



Lake Jesup Basin Assessment Updates

April 28, 2021

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Environmental Administrator
Watershed Assessment Section



Presentation Overview

- **Most recent Group 2 basin assessment**
- **Data Providers to IWR Assessment**
- **Additions to Verified List**
 - **Cycle 4 adoption**
 - **Previous cycle listings - status**
- **QA Audit – Impacts to Bacteria Impairments**
- **WIN Data Uploads**
- **Next Steps for Biennial Assessment**



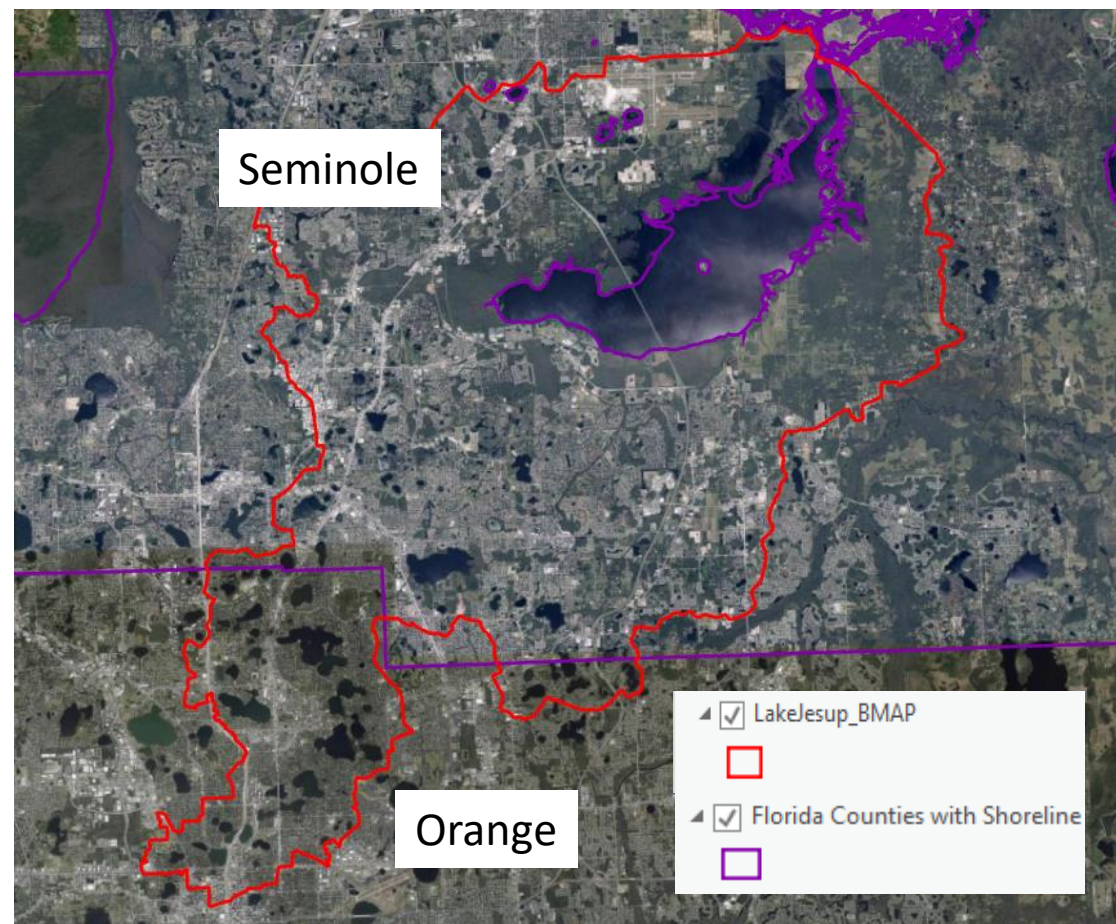
Lake Jesup Basin Overview

Basin crosses two counties:

- **Seminole**
- **Orange**

DEP adopted revisions to the Group 2 Basins Verified and Delist List on April 30, 2020

<https://floridadep.gov/dear/watershed-assessment-section/content/final-verified-and-delist-lists-impaired-waters-group-2>





Data Sources for the IWR Assessment Period

Primary Data Providers:

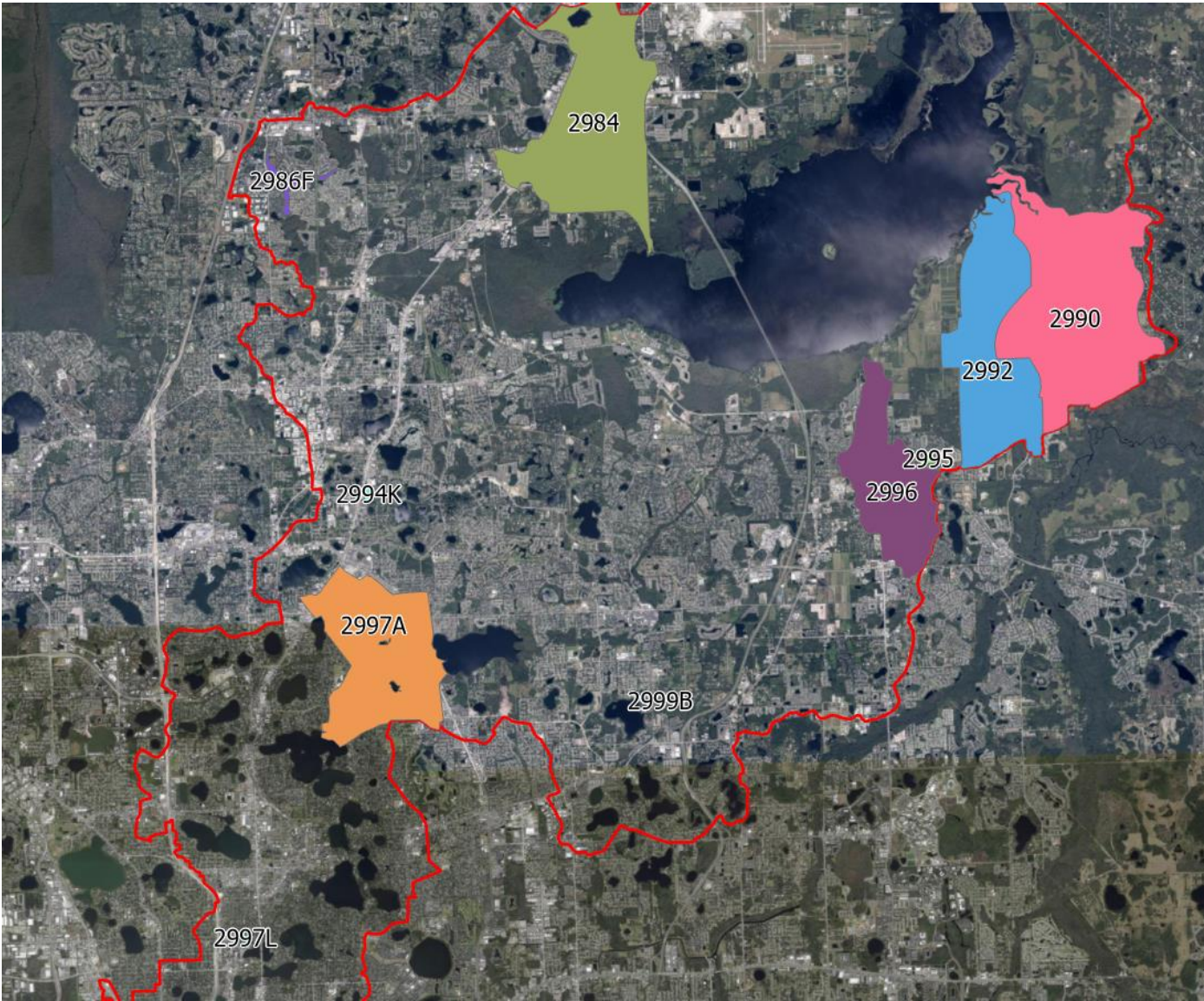
- **DEP – Bio & WQ**
- **LakeWatch – WQ (Planning Period Only)**
- **Seminole County – Bio & WQ**
- **St. Johns River WMD - WQ**
- **USGS – WQ**
- **Volusia County - WQ**



