

# Florida Program Update

October 2021

NASCA Regional

Christopher Pettit, Director

Florida Department of Agriculture and Consumer Services

Office of Agricultural Water Policy



# OAWP Responsibilities

- Development and implementation of agricultural best management practices (BMPs)
- Implementation of cost share programs
- Water supply and water quality planning and coordination
- Scientific and technical research
- Technical support and general oversight of SWCDs
- Other policy development and statutory responsibilities



# Past Successes

- Implementation and enhancement of agricultural BMP Program
- Utilization of cost share programs to assist producers and protect the environment
- Accurate characterization of agricultural water and land use
- Development of top-quality research
- Development and implementation of innovative agricultural practices and technologies



# Resources

- 59 positions
  - Policy
  - Finance and contracts
  - IT and Data Management
  - Field staff (25 positions)
- Contractual support provided by soil and water conservation district technicians and independent consultants
- ~\$50 million budget for FY 2021-22



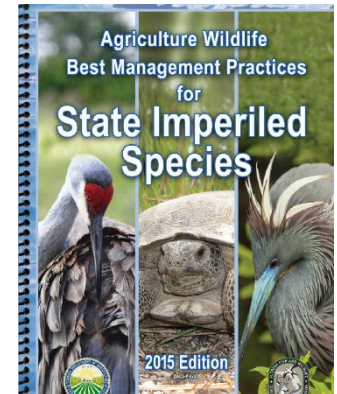
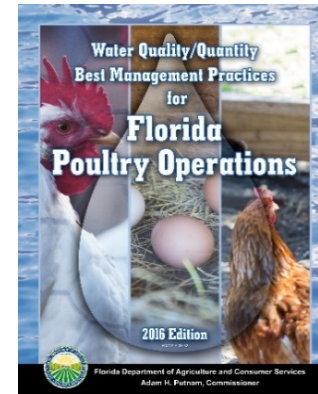
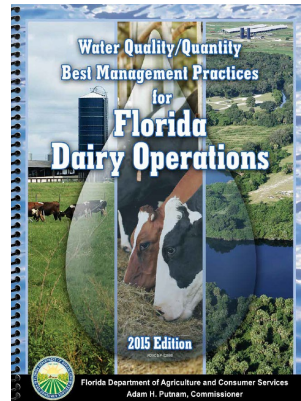
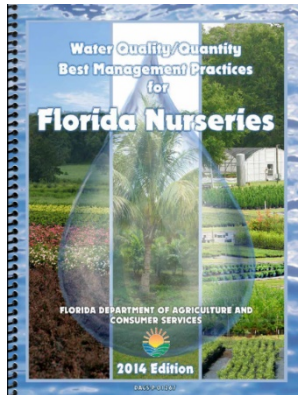
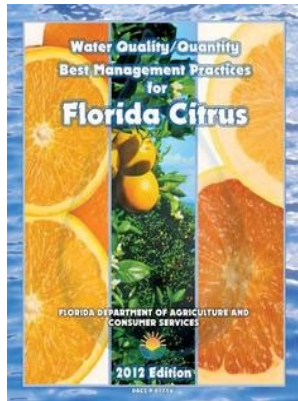
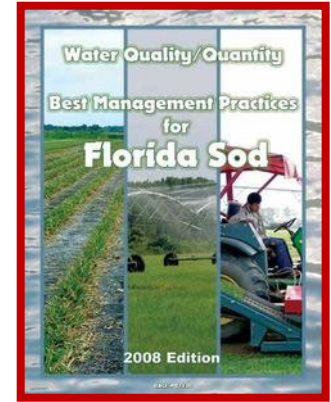
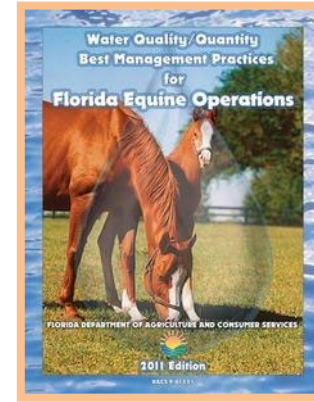
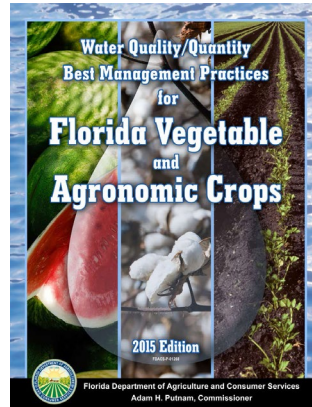
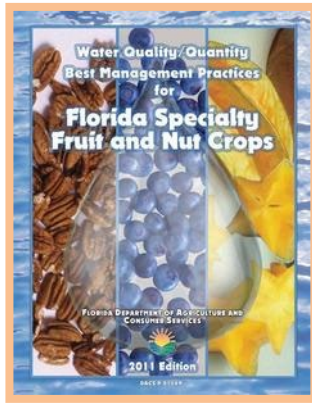
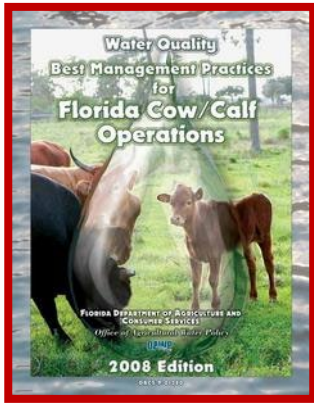
# BMPs

