

Upper Ocklawaha Basin Management Action Plan (BMAP) Annual Update

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FDACS

Office of Agricultural Water Policy (OAWP)

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Presentation Overview

- ✓ Agricultural Best Management Practice (BMP) Program Overview and Enrollment Update
- ✓ Implementation Assurance (IA) Program Update
- ✓ Trout Lake Hybrid Wetland Treatment Technology (HWTT) Project



Agricultural BMP Program Overview and Enrollment Update



Agricultural BMP Overview

- ✓ Practical measures that reduce amount of fertilizers, pesticides, and animal waste entering water resources.
- ✓ BMP manuals developed in collaboration with agricultural industry, agencies, and others.
- ✓ Must be economically and technically feasible for producer to implement.



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

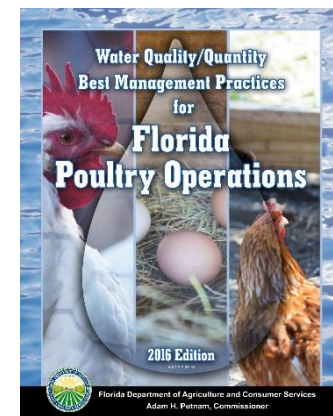
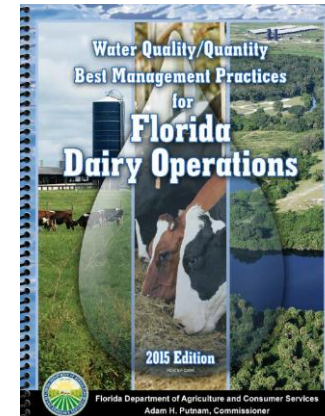
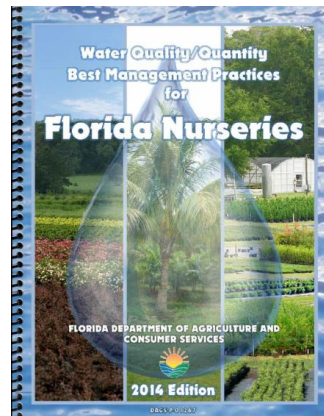
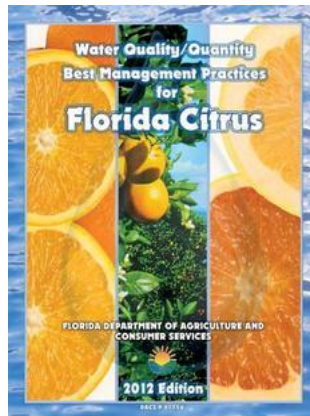
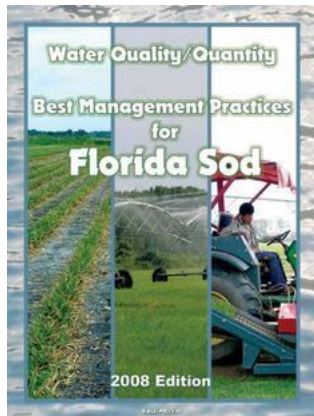
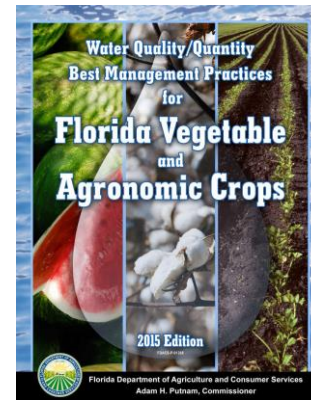
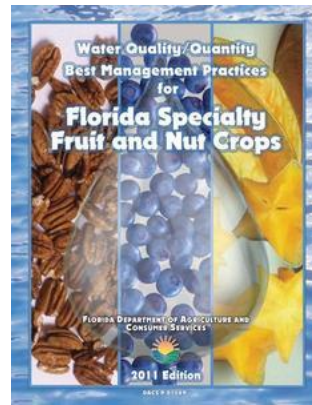
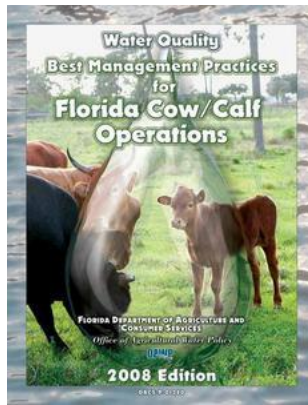


