

Agricultural Best Management Practices (BMPs) In the Springs Coast BMAP Areas

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Agricultural Best Management Practices (BMPs)

- ✓ **BMPs are practical measures that reduce the amount of fertilizers, pesticides, animal waste, and other pollutants entering our water resources**
 - Determined through research, field-testing, and expert review
 - Designed to improve water quality while maintaining agricultural production.
- ✓ **Adopted by FDACS, collection of practices in each manual is verified effective by FDEP**
 - BMP manuals developed in collaboration with ag industry, agencies, other stakeholders
- ✓ **Must be economically and technically feasible for the producer to implement**
 - When funding is available, FDACS works with producers to secure cost-share for some BMPs



Florida Watershed Restoration Act

(section 403.067, F.S.)

Authorizes FDACS to develop BMPs for agricultural nonpoint sources to help meet Total Maximum Daily Loads (TMDLS) and otherwise protect water quality.

Implementation of FDACS BMPs, according to rule*, provides a “presumption of compliance” with state water quality standards for the pollutants addressed by the BMPs (e.g., nitrogen, phosphorus, etc.).

- * FDACS rules require submittal of Notice of Intent (includes checklist of practices), implementation of applicable practices, and record keeping.**



Agriculture's Role in Water Quality Protection

The Legislature provided for agricultural operations to implement BMPs as the preferred means to help meet TMDLs and otherwise protect water quality.

Agricultural operations within BMAP areas, and within the Northern Everglades, have two options*:

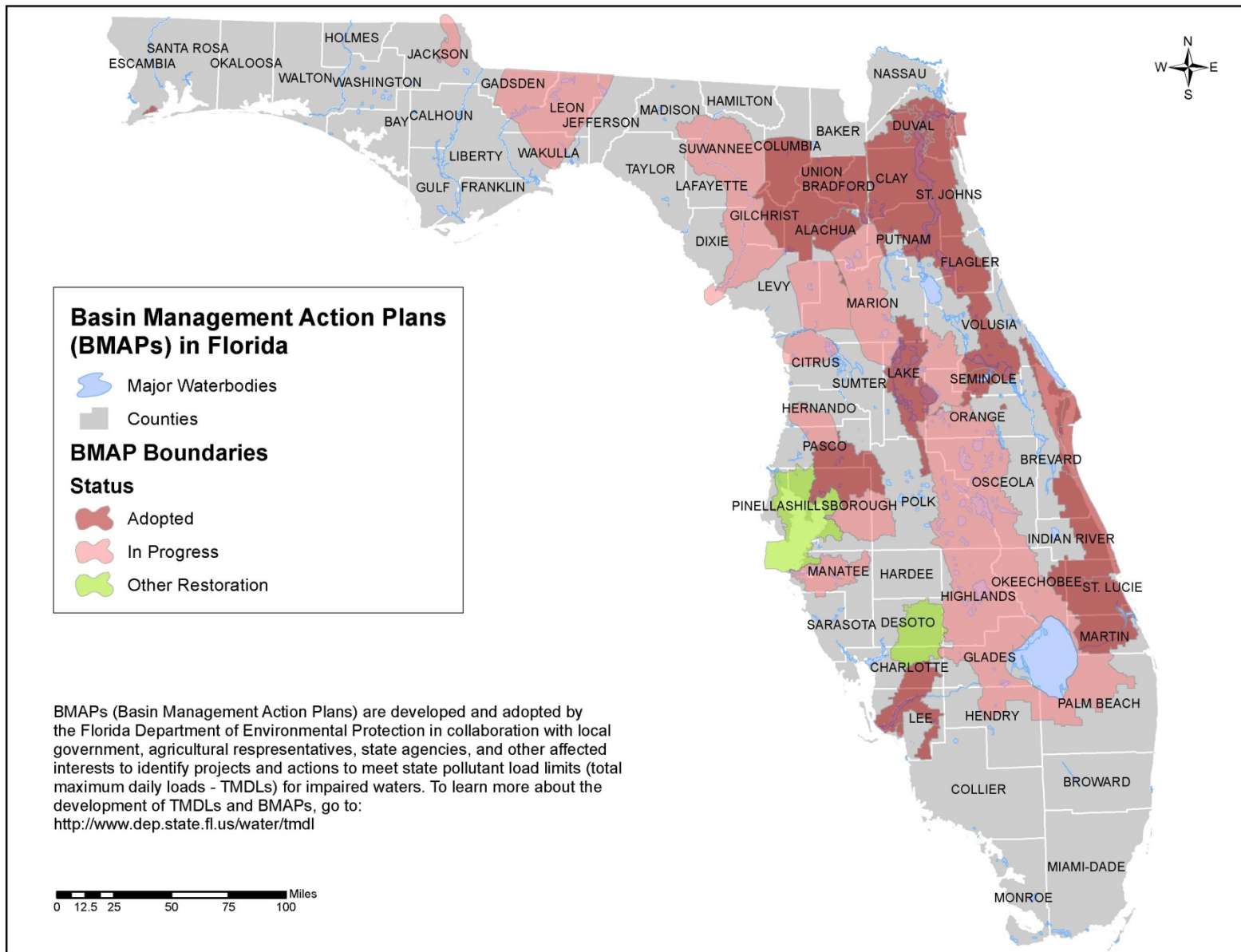
- ✓ Enroll in and implement FDACS BMPs

Or

- ✓ Follow an FDEP- or WMD-prescribed water quality monitoring plan at the producer's own expense (complicated and costly)

* Failure to do either could bring enforcement action by FDEP or the applicable WMD





FDACS BMP Programs

Focus is on Commercial Agricultural Operations

Citrus: Statewide manual adopted January 2013

Vegetable/Row Crop: Adopted 2005, under revision

Nursery: Container nursery manual adopted 2006, statewide manual (includes container, field, and cut foliage) adopted June 2014

Sod: Adopted 2008

Cow/Calf: Adopted 2009

Conservation Plan Rule: Adopted 2010

Specialty Fruit/Nut: Adopted 2011

Equine: Adopted 2011

Forestry: Program under the Florida Forest Service

Aquaculture: Division of Aquaculture Certification Program



Benefits of Participating in FDACS BMPs

- ✓ **Demonstrates environmental stewardship and strengthens support for BMP approach**
- ✓ **Some practices increase efficiencies/reduce costs**
- ✓ **Provides presumption of compliance with state water quality standards**
- ✓ **Protection from duplicative regulation by local government – for activities addressed by implemented BMPs**
- ✓ **Eligibility for state-funded cost share**
- ✓ **May satisfy some WMD permit requirements (check with your WMD)**



Statewide BMP Enrollment as of June 30, 2014

Statewide Non-Forestry – 4.16 million acres, including (rounded numbers):

- **Cow/Calf – 2.3 million acres**
- **Row Crops – 1.04 million acres**
- **Citrus – 581,000 acres**
- **All other - 239,000 acres**

Statewide Forestry (rounded number): 5.3 million acres



FDACS BMP Enrollment, Statewide, 6/30/2014

Commodity	Total NOI Acres	# of NOIs
Citrus	581,611.77	3,381
Cow/Calf	2,318,977.28	1,048
Dairies	47,811.03	26
Equine	1,970.25	49
Fruit/Nut	8,298.15	205
Mixed Use	101,323.65	4
Nursery	29,759.78	1,203
Row Crops	1,044,344.88	1,307
Sod Farms	34,596.48	61
Sub Total	4,168,693.27	7,284
Forestry	5,305,121.34	419
Grand Total	9,473,814.61	7,703



* Florida Forest Service Data

Disclaimer: This map/information represents an estimate of the amount and/or location of acreage enrolled in FDACS BMP programs for specific commodities and/or regions of the state. It is not binding, and does not otherwise affect the interests of any persons, including any vested rights or existing uses of real property. The accuracy and reliability of this map/information are not guaranteed, and are affected by continual changes in land use, crop production, and other socioeconomic factors. Data current as of June 30, 2014.

Agricultural Land Use in the Proposed Weeki Wachee BMAP Area

2009 SWFWMD Land Use	2009 Acres
Cropland and Pastureland	29,167.3
Rangeland	3,900.6
Specialty Farms	1,228.7
Row Crops	118.3
Tree Crops	1,503.6
Nurseries and Vineyards	601.8
Feeding Operations	206.2
Other Open Lands (Rural)*	3,856.7
TOTAL	40,583.2

* Land in this category may not need to be enrolled as it is possible that there is no agricultural production on the land