- Management strategies, tools and practices that improve water quality, conserve water, and protect water resources (Efficiency)
- Best available science and technology
- Technical and economic feasibility (Manual)
- Balance Productivity with Water Quality Improvement\*
- Proper implementation confirmed through implementation verification site visits



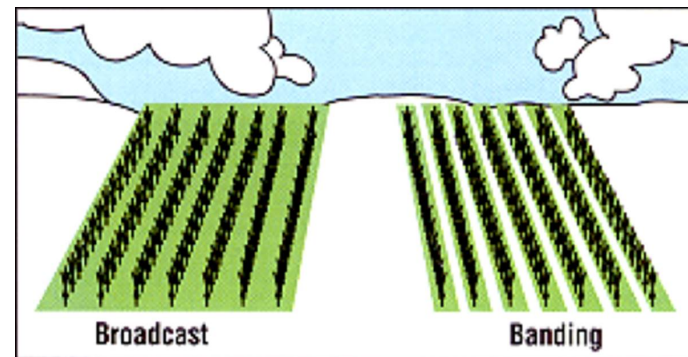
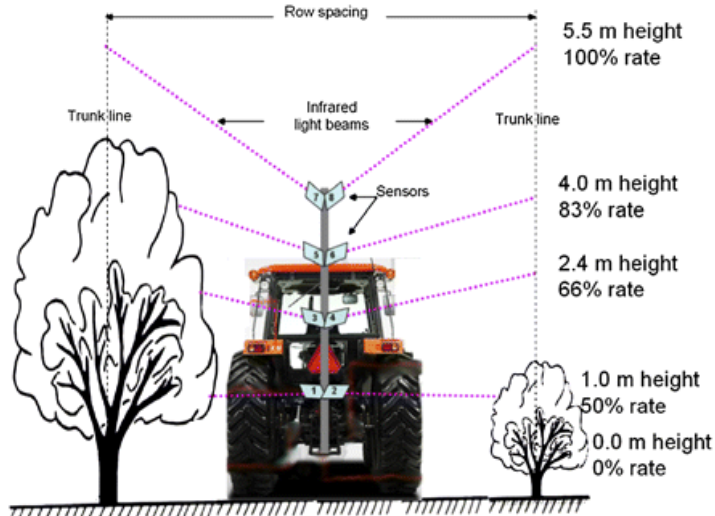


# Adopted BMP Manuals



# Nutrient Management BMPs

- Precision Fertilization – Multiple technologies such as soil sampling on a grid or precision application equipment – reduces fertilizer inputs as much as 35%
- Variable Rate Technology – Allows precise placement of nutrients to roots and leaf tissue





# Irrigation Management BMPs

- Soil Moisture Probes – Reduces fertilizer and water usage by up to 50%
  - provides tracking of fertilizer through soil column
- Precision Irrigation – Allows placement of water close to the plant and reduces evaporation - individual valves may be guided by soil moisture probes – reduces groundwater withdrawals up to 40%





# Water Resource Protection BMPs

- Surface Water Control Structures
- Buffers – erosion control



# BMP Enrollment and Verification

- Notice of Intent to Implement BMPs - Enrollment and identification of BMPs appropriate to the specific parcel and commodity
- Implementation verification (IV) site visits
- Cost Share Projects identified at enrollment, IV, or through outreach efforts
- Referral to the Department of Environmental Protection in the event of non-compliance
- Annual Report
- Data management