OAWP BMP Programs

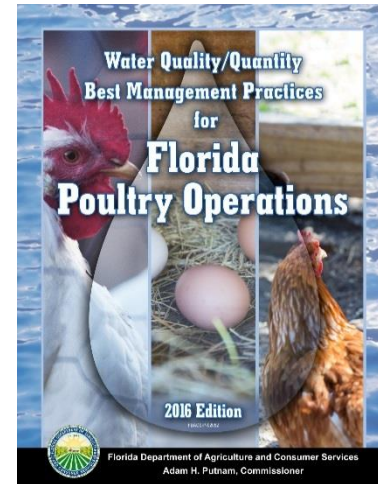
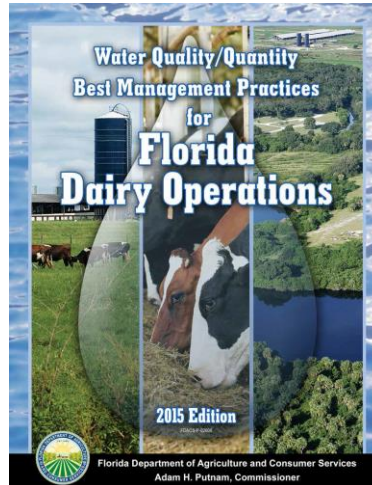
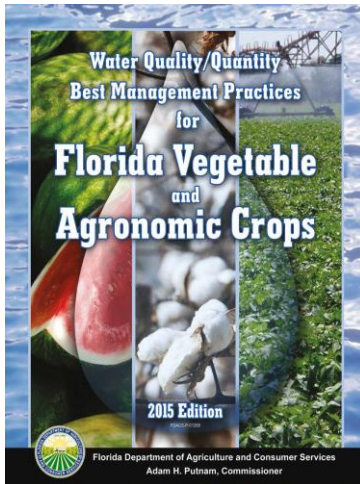
Manual	Adoption	Rule Reference	Next Review
Cow/Calf	2009	5M-11	2016
Sod	2008	5M-9	2016
Specialty Fruit & Nut	2011	5M-13	2017
Equine	2012	5M-14	2017
Citrus	2013	5M-16	2018
Nursery	2014	5M-6	2018
Vegetable and Agronomic Crops	2015	5M-8	2020
Dairies	2016	5M-17	2021
Poultry	Expected 2016	5M-19	2021