2020 Additions to Verified

Cycle	Group	WBID	Water Segment Name	Waterbody Type	Waterbody Class	Parameters Assessed Using the Impaired Waters Rule (IWR)
4	2	2984	Six Mile Creek	Stream	3F	Escherichia coli
4	2	2986F	Greenwood Lake	Lake	3F	Chla
4	2	2990	Salt Creek	Stream	3F	Escherichia coli
4	2	2992	Black Hammock	Stream	3F	Escherichia coli
4	2	2994K	Lake Concord	Lake	3F	Chla, TP
4	2	2995	Lake Charm	Lake	3F	Chla, TN, TP
4	2	2996	Sweetwater Creek	Stream	3F	Escherichia coli
4	2	2997A	Howell Creek above Lake Howell	Stream	3F	Nutrients (Macrophytes)
4	2	2997L	Lake Winyah	Lake	3F	Chla, TP
4	2	2999B	Noname Lake	Lake	3F	Chla, TN, TP

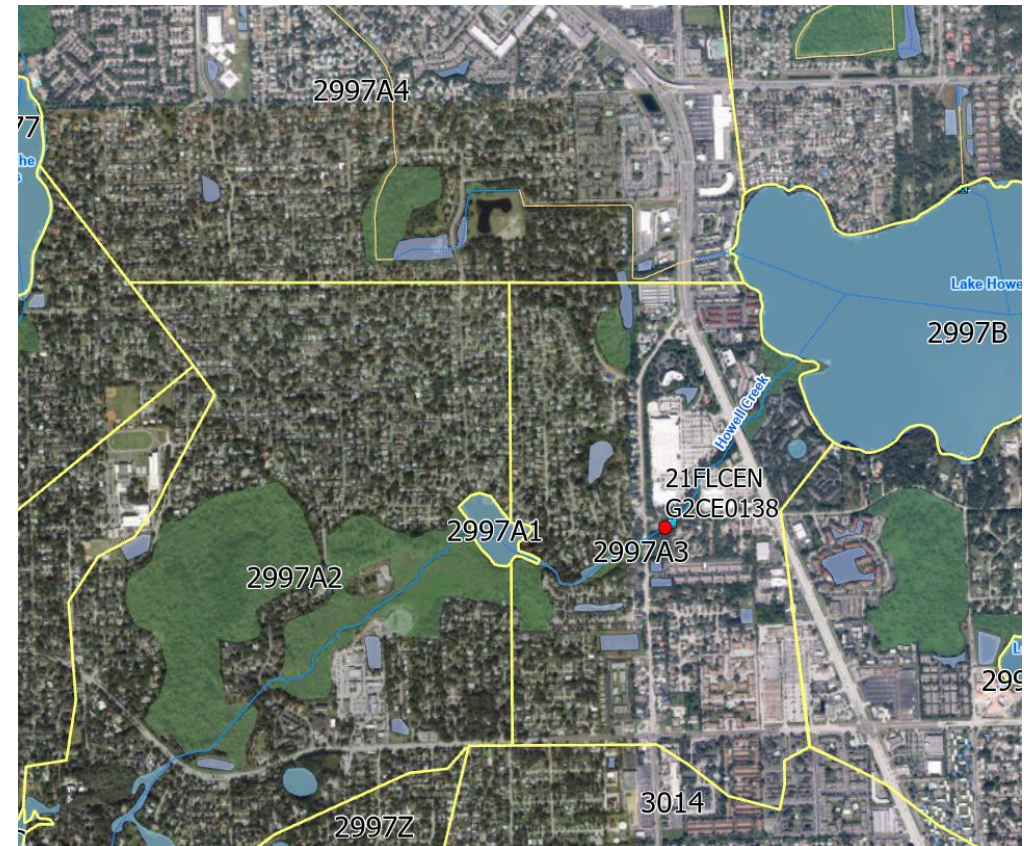
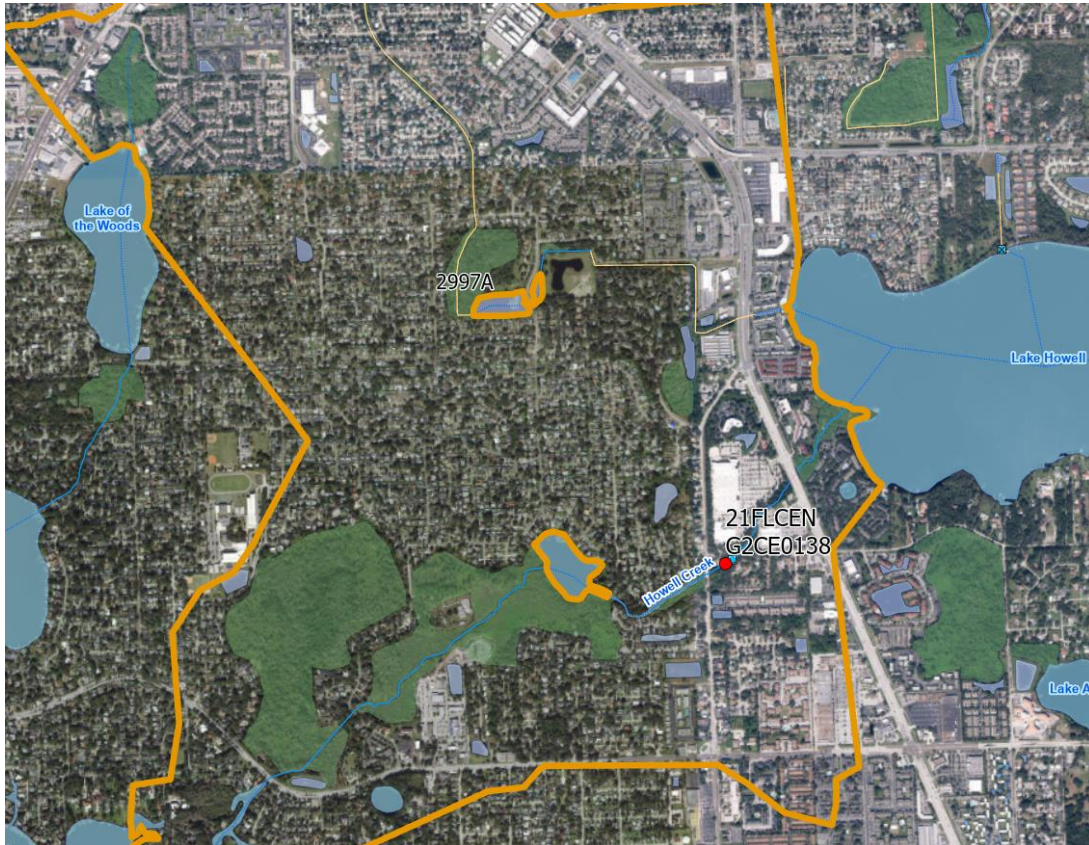
WBID 2984 will be removed from the Verified List due to a QA audit. Others remain impaired with sufficient bacteria data.