# Producer Options in TMDL/BMAP Areas

1. Sign an NOI and properly implement applicable BMPs for presumption of compliance, OR
2. Follow an FDEP or WMD-prescribed water quality monitoring plan at a Producer's expense



# SB 712





# New Statutory Language in SB 712, s. 403.067(c)7(d)3, F.S.

At least every 2 years, the Department of Agriculture and Consumer Services shall perform onsite inspections of each agricultural producer that enrolls in a best management practice to ensure that such practice is being properly implemented. Such verification must include a **collection and review** of the best management practice documentation from the previous 2 years required by rules adopted pursuant to subparagraph (c)2., including, but not limited to, nitrogen and phosphorus fertilizer application records, which must be **collected and retained** pursuant to subparagraphs (c)3., 4., and 6. The Department of Agriculture and Consumer Services shall initially prioritize the inspection of agricultural producers located in the basin management action plans for Lake Okeechobee, the Indian River Lagoon, the Caloosahatchee River and Estuary, and Silver Springs.



# Statutory Language in SB 712

## Section 403.067(c)

5. Subject to subparagraph 6., the Department of Agriculture and Consumer Services shall provide to the department **information obtained** pursuant to subparagraph (d)3.



## SB 712 language and requirements

- IV Site Visit required for all enrolled producers every two years
- Documentation is required to be provided from Producers to demonstrate proper implementation of Applicable BMPs (Collect and Review). *See existing BMP manuals.*
- Records are required to be retained by OAWP. (N and P fertilizer application records quantifying the amount of nutrients applied on an enrolled parcel). *See NARF and associated rule amendments.*

\*\* Nutrient information obtained provided to the Department of Environmental Protection for utilization within BMAP assessment process



# Existing Record Requirements for Nutrient Management

- Quantify all nutrient sources
  - Guaranteed analysis for commercial fertilizer
  - Book values, other lab analysis, supplier data for other sources
- Plan nutrient applications to match plant requirements
  - Soil and tissue testing
  - UF/IFAS recommendations are the default; some manuals have special nutrient management measures to justify alternative applications
- Keep records of sources (w/content), application rates, location, and timing







# Current Recordkeeping Requirements

## In the Narrative of the manual



- ✓ 10.  Keep records of all nutrient applications that contain N or P.

## In the Checklist of the manual

-  10. Keep records of all nutrient applications that contain N or P.





# Final Rule Changes

- Rule 5M-1.001 (Definitions)
  - Update Definitions of “Notice of Intent” and “Enrollment” to clarify how enrollment occurs
  - Incorporate by reference General NOI form
- Rule 5M-1.008 (Implementation Verification)
  - New subparagraph identifying “collection and review” to determine proper implementation of Applicable BMPs
  - New subparagraph requiring submittal of the NARF or substantially similar records detailing the application of N or P on a subject parcel
- Rule 5M-1.009 (BMP Implementation Assistance)
  - Update for consistency with SB 712
  - Update timeframes for the implementation of corrective / remedial action



# How are we doing?

BMAP	IVs Completed	Total IVs	Percentage	IV Acres Completed	Total IV Acres	Percentage
Alafia River Basin	10	104	10%	1,960	6,013	33%
Caloosahatchee River and Estuary Basin	170	377	45%	220,358	583,779	38%
Central Indian River Lagoon	89	249	36%	34,832	103,839	34%
Chassahowitzka-Homosassa Springs BMAP	60	113	53%	9,623	17,238	56%
DeLeon Spring BMAP	8	31	26%	1,089	2,546	43%
Everglades West Coast Basin	1	18	6%	2,570	6,112	42%
Gemini Springs BMAP	2	8	25%	349	377	93%
Hillsborough River Basin	8	58	14%	2,160	11,013	20%
Jackson Blue Spring	142	231	61%	27,469	37,592	73%
Kings Bay and Crystal River Springs	20	27	74%	2,865	3,094	93%
Lake Harney, Lake Monroe, Middle St. Johns River and Smith Canal	9	29	31%	9,320	10,299	90%
Lake Jesup Basin	7	49	14%	705	6,078	12%
Lake Okeechobee Basin	1,153	2,341	49%	509,866	1,377,599	37%
Long Branch	1	1	100%	229	229	100%
Lower St. Johns River Basin Main Stem	105	300	35%	27,365	78,673	35%
Lower St. Johns River Basin Tributaries I and II	2	4	50%	54	1,074	5%
Manatee River Basin	2	5	40%	653	1,186	55%
Middle and Lower Suwannee River Basin	588	1,345	44%	119,483	297,142	40%
North Indian River Lagoon	3	14	21%	137	333	41%
Orange Creek	110	209	53%	21,033	33,903	62%
Rainbow River and Springs	305	471	65%	62,038	121,670	51%
Santa Fe River Basin	377	770	49%	75,701	141,039	54%
Silver River and Springs	249	349	71%	31,742	48,418	66%
St. Lucie River and Estuary Basin	206	448	46%	137,864	276,917	50%
Upper Ocklawaha River Basin	150	346	43%	11,830	24,198	49%
Upper Wakulla River and Wakulla Spring	21	108	19%	5,876	20,392	29%
Volusia Blue Springshed	3	6	50%	84	125	67%
Wacissa River and Wacissa Spring Group	55	85	65%	19,352	24,311	80%
Weeki Wachee Spring and River	61	91	67%	20,901	29,413	71%
Wekiva River, Rock Springs Run, and Little Wekiva Canal	111	276	40%	4,852	9,806	49%
Wekiwa Spring and Rock Springs BMAP	62	167	37%	2,229	4,254	52%
<b>Total</b>	<b>4,090</b>	<b>8,630</b>	<b>47%</b>	<b>1,364,587</b>	<b>3,278,663</b>	<b>42%</b>