BMP Manuals



BMP Manual Update

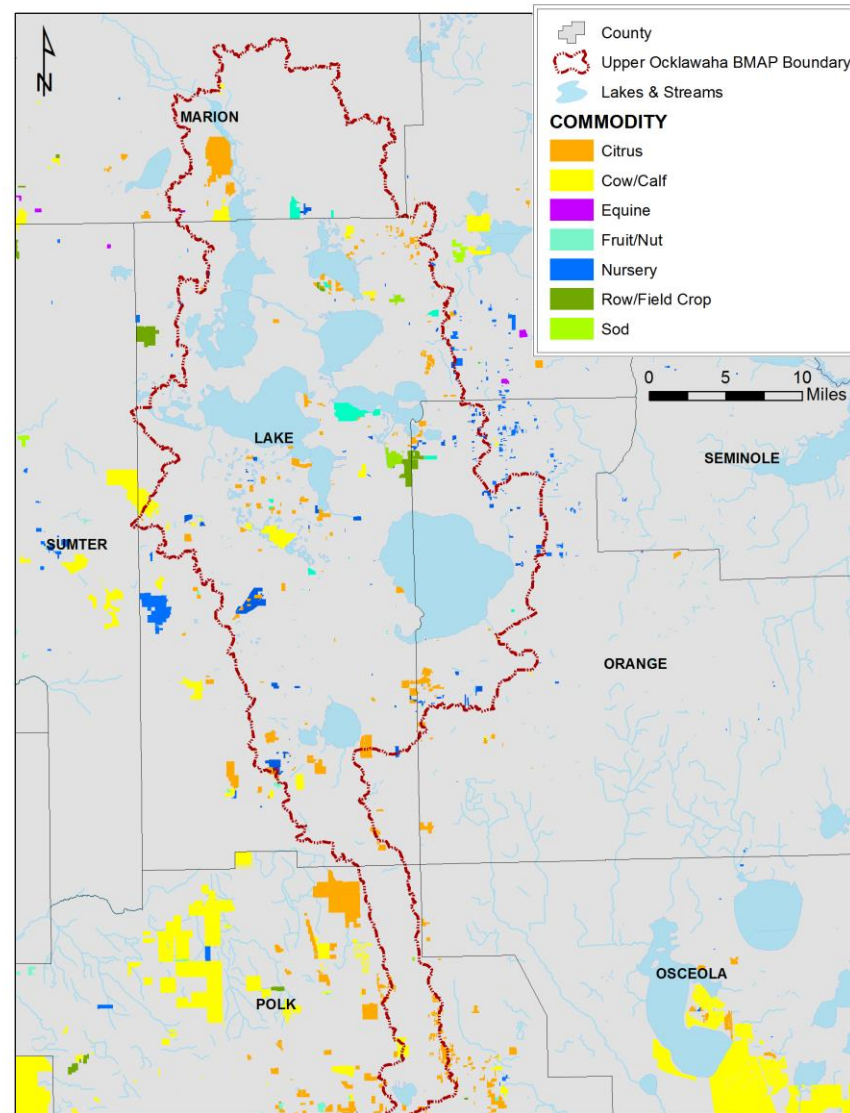


Agriculture's Role in Water Quality Protection

- ✓ 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 BMAP areas and/or Northern Everglades have two options:
 - ✓ Enroll in and implement FDACS BMPs.
 - ✓ Follow a Florida Department of Environmental Protection (FDEP)- or water management district approved water quality monitoring plan at operator's own expense.



Upper Ocklawaha BMAP Enrollment Update, June 2016



Agricultural Land Use and BMP Enrollment in Upper Ocklawaha BMAP Area

2009 SJRWMD Land Use	Land Use Acres	Enrolled Acres (June 2016)
Pasture and Rangeland	62,313.3	3,084.4
Row/Field/Mixed Crops	14,166.7	1,644.1
Horse Farm	2,826.6	23.9
Citrus	19,841.8	6,818.7
Fruit Orchards/Other Groves	256.6	676.9
Abandoned Tree Crops	0.0	N/A
Nurseries and Vineyards, Ornamentals	3,371.4	4,257.5
Tree Nurseries	946.9	-
Sod Farms	396.1	521.3
Shade / Hammock Ferns	514.7	-
Floriculture	5.0	-
Specialty Farms	87.3	-
Dairies	128.1	-
Cattle Feeding Operations	22.8	-
Poultry Feeding Operations	34.7	-
Other Open Lands – Rural	0.0	N/A
Fallow Cropland	0.0	N/A
TOTAL	104,912.0	17,026.80

Agricultural Land Use and BMP Enrollment in Upper Ocklawaha BMAP Area, continued

Category	Acres
Total (FDACS-Adjusted Acres)	104,912.0
5-Year Enrollment Goal (60%)	62,947.2
Acreage Enrolled (as of June 2016)	17,026.80
Remaining Acres to Enroll	45,920.40

