

# **Florida Department of Agriculture and Consumer Services (FDACS) Best Management Practices (BMP) Program**

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# Presentation Overview

- ✓ FDACS BMP Program
  - ✓ Overview
  - ✓ South Florida Water Management District (SFWMD) Enrollment
  - ✓ Lake Okeechobee Basin Management Action Plan (BMAP) Enrollment
- ✓ Nutrient Reduction Estimates
- ✓ Implementation Assurance (IA) Program



# FDACS BMP Program



# BMP Types

- ✓ Management BMPs
  - ✓ Examples: Nutrient and irrigation management.
  - ✓ Comprise majority of practices and often are not readily observable.
  - ✓ Generally affordable.
  
- ✓ Structural BMPs
  - ✓ Examples: Water control structures, fencing, and tailwater recovery systems.
  - ✓ May require cost share to be economically feasible.



# Key BMP Categories

- ✓ Nutrient Management
- ✓ Irrigation Management
- ✓ Water Resources Protection



Source: UF-IFAS Extension,  
Okeechobee County

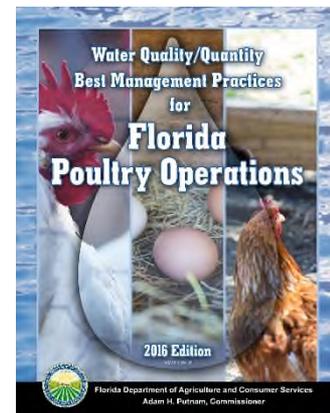
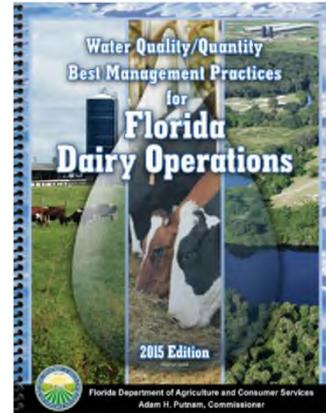
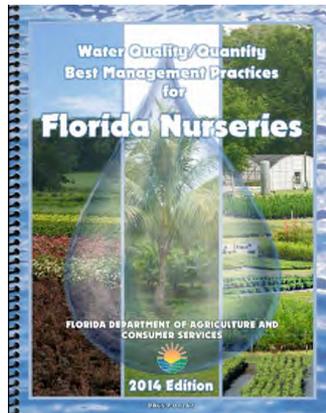
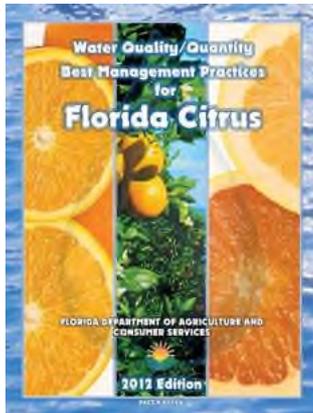
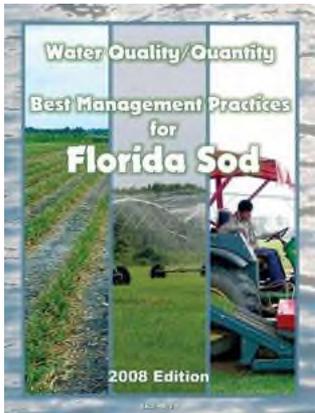
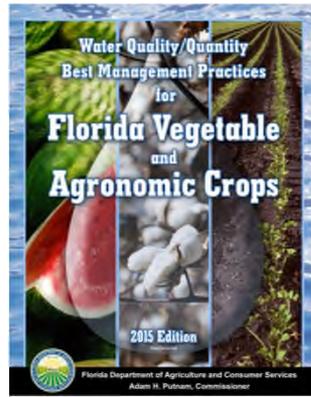
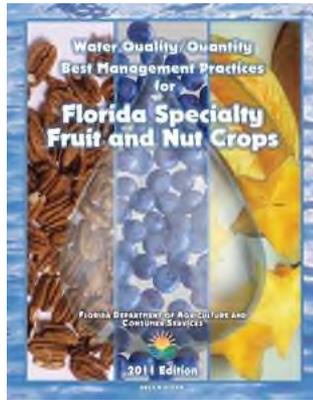


# OAWP BMP Programs

Manual	Adoption	Rule Reference	Next Review
Cow/Calf	2009	5M-11	2016
Sod	2008	5M-9	2016
Specialty Fruit & Nut	2011	5M-13	2017
Equine	2012	5M-14	2017
Citrus	2013	5M-16	2018
Nursery	2014	5M-6	2018
Vegetable and Agronomic Crops	2015	5M-8	2020
Dairies	2016	5M-17	2021
Poultry	Expected 2016	5M-19	2021