# Scientific and Technical Research

- Scientific and technical foundation for BMP development and improvement
- OAWP Research Priorities
  - <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices/BMP-Research>
- Research Plan Development (SB 712)
  - Collaboration with UF/IFAS, other research universities, state colleges with an agricultural program
  - Solicitation published February 2021, Proposals received by June 1
  - Coordination with FDEP
  - Legislative Budget Request



Emerging Issue: Rate Research v. Efficiency of Management in BMP Manual Implementation

# Other OAWP Policy Issues

- Central Florida Water Initiative – Water Scarcity
- NW Florida Springs MFLs (DEP, SJRWMD, SRWMD)
- LOSOM – Lake Okeechobee System Operations
- Comprehensive Everglades Restoration
- Wildlife Species
- Conservation Lands
- Public Goods / Payment for Environmental Services
- Regional Water Supply Planning and Land Use
  - FSAID
  - ESRI - GIS



# Emerging BMP/Policy Issues

- Clarity in Existing Recordkeeping
  - Electronic v. Traditional
  - Forms and Templates
- IV Site Visit Efficiency
  - Technical Assistance
- Enrollment/Land Use Classification
  - State owned lands
  - Leases
- Diversified Operations
- Human Resource Needs
- Coordinating Agency Agreements (SB 712 and Northern Everglades)



# Cost Share Programs

- \$\$\$\$ Needed with emerging trends
- Prioritization
  - “Bang for the buck”
  - Targeted areas
  - Economic feasibility
- Collaboration and Leveraging
  - Water management district programs
  - Statutory requirements as a collaborative agency
  - Federal agency programs (Natural Resources Conservation Service - USDA)





# Emerging BMP/Policy Issues

- Clarity in Existing Recordkeeping
  - Electronic v. Traditional
  - Forms and Templates
- IV Site Visit Efficiency
  - Technical Assistance
- Enrollment/Land Use Classification
  - State owned lands
  - Leases
- Diversified Operations
- Human Resource Needs – LBR for 27 additional positions
- Coordinating Agency Agreements (SB 712 and Northern Everglades)



# Other OAWP Policy Issues

- Central Florida Water Initiative – Water Scarcity
- NW Florida Springs MFLs (DEP, SJRWMD, SRWMD)
- LOSOM – Lake Okeechobee System Operations
- Comprehensive Everglades Restoration
- Wildlife Species
- Conservation Lands
- Public Goods / Payment for Environmental Services
- Regional Water Supply Planning and Land Use
  - FSAID
  - ESRI - GIS



# What's Next?

- Efficiency and Nutrient Reduction
  - Nutrient Reduction Plan or Similar
- Cost Share Improvements
  - Prioritize
  - Improve tracking and data management
  - Possible Rulemaking
- Efficiency in Contracting
  - MILs
  - Technicians
  - Cost Share
  - AFCD
  - Fiscal Year Begins July 1



# Thank You!

<http://www.fdacs.gov/Divisions-Offices/Agricultural-Water-Policy>

Christopher Pettit  
Director

(850) 617-1700

Christopher.pettit@fdacs.gov



Florida Department of Agriculture and Consumer Services