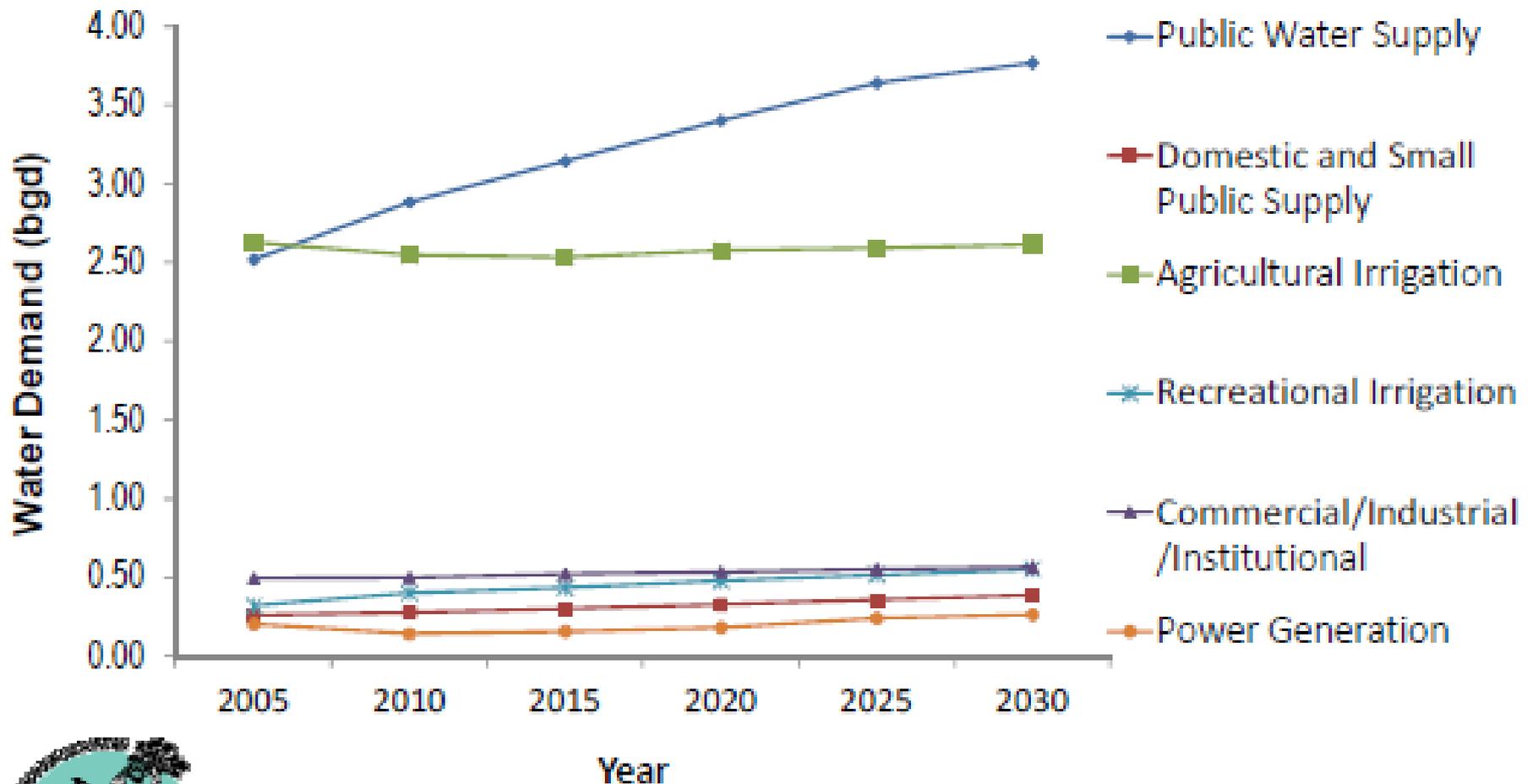
04.03.2012 18:41

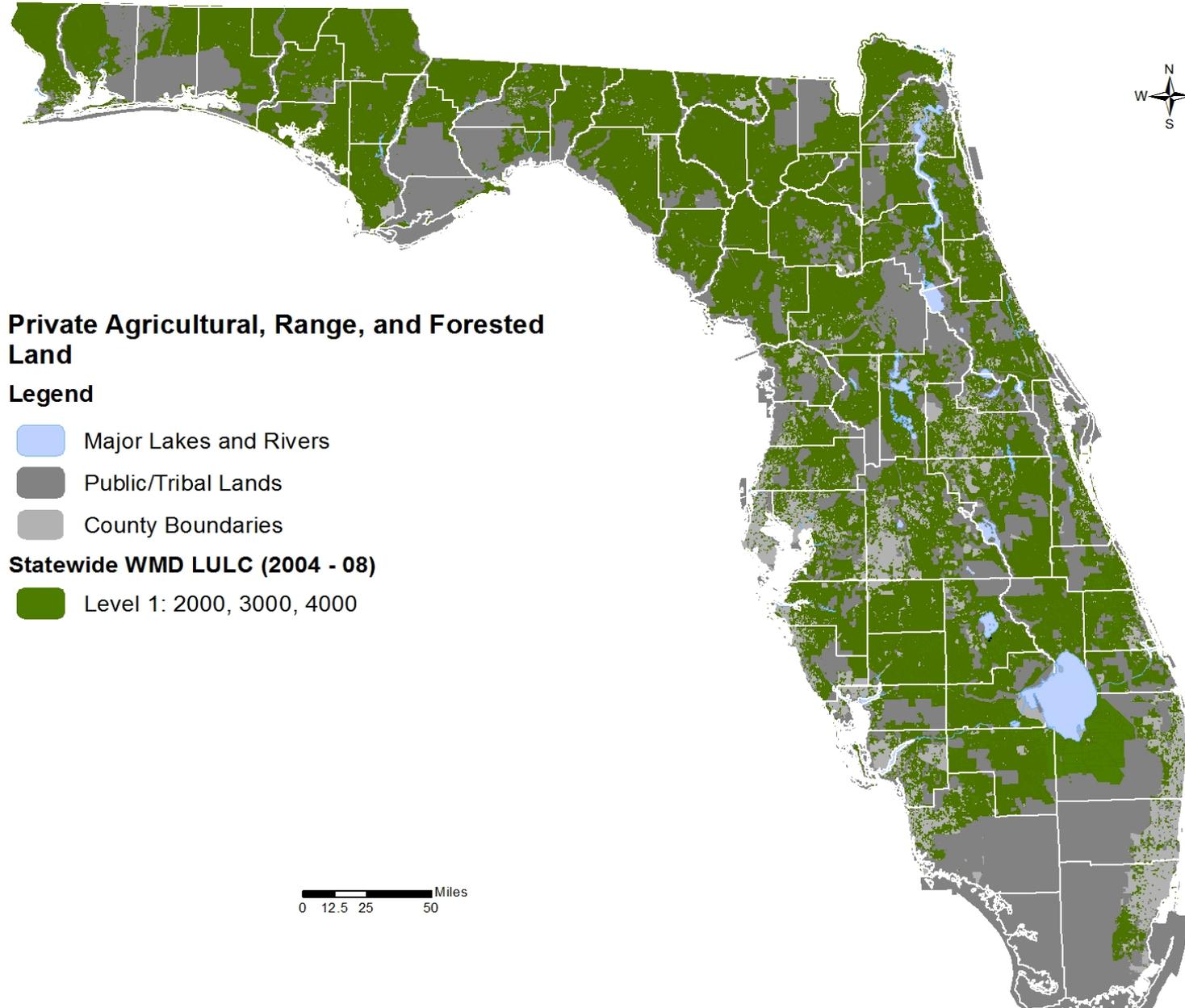
# Water Supply Planning

- **Regional Water Supply Plans**
  - Assessments
  - Future Projections
  - Conservation Requirements
  - Alternative Water Supply
- **Senate Bill 948**
- **FDACS support existing planning process**
- **Help gather data for Agriculture**



# Fresh Water Demand & Use





# SFWMD

## Dispersed Water Management

### “By The Numbers”

- *Through a combination of public and private projects, 131,500 acre-feet of water retention/storage has been made available to date*
- *To date, the District has collaborated with more than 100 participating landowners*
- *The ultimate goal for the program is to provide 450,000 acre-feet of retention/storage throughout the Northern Everglades watershed*
- *450,000 acre-feet of additional storage equates to approximately 1 foot of water off of Lake Okeechobee*



# Summary

## -Agriculture producers.....

- have a significant incentive to be efficient
- are willing to utilize technology and use BMPs
- have enrolled 9 million acres in the FDACS BMP program
- are using mobile irrigation labs to improve irrigation system efficiency and save water
- are using conservation tillage and cropping systems

## -Water Supply Planning is key





Thank You!

# OFFICE OF AGRICULTURAL WATER POLICY

[www.FloridaAgWaterPolicy.com](http://www.FloridaAgWaterPolicy.com)

Darrell Smith  
Assistant Director

[850-617-1700](tel:850-617-1700)

[Darrell.Smith@freshfromflorida.com](mailto:Darrell.Smith@freshfromflorida.com)