



Upper Ocklawaha BMAP Meeting

Mary Paulic

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AGENDA

Welcome, Introduction, and Purpose (*Tiffany Busby*)

Agriculture Updates for Upper Ocklawaha River Basin (*Corrine Hermle*)

Water Quality Update for BMAP Focus Lakes (*Rolland Fulton*)

Status of Lake Minneola (*Tiffany Trent*)

Lake Apopka Project Update (*Lori McCloud*)

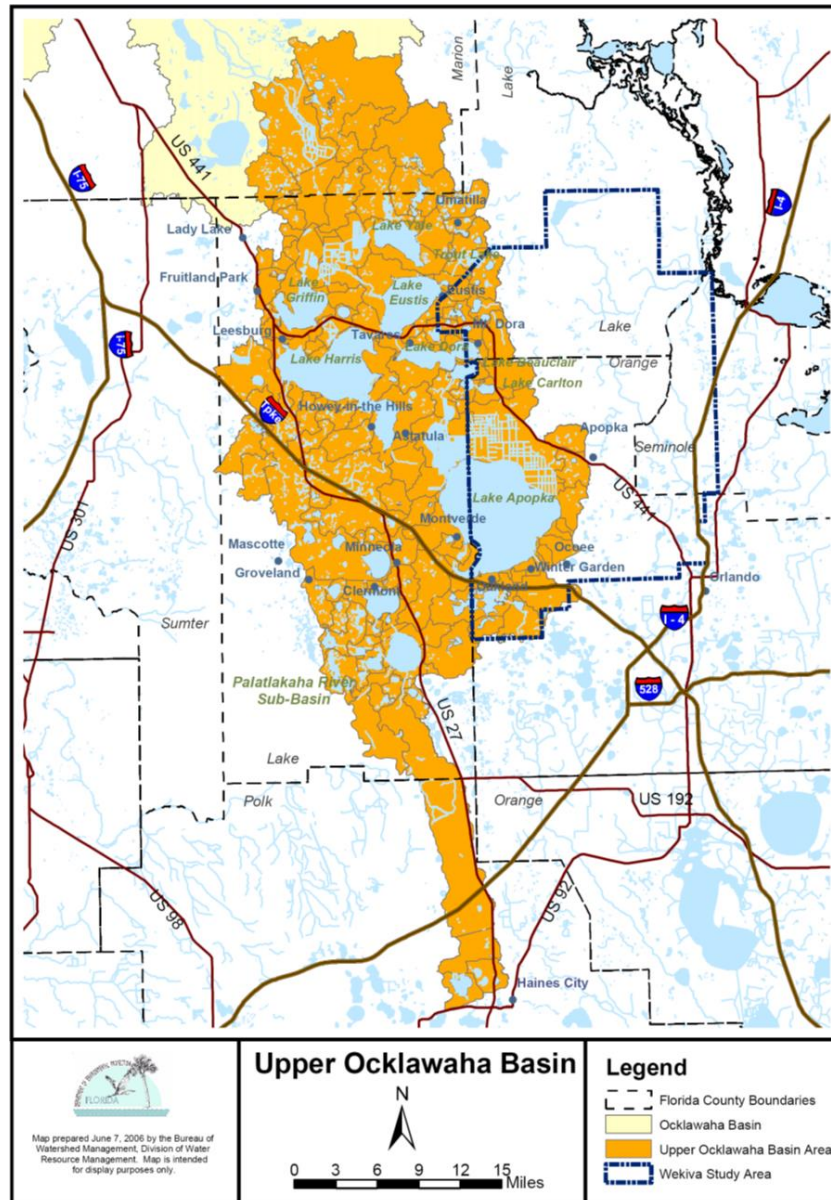
Project Status Update and Loading Reductions (*Mary Paulic*)

Agency Updates (*All*)

Next Steps (*Tiffany Busby*)