# BMP Manuals

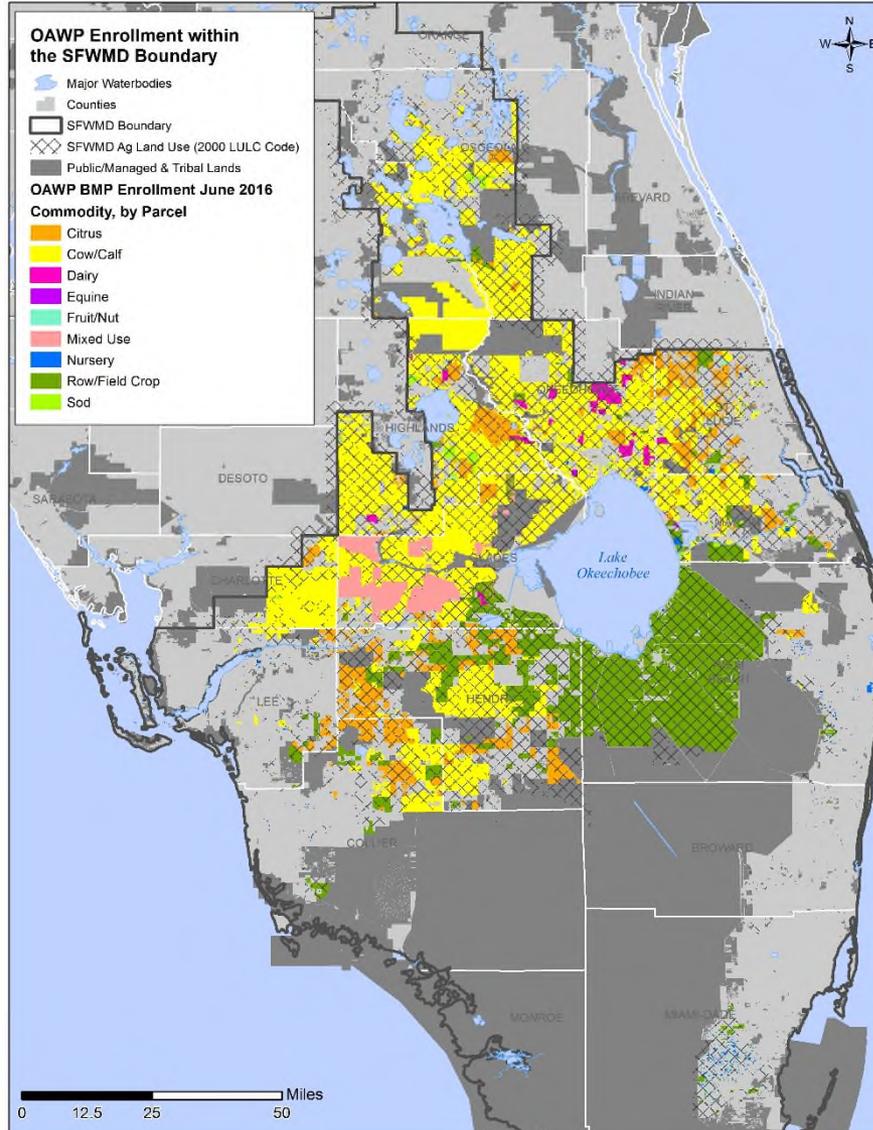


# Agriculture's Role in Water Quality Protection

- ✓ Florida Legislature provided for agricultural operations to implement BMPs as preferred means to help meet total maximum daily loads and protect water quality.
- ✓ Operations within adopted Basin Management Action Plan (BMAP) areas and/or Northern Everglades have two options:
  - ✓ Enroll in and implement FDACS BMPs.
  - ✓ Follow a Florida Department of Environmental Protection (FDEP)- or SFWMD-approved water quality monitoring plan at operator's own expense.