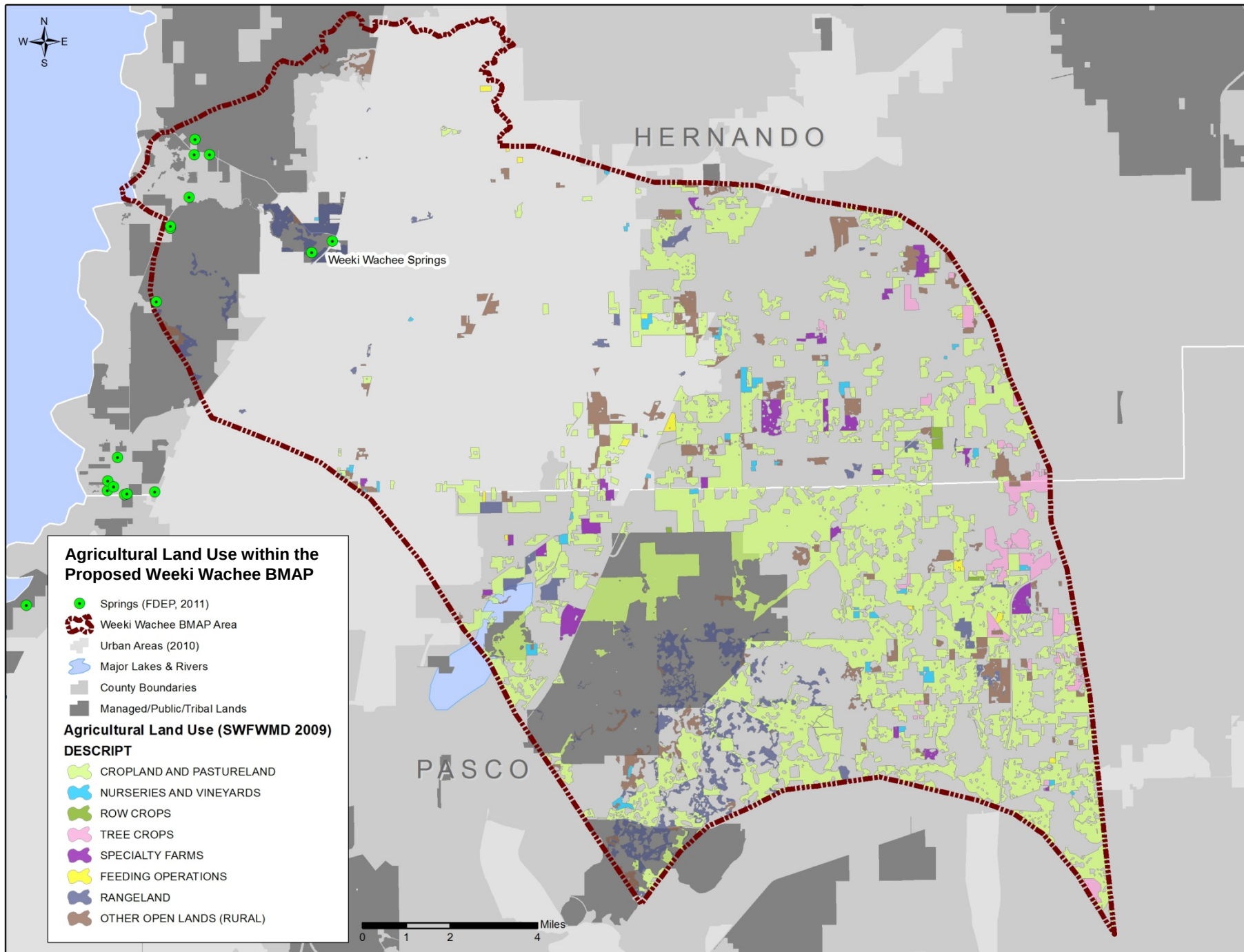


Agricultural Land Use in the Proposed Kings Bay/ Crystal River BMAP Area

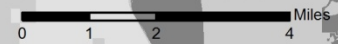
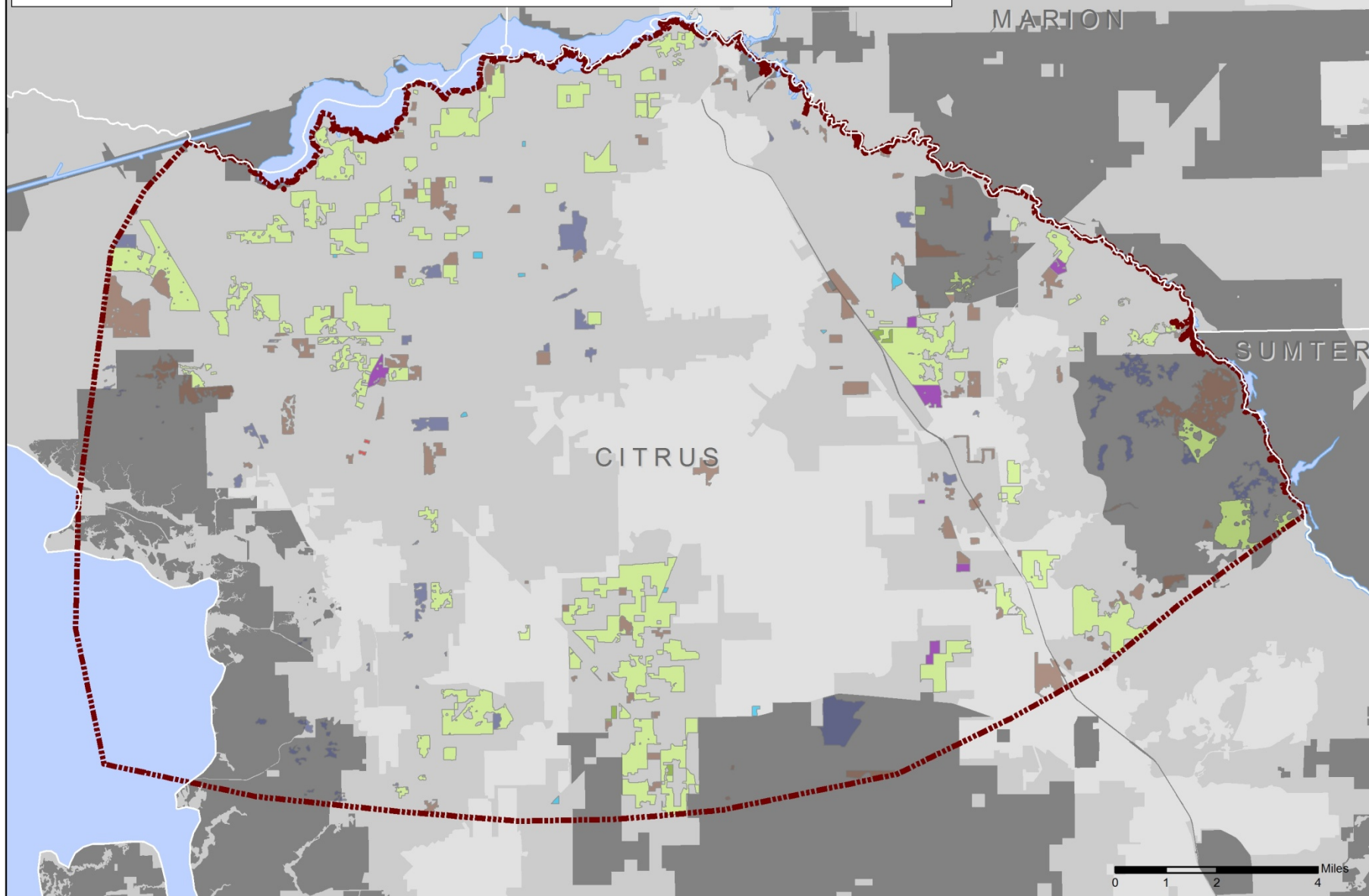
2009 SWFWMD Land Use	2009 Acres
Cropland and Pastureland	10,436.4
Rangeland	2,030.1
Specialty Farms	338.5
Row Crops	69.2
Nurseries and Vineyards	86.2
Other Open Lands (Rural)*	4,147.3
<i>Tropical Fish Farms</i>	9.7
TOTAL	17,117.4

* Land in this category may not need to be enrolled as it is possible that there is no agricultural production on the land