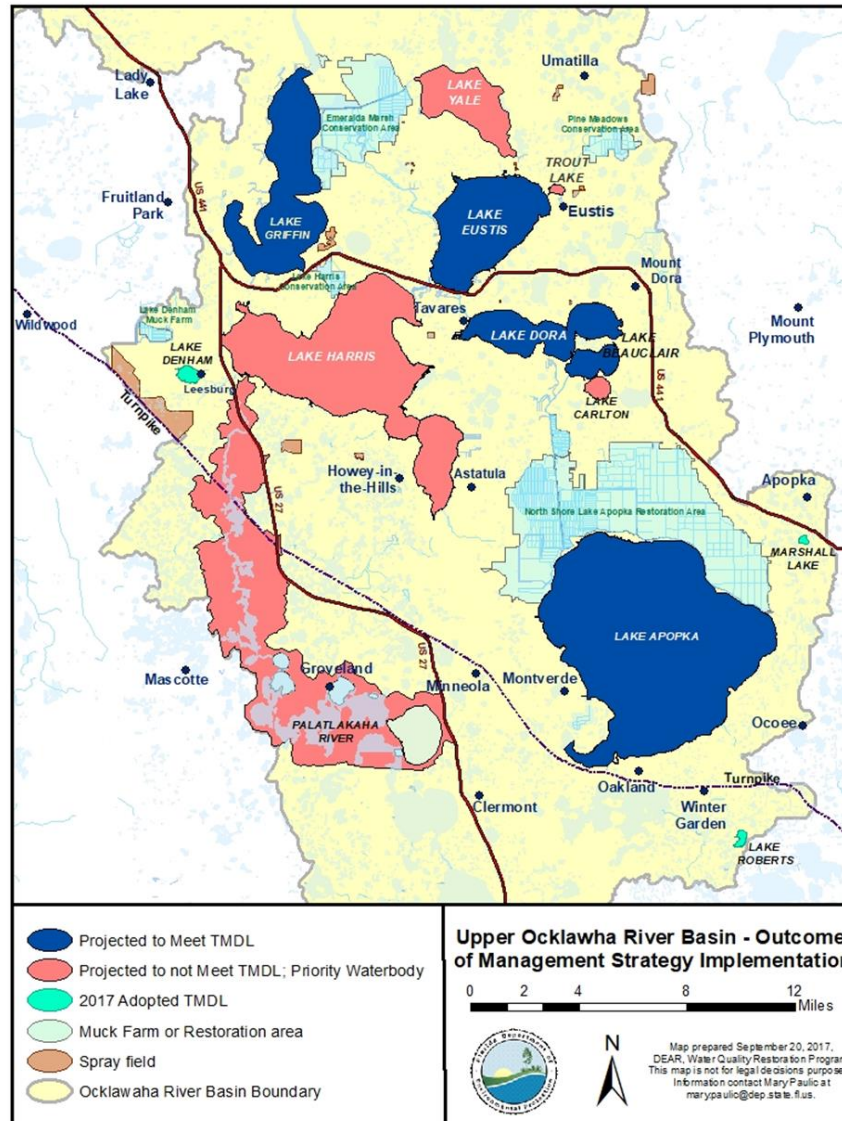


Upper Ocklawaha Basin





Impaired Waterbodies





Project Status and Preparation for 2021 Project Reporting

- Project information reported through December 2020



Project Summary

- Added 25 new projects
 - In addition to 26 projects in 2019
 - 4 WWTF upgrade and maintenance
 - 1 connection of OSTDS to central sewer
 - 1 Regulatory/Ordinance
 - 10 Stormwater BMP retrofit/maintenance
 - NURF upgrade
 - 7 Studies
 - 1 SAV habitat restoration
- New total of 464 projects
- Information reported to Legislature through STAR report



New Project Highlights

Stormwater Retrofits

- Baffle boxes at multiple locations
 - Fruitland Park Mirror Lake
 - Lake County Picciola Harbor retrofit of CDS unit
 - Lake County Lake Joanna stormwater enhancement
 - Orange County Siplin Road pond retrofit
 - Umatilla Trowell Avenue
- Lake County paving and drainage improvement (swales) of Lenze Road
- Lake County catch basin and pipe cleaning in Lake Dora watershed



New Project Highlights

Education, Studies, Ordinances

- Lake Joanna Water Quality Study (Loch Levin)- LCWA
- Upgrade of NuRF Facility - LCWA
- Lake Minneola Study – LCWA
- Lady Lake Stormwater Master Plan
- Orange County Groundwater Vulnerability Study
- Ocoee land development code
 - Fertilizer management, grass clippings and vegetation material, debris and pet waste



Studies and Restoration

Lake Apopka Basin

- Johns Lake Hydrological and Nutrient Assessment
- Evaluation of Jones Avenues Regional Stormwater Project – Orange County
- Lake Apopka submerged aquatic vegetation planting - SJRWMD



New Project Highlights

Wastewater Management

- Eustis rehabilitation of wastewater collection system and inflow infiltration smoke testing
- Howey-in-the-Hills received DEP grant to connect properties in downtown to central sewer
- Winter Garden Crest Avenue WWTF process optimization and increased capacity



Project Funding

- Information about FDEP grant programs is available at <https://floridadep.gov/wra>
- Nonpoint Source funding programs:
 - Federal Clean Water Act Section 319(h) grants and State Water-quality Assistance grants
 - Submit proposal anytime during the year. Primary review for funding periods are September/October and March/April
 - Local and state governments (including water management district) and public universities are examples of local groups eligible for funding
 - Contact Emily Forinash for information at Emily.Forinash@FloridaDEP.gov