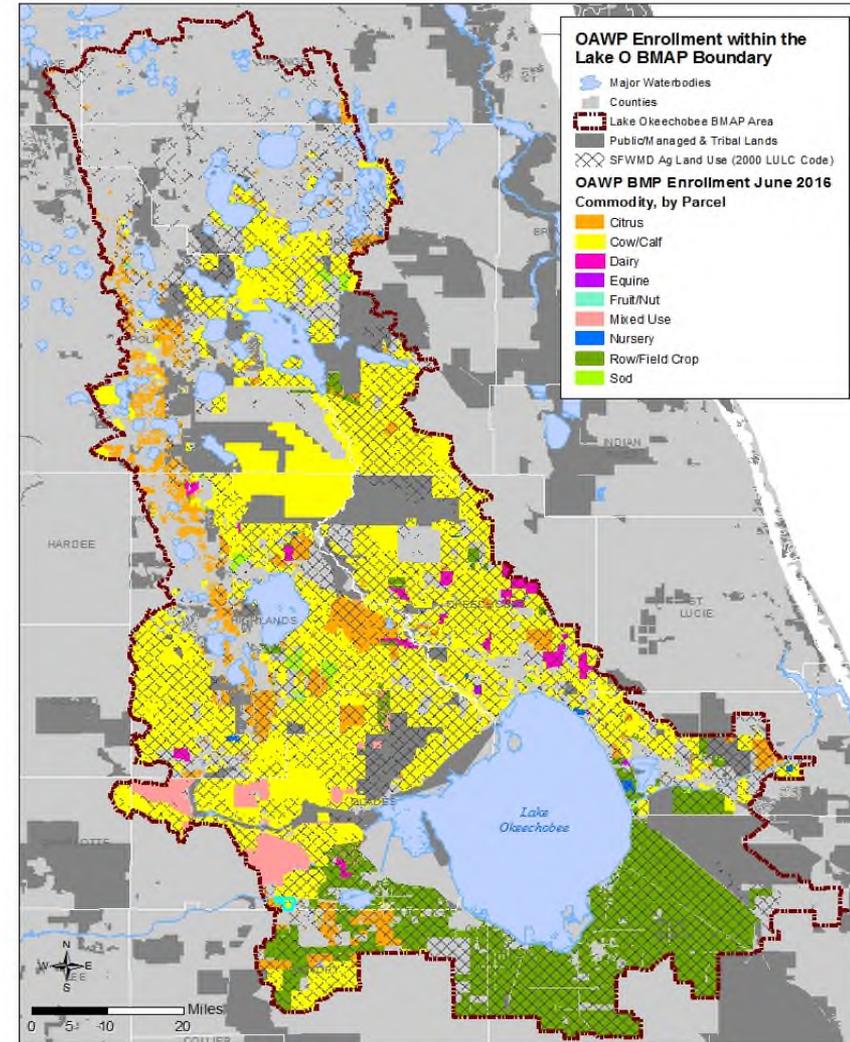


# SFWMD Enrollment



# Lake Okeechobee BMAP Enrollment

- ✓ Total SFWMD 2009 agricultural land use acres (2000 land use code only): 1,646,723.60
- ✓ Total acres enrolled on SFWMD 2009 agricultural land use: 1,392,932.81
- ✓ Percent enrollment on agricultural land use: 84.5%



# Nutrient Reduction Estimates



# Lake Okeechobee BMAP Nutrient Reduction Estimates

- ✓ 100% Implementation of Owner-Implemented BMPs in Lake Okeechobee BMAP (six northern sub-watersheds)
  - ✓ Total phosphorus (TP): 30.97 metric tons (MT)
  - ✓ Total nitrogen (TN): 593.28 MT
- ✓ Cost-Share Estimates
  - ✓ TP: 0.95 MT



Source: FDACS



# OAWP Cost-Share Nutrient Reduction Estimates

- ✓ Cost-Share Estimates (Soil and Water Engineering Technology, Inc.)
  - ✓ TP: 49 MT/year
  - ✓ TN: 250 MT/year
  
- ✓ Typical cost effectiveness
  - ✓ TP range: \$5.95/pound-TP/year (water troughs) to \$1,220/pound-TP/year (dairy remediation)
  - ✓ TN range: \$.71/pound-TN/year (weather stations) to \$642/pound-TN/year (dairy remediation)



# IA Program



# IA Program

- ✓ Primary purposes:
  - ✓ Document implementation of BMPs.
  - ✓ Report on implementation extent and progress, particularly in BMAP areas.
  - ✓ Provide basis for determination of implementation status.
  - ✓ Inform research priorities, opportunities for technical assistance, cost-share focal points, and BMP review/revision process.



Source: FDACS



# IA Program Development

- ✓ Standardized data collection.
- ✓ Periodic surveys and self-certifications conducted.
- ✓ Prioritized FDACS site visits for confirmation and assistance.
- ✓ Multiple opportunities for corrective or remedial action.
- ✓ Final determination of status, including assessment of risk to water resources.
- ✓ Non-implementing landowners referred to FDEP for development of a water quality monitoring plan.



# Conclusion

- ✓ FDACS BMP Program
  - ✓ Overview
  - ✓ SFWMD Enrollment
  - ✓ Lake Okeechobee BMAP Enrollment
- ✓ Nutrient Reduction Estimates
- ✓ IA Program



# Thank you!

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