Agricultural Land Use within the Proposed Kings Bay/Crystal River BMAP



BMP Enrollment in Weeki Wachee Proposed BMAP Area as of June 30, 2014

**Non-Forestry Agricultural Acreage Enrolled –
8,624 acres (21% of ag land use acreage):**

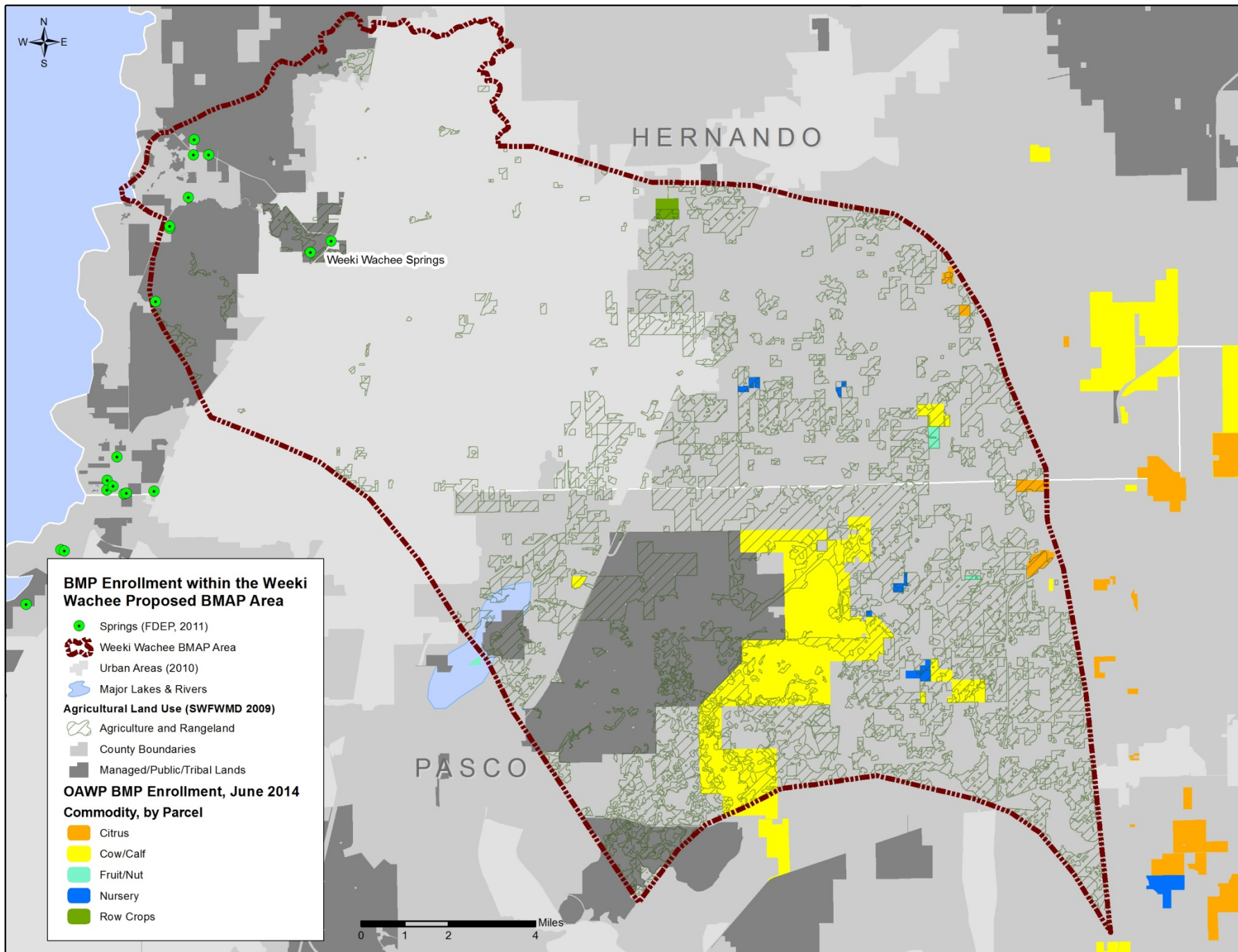
- **Cow/Calf – 8,042 acres**
- **Nursery – 245 acres**
- **Citrus – 238 acres**
- **Fruit/Nut – 87 acres**
- **Row Crops – 12 acres**



BMP Enrollment in Kings Bay/ Crystal River Proposed BMAP Area as of June 30, 2014

- **No enrollment yet – lots of opportunity!**





BMP Enrollment within the Kings Bay/ Crystal River Proposed BMAP Area

 Kings Bay Crystal River

Agricultural Land Use (SWFWMD 2009)

 Agriculture and Rangeland

 Urban Areas (2010)