Revision to WBID on Verified List

- Revision to WBID 2997A – Howell Creek above Lake Howell
- Created stream segments upstream and downstream of Lake Waumpi
- Impairment will be updated to be WBID 2997A3 for the 2021 Draft Statewide Biennial Assessment





Alternative Restoration Plans in Review

Nutrient Reduction Plan or Category 4e plan for nutrients

- City of Casselberry and their consultant Geosyntec submitted a 4e plan for Lake Concord**
- Currently in review by DEAR staff (BMAP, TMDL, and WAS for approval**
- Approval of a 4e plan delays TMDL development to allow for project implementation and additional data collection and evaluation**



Previous Cycle Additions to Verified List

Cycle 3 Impairments – Oct. 2016

- All fecal coliform WBIDs will be reassessed for new bacteria parameter; freshwater = *E. coli*
- WBID 2999 – Bear Creek monitored by DEP Central ROC in 2017, 2018, 2019. There are currently 4 exceedances out 13 samples total; add to 2022 SMP
- WBID 3009G – looking into sampling stations used in previous assessment

Cycle	Group	WBID	Water Segment Name	Waterbody Type	Waterbody Class	Parameters Assessed Using the Impaired Waters Rule (IWR)
3	2	2986F	Greenwood Lake	Lake	3F	Nutrients (Total Phosphorus)
3	2	2997V	Lake Gem (Orange County)	Lake	3F	Biology
3	2	2999	Bear Creek	Stream	3F	Fecal Coliform
3	2	3009G	Bear Gulley Lake Drain	Stream	3F	Fecal Coliform



Previous Cycle Additions to Verified List

Cycle 2 Impairments – May 2009

- All fecal coliform WBIDs will be reassessed for new bacteria parameter; freshwater = *E. coli*
- *Only* WBID 2997Q has sufficient data and is not impaired for *E. coli*; others are insufficient data

Cycle	Group	WBID	Water Segment Name	Waterbody Type	Waterbody Class ¹	Parameters Assessed Using the Impaired Waters Rule (IWR)
2	2	2982	Phelps Creek	Stream	3F	Fecal Coliform
2	2	2985	Chub Creek	Stream	3F	Fecal Coliform
2	2	2997	Howell Creek Below Lake Howell	Stream	3F	Fecal Coliform
2	2	2997Q	Lake Dot	Lake	3F	Fecal Coliform