Project Funding

Examples of Nonpoint source projects

- Demonstration and evaluation of best management practices (BMPs)
- Nonpoint pollution reduction in priority watersheds (e.g., areas with water quality restoration plans, etc.)
Example includes treatment of impaired waters.
- Ground water protection from nonpoint sources
- Public education programs on nonpoint source management ("319 Grant" only)
- Septic to sewer projects ("319 Grant" only)
- Green Infrastructure/Low Impact Development for stormwater



Agriculture Reductions

Draft Agriculture Project Reductions

- Draft reductions in agriculture loading from additional agriculture projects – 32 cost share

Basin	TN lbs/yr	TP lbs/yr	Modeled TP lbs/yr
Lake Apopka	619	156	Not separated
Palatlakaha River	4,591	700	414
Lake Harris	836	168	488
Lake Beauclair	1,685	185	398
Lake Yale	2,839	577	361
Upper Ocklawaha River Basin	2,854	565	No TMDLs
Lake Griffin	3,260	640	351
Trout Lake	1,007	109	70

- Totals are for 2015 through 2020



Lake Harris Allocation

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Reductions and Credits by Jurisdiction for Lake Harris	Total Required Developed Land Use Reduction lbs/yr TP	First Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Education Credit lbs/yr TP	Project Credits lbs/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achieved by 2022 in lbs/yr TP	Second Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Additional Project Credits lbs/yr TP	Total OSTDS Reduction to be Achieved by 2027 lbs/yr TP	Final Reduction Needed lbs/yr TP
Astatula	40.1	20.1	0.0	0.0	20.1	20.0		25.2	65.3
FDOT	46.9	23.5	0.7	1,224.0	-1,201.2	23.4			0.0
Howey-in-the-Hills	21.6	10.8	1.7	11.0	-1.9	10.8		41.8	50.7
Lake County	386.4	193.2	87.7	206.8	-101.3	193.2		402.3	494.2
Leesburg	390.1	195.1	68.3	31.0	95.8	195.0	156*	1.0	135.8
Tavares	147.9	74.0	8.2	9.9	55.9	73.9		5.4	135.2
Wildwood	1.5	0.8	0.3	0.0	0.5	0.7			1.2
Total lbs/yr TP	1,034.6	517.5	167.0	1,482.7	-1,132.2	517.0		475.8	

- Lake Denham education credit added back in
- *Lake Denham project included at 156 lb TP.



Palatlakaha River Allocation

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Reductions and Credits by Jurisdiction - Palatlakaha River	Total Required Developed Land Use Reduction lbs/yr TP	First Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Education Credit lbs/yr TP	Project Credits lbs/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achieved by 2022 in lbs/yr TP	Second Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Remaining Required Developed Land Use Reduction to be Achieved by 2027 lbs/yr TP	Final Reduction Needed lbs/yr TP
Clermont	15.1	8.0	1.0	406.0	-399.0	7.1	-391.9	0.0
Groveland	119.0	60.0	7.8	15.0	37.2	59.0	96.2	96.2
Lake County	245.0	123.0	53.3	17.0	52.7	122.0	174.7	174.7
Leesburg	30.0	15.0	5.3	0.0	9.7	15.0	24.7	24.7
Mascotte	1.0	1.0	0.0	0.0	1.0	0.0	0.9	0.9
Minneola	24.0	12.0	0.7	2.0	9.3	12.0	21.3	21.3
Florida Turnpike Enterprise	4.0	2.0	0.1	0.0	1.9	2.0	3.9	3.9
FDOT	9.0	5.0	0.1	1,487.3	-1,482.4	4.0	-1,478.4	0.0
Total lbs/yr TP	447.1	226.0	68.3	1927.3	-1769.6	221.1	-1,548.6	



Lake Carlton Allocation

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Reductions and Credits by Jurisdiction - Lake Carlton	Total Required Developed Land Use Reduction lbs/yr TP	First Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Education Credit lbs/yr TP	Project Credits lbs/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achieved by 2022 in lbs/yr TP	Second Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Remaining Required Developed Land Use Reduction to be Achieved by 2027 in lbs/yr TP	Total OSTDS Reduction to be Achieved by 2027 lbs/yr TP	Final Reduction Needed lbs/yr TP
FDOT	16.0	8.0	0.0	206	-198.0	8.0	-190.0	0	0.0
Lake County	12.0	6.0	1.0	3	2.0	6.0	8.0	25.0	33.0
Orange County	90.0	45.0	6.0	0	39.0	45.0	84.0	28.0	112.0
Total lbs/yr TP	118.0	59.0	7.0	209	-157.0	59.0	-98.0	53	