 Major Lakes & Rivers

 County Boundaries

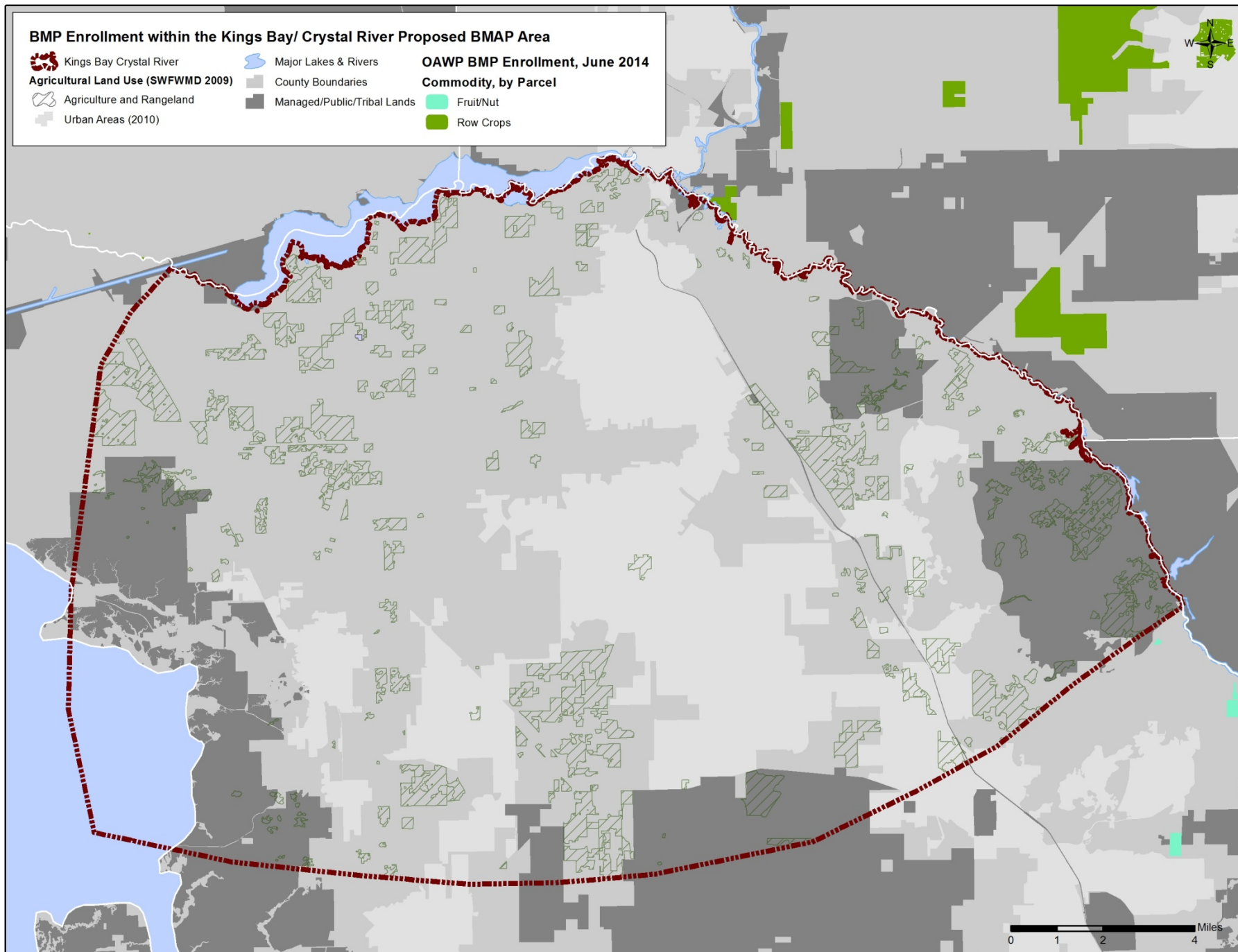
 Managed/Public/Tribal Lands

OAWP BMP Enrollment, June 2014

Commodity, by Parcel

 Fruit/Nut

 Row Crops



Types and Categories of BMPs

BMP Types:

Management BMPs - Such as nutrient and irrigation management, comprise the majority of practices and often are not readily observable. Generally affordable.

Structural BMPs - Involve the installation of structures or changes to the land. These BMPs include water control structures, fencing, and tailwater recovery systems, among others. Sometimes require cost share to be economically feasible.

Key BMP Categories:

Nutrient Management

Irrigation Management

Sedimentation and Erosion Control

Water Resources Protection



Key BMP Categories

Nutrient Management - Provide necessary crop nutrients while protecting against adverse environmental effects. Soil testing, plant tissue testing to determine appropriate nutrients and rates; fertilizer application timing and placement, etc.