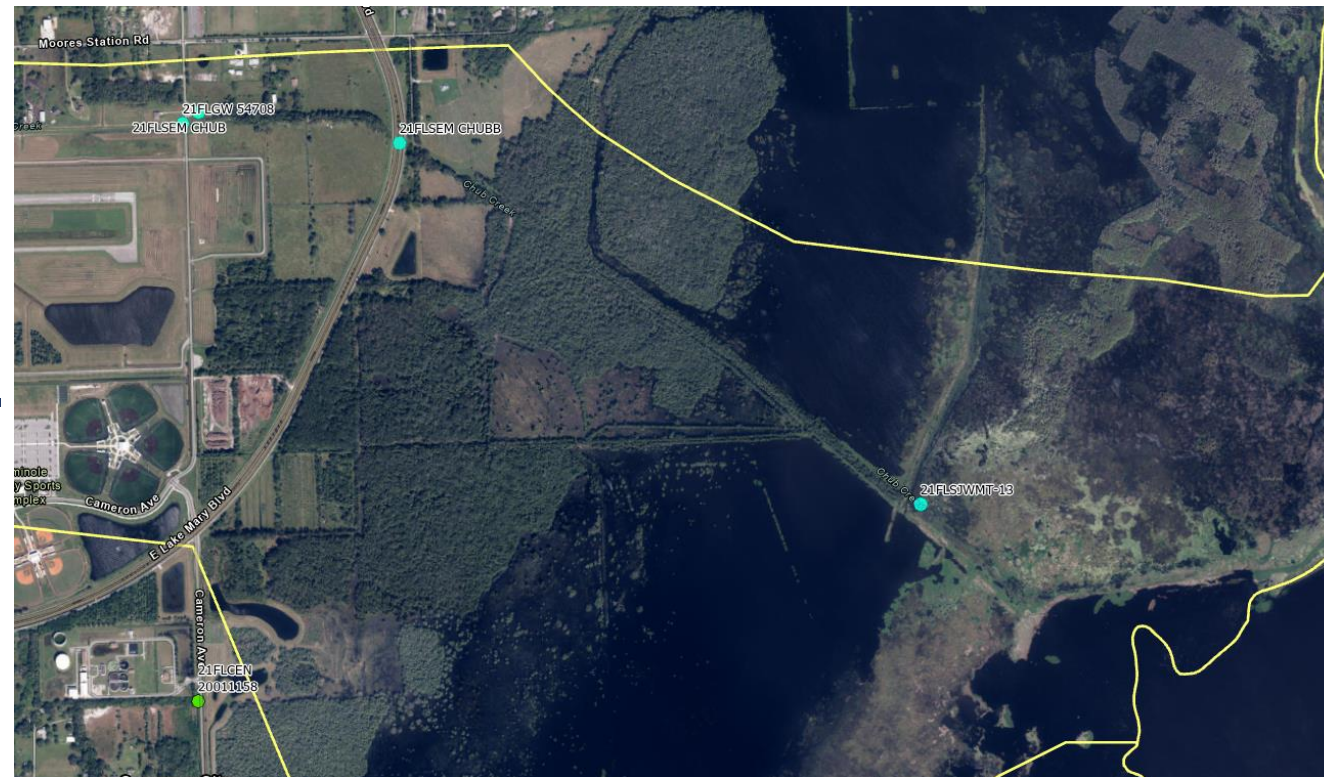


Previous Cycle Additions to Verified List

Cycle 1 Impairments – May 2004

- DO mg/L impairment that appears to no longer be sampled.
- Nutrients were identified as the causative pollutant – specifically TP annual geometric means are high

Cycle	Group	OGC Case Number	WBID	Water Segment Name	Waterbody Type	Waterbody Class	Parameters Assessed Using the Impaired Waters Rule (IWR)
1	2	03-2589	2985	Chub Creek	Stream	3F	Dissolved Oxygen





Quality Assurance Lab Audit Performed by DEP

Department finalized an audit in May 2019 that impacts the data usability for IWR bacteria assessments

- Includes *E. coli* data analyzed at the AEL Laboratory – Gainesville
- IWR data excluded from Verified Period data usability:
 - From 3/31/2009 – 2/12/2019
- Lab audit results available here:
 - <https://fldeploc.dep.state.fl.us/reports/audits.asp>

Current Assessment Cycle Information			
Cycle:	4	Verified Period start:	1/1/2013
		Verified Period end:	6/30/2020

Bureau of Laboratories Reports Search

List of Audits meeting your query constraints:

15161	AUDIT LABORATORY			May 2019	AEL-Gainesville Microbiology Laboratory Records Audit Report
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WIN Data Uploads

- **DEP is requesting data to be uploaded by June 15th**
- **WIN Coordinator: Tommy Adams; email address is tommy.adams@floridadep.gov**
- **Next IWR data extraction is planned for early July to produce IWR Run 62**
- **Also requesting any external [bioassessment data](#) to be submitted by June 15th to Kevin O'Donnell; email address is kevin.odonnell@floridadep.gov**



Next Steps

- **WAS is developing a statewide basin assessment list**
 - **Stay tuned for draft lists for public review summer 2021**
- **Workshop Planned for the Triennial Review of Water Quality Standards, scheduled for May 5th**
- **Strategic Monitoring Plans for 2021 calendar year are posted**
- **IWR Run 60 Access Database, WBID & Station GIS layers available on Basin 411 and DEP's Geospatial Data Portal**



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DEP Websites:

WAS: <https://floridadep.gov/dear/watershed-assessment-section>
Basins 411: <https://floridadep.gov/dear/watershed-assessment-section/content/basin-411-0#B411downloads>

Questions??