Trout Lake Allocation

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Reductions and Credits by Jurisdiction for Trout Lake	Total Required Developed Land Use Reduction lbs/yr TP	First Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Education Credit lbs/yr TP	Project Credits lbs/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achieved by 2022 in lbs/yr TP	Second Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Remaining Required Developed Land Use Reduction to be Achieved by 2027 lbs /yr TP	Total OSTDS Reduction to be Achieved by 2027 lbs/yr TP	Final Reduction Needed lbs/yr TP
Eustis	212.0	106.0	14.0	199.0	-107.0	106.0	-1.0	1.3	0.3
FDOT	29.0	15.0	0.0	531.0	-516.0	14.0	-502.0		0.0
Lake County	72.0	36.0	4.0	143.0	-111.0	36.0	-75.0	5.6	0.0
Umatilla	166.0	83.0	10.0	137.0	-64.0	83.0	19.0	0	19.0
FDACS-HWTT				2,015.0					0.0
Total lbs/yr TP	479.0	240.0	28.0	3,025.0	-798.0	239.0	-559.0	6.9	

*TP reduction varies by year. Future adjustment to a long-term average.



Lake Yale Allocation

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Reductions and Credits by Jurisdiction - Lake Yale	Total Required Developed Land Use Reduction lbs/yr TP	First Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Education Credit lbs/yr TP	Project Credits lbs/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achieved by 2022 in lbs/yr TP	Second Five Year 50% Required Developed Land Use Reduction lbs/yr TP	Remaining Required Developed Land Use Reduction to be Achieved by 2027 in lbs/yr TP	Total OSTDS Reduction to be Achieved by 2027 lbs/yr TP	Final Reduction Needed lbs/yr TP
Eustis	119.0	60.0	14.0	2	44.0	59.0	103.0	3.8	107.0
FDOT	24.0	12.0	0.0	475	-463.0	12.0	-451.0		0.0
Lake County	184.0	92.0	20.0	27	45.0	92.0	137.0	95.0	232.0
Marion County	8.0	4.0	1.0	0	3.0	4.0	7.0	0	7.0
Umatilla	24.0	12.0	3.0	6.0	3.0	12.0	15.0	0.0	15.0
Total lbs/yr TP	359.0	180.0	38.0	510.0	-368.0	179.0	-189.0	98.8	



Lake Denham Allocation

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Reductions and Credits by Jurisdiction - Lake Denham	Total Required Developed Land Use Reduction kg/yr TP	First Five Year 50% Required Developed Land Use Reduction kg/yr TP	Education Credit kg/yr TP	Project Credits kg/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achived by 2022 in kg/yr TP	Second Five Year 50% Required Developed Land Use Reduction kg/yr TP	Final Reduction Needed by 2027 in kg/yr TP
FDOT	6.0	3.0	0.0		3.0	3.0	6.0
Lake County	26.0	13.0	2.0		11.0	13.0	24.0
Leesburg	91.0	45.0	6.0	85*	-46.0	46.0	0.0
Wildwood	3.0	1.0	0.0		1.0	2.0	3.0
Muck Farm - LCWA	421.0	210		415.0	-205.0	211.0	6.0

* Credit given to Leesburg for partial funding of Lake Denham Muck Farm purchase



Lake Marshall Allocation

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Reductions and Credits by Jurisdiction - Marshall Lake	Total Required Developed Land Use Reduction kg/yr TP	First Five Year 50% Required Developed Land Use Reduction kg/yr TP	Education Credit kg/yr TP	Project Credits kg/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achieved by 2022 in kg/yr TP	Second Five Year 50% Required Developed Land Use Reduction kg/yr TP	Final Reduction Needed by 2027 in kg/yr TP
Apopka	135.0	67.0	7.0		60.0	68.0	128.0
Orange County	23.0	12.0	1.0		10.0	11.0	21.0
FDOT	7.0	4.0	0.0		4.0	4.0	8.0
Central Florida Expressway Authority	15.0	8.0		2	6.0	7.0	13.0



Lake Roberts Allocation

DRAFT No Change

Reductions and Credits by Jurisdiction - Lake Roberts	Total Required Developed Land Use Reduction kg/yr TP	First Five Year 50% Required Developed Land Use Reduction kg/yr TP	Education Credit kg/yr TP	Project Credits kg/yr TP	First Five Year Remaining Developed Land Use Reduction to be Achieved by 2022 in kg/yr TP	Second Five Year 50% Required Developed Land Use Reduction kg/yr TP	Final Reduction Needed by 2027 in kg/yr TP
Orange County	24.0	12.0	1.0		11.0	12.0	23.0
Winter Garden	14.0	7.0	1.0		6.0	7.0	13.0



Questions

A photograph of an empty lecture hall with rows of blue seats. The text "• Any comments or questions???" is overlaid in yellow on the seats.

• Any comments or questions???