Irrigation Management - Control the volume and frequency of irrigation water applied, to meet water needs of crops while conserving water resources

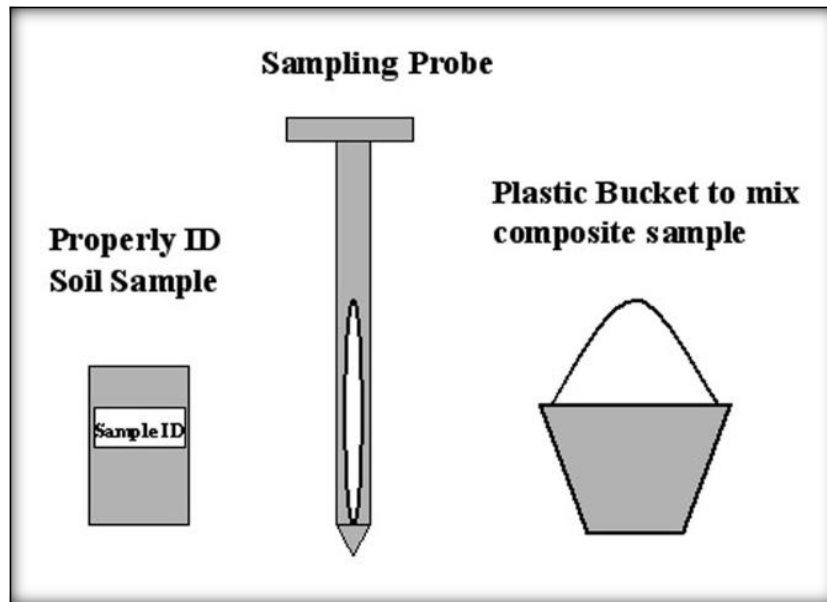
Sedimentation and Erosion Control - Prevent sediment loss, slow water flow, and/or trap or collect debris and sediments in runoff

Water Resources Protection (riparian, wetlands, springs, aquifers) – Minimize adverse impacts to water resources through preventative measures, such as conservation buffers, wellhead protection, and backflow prevention.



Examples of BMPs - Nutrient Management

Soil and pH Analysis

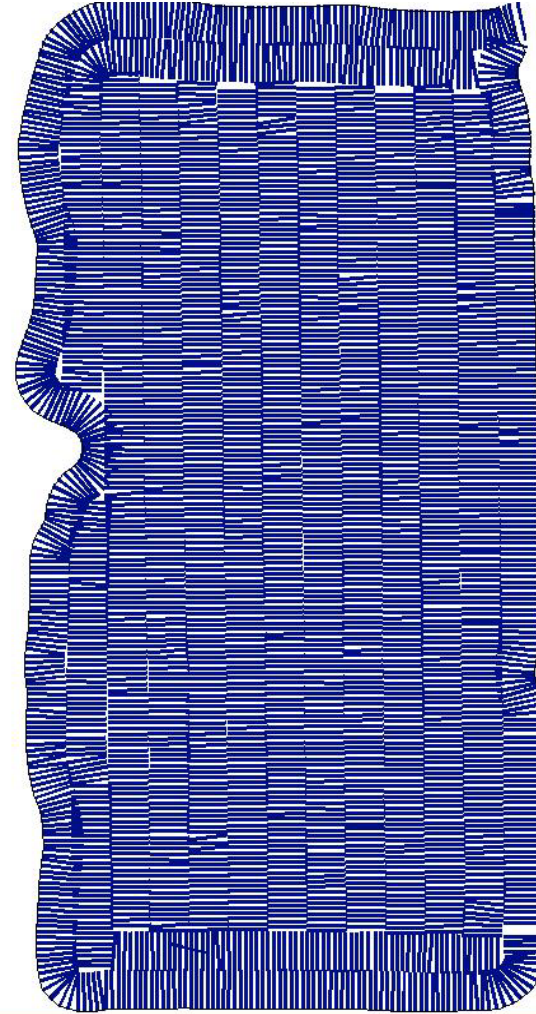
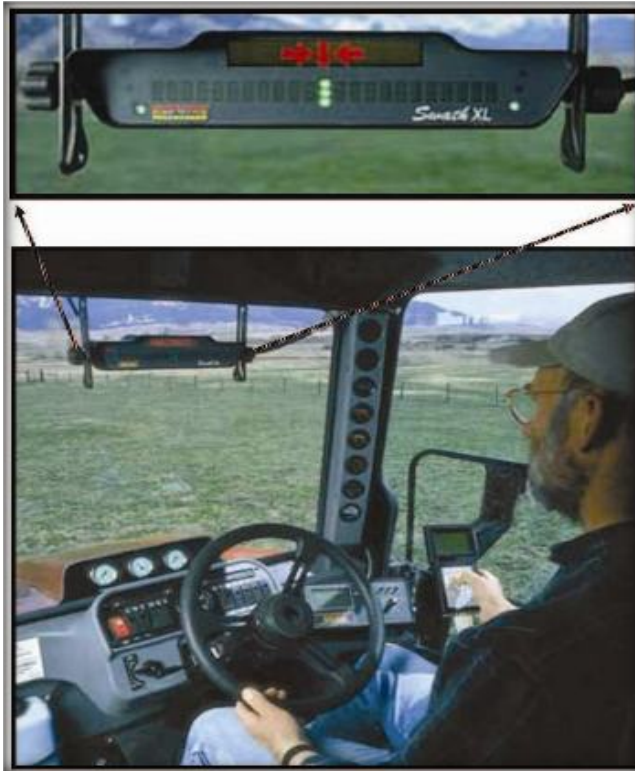