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

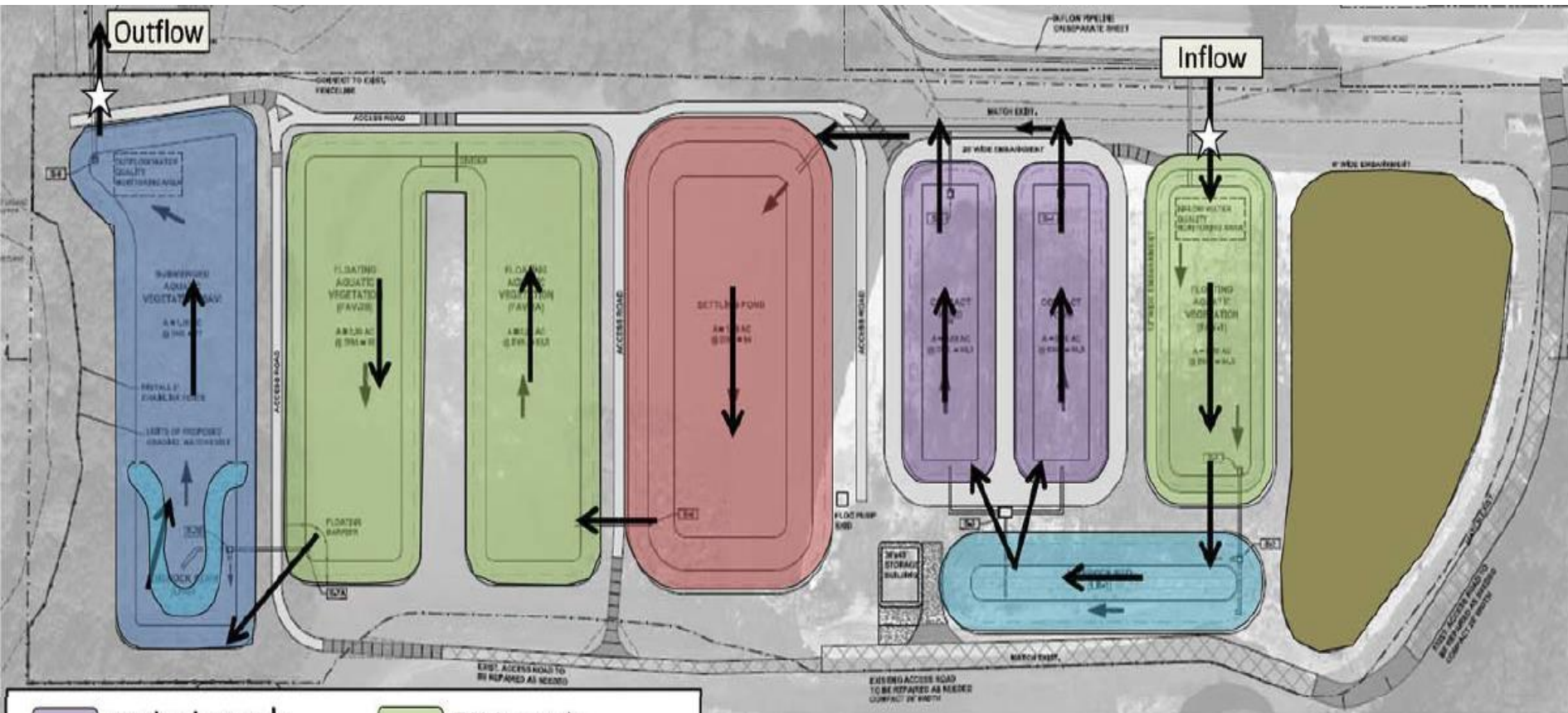
- ✓ Standardized data collection.
- ✓ Periodic surveys and self-certifications conducted.
- ✓ Prioritized FDACS site visits for confirmation and assistance.
- ✓ Multiple opportunities for corrective or remedial action.
- ✓ Final determination of status, including assessment of risk to water resources.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



Trout Lake HWTT Project



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Trout Lake HWTT Project, continued

- ✓ 20 cubic feet per second facility.
- ✓ Located on land leased to FDACS by City of Eustis.
- ✓ All permits have been received.
- ✓ Construction is underway (75% complete).
- ✓ Expected to be fully constructed and operational by spring 2017.



Trout Lake HWTT Project, continued

- ✓ HWTT system phosphorus (P) removal efficiency of 85% (estimate based on performance of existing HWTT facilities).
- ✓ Estimated annual P removal is 2,214 pounds.



Conclusion

- ✓ Agricultural BMP Program Overview and Enrollment Update
- ✓ IA Program Update
- ✓ Trout Lake HWTT Project



Thank you!

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