Tissue Test Meter



Examples of BMPs - Nutrient Management

Tractor-Mounted Navigation Equipment



Examples of BMPs - Irrigation Management

Observation Wells



Weather Stations



Soil Moisture Monitoring



Examples of BMPs - Irrigation Management

Mobile Irrigation Labs



Irrigation System Retrofits



Tailwater Recovery



Examples of BMPs - Sedimentation/Erosion Control

Conservation Tillage



Cover Crops



Grassed Waterways/Filter Strips



Examples of BMPs - Water Resources Protection



**Replace
Water
Control
Structures**



**Critical
Area
Fencing**



**Watering
Troughs**



Participating in BMPs - How to Enroll

- **Schedule an on-site visit with a BMP team member**, who will provide a free FDACS BMP manual and other BMP-related information.
- **Participate in the free assessment of your operation**, to determine which BMPs apply to you.
- **Fill out a BMP checklist and sign the Notice of Intent (NOI)** to implement the BMPs.
- **Keep a copy** of the checklist and signed NOI in your records.
- **Implement and maintain the applicable BMPs and keep records as instructed in the manual**, to maintain a presumption of compliance with state water quality standards.

You may request a Certificate of Enrollment in BMPs through a BMP team member, or by contacting FDACS at (850) 617-1727 or AgBmpHelp@FreshFromFlorida.com



Participating in BMPs - Preparing for Enrollment

- Review the relevant BMP manual before the site assessment, and jot down any questions you have about the BMPs, unfamiliar terms, or other manual contents. You can get the manuals at: <http://www.FloridaAgWaterPolicy.com/> .
- Be ready to confirm the tax parcel IDs of land to be enrolled in the program, to ensure the accuracy of the NOI.
- Have someone available the day of the visit who is familiar with the nutrient and irrigation regimes of the operation.
- During the visit, the BMP team member will discuss with you any resource concerns (impacts to wetlands, streams, sinkholes, springs, etc.), help identify what BMPs to implement, and assist with completing the BMP checklist and NOI.



Participating in BMPs - After Enrolling

- Document through record keeping, as specified in FDACS rules and BMP manuals. This is sometimes the only way to confirm BMP implementation.
- BMP records should be accurate, clear, and well-organized. You may develop your own record-keeping forms or use the ones provided in the manual.
- FDACS BMP team members, soil and water conservation districts, USDA-NRCS and/or county Extension staff can assist producers with BMP implementation and record-keeping methods.
- Cost share may be available for certain practices.



Participating in BMPs - After Enrolling

90-day follow-up

A BMP team member will check in within 90 days of enrollment to see whether there are questions or assistance is needed

BMP Implementation Assurance

- Written surveys to get producer feedback on BMP implementation –
 - Helps evaluate effectiveness of programs/identify producer needs
- Some site visits conducted, scheduled at grower's convenience
 - To review key BMPs, discuss questions, provide technical assistance
- LSJR compliance process



Cost Share Funding

Several cost share funding programs are expected to be available in the Springs Coast BMAP areas during the next fiscal year

- **\$250,000 within SWFWMD; all commodities, administered through Hillsborough SWCD**
- **Statewide funding for weather stations, administered through Highlands SWCD**
- **SWFWMD's FARMS program; all commodities, but focus is on larger commercial operations (> 100 ac)**



Thank You!

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