

**DRAFT**

**MINUTES OF THE MEETING  
of the  
HARRIS CHAIN OF LAKES RESTORATION COUNCIL**

The regular meeting of the Harris Chain of Lakes Restoration Council (Council) was held at 9:03 a.m. on May 3, 2019, at the Lake County Board of County Commissioner Chambers, 315 West Main Street, Tavares, Florida.

**1. CALL TO ORDER**

Chairman Grow called the meeting to order at 9:03 a.m.

**2. INVOCATION AND PLEDGE OF ALLEGIANCE**

Chairman Grow called for a moment of silence in remembrance of Dr. Karl Havens. The Pledge of Allegiance followed.

**3. COUNCIL ROLL CALL**

Chairman Grow called the roll.

**Council Members present**

Sid Grow, Chairman  
Stephanie Bishop  
Joe Dunn  
John Stump

**Council Members absent**

Keith Truenow, Vice-Chairman  
Robert Johnson, Secretary  
Wade Boyette  
Skip Goerner  
Don Nicholson

**Technical Advisory Group (TAG) Members present**

Mike Perry, Lake County Water Authority (LCWA)  
Scott Bisping, Florida Fish and Wildlife Conservation Commission (FWC)  
Robert Zammataro, St. Johns River Water Management District (SJRWMD)  
Kevin Coyne, Florida Department of Environmental Protection (FDEP)

**TAG Members absent**

Mark Hoyer, UF  
Vacant, Florida Department of Transportation (FDOT)  
Vacant, Army Corps of Engineers (ACOE)

4. **APPROVAL OF MINUTES**

Approval of the April Council minutes was tabled to the next meeting as there was no quorum.

5. **FOR INFORMATION**

TAG to provide updates on Phosphorus Removal: identifying package septic systems (apartments, group of trailers) and municipal septic systems around the Harris Chain. Technical Advisory Group.

Mike Perry, LCWA, updated Council on phosphorus removal and wastewater systems. Mr. Perry provided spreadsheets downloaded from the DEP website identifying permitted RV/mobile home wastewater facilities, domestic, and industrial waste facilities. Mr. Perry noted there are only a few county owned facilities, mostly schools.

Mr. Perry discussed onsite sewage treatment and disposal systems (OSTDS) noting they are regulated by the Florida Department of Health (DOH) in coordination with DEP. Mr. Perry discussed a series of figures and a pie chart summarizing Lake County wastewater, reporting 24,076 (18.1%) known OSTDS and 43,563 (32.8 %) likely OSTDS parcels. Mr. Perry reported these data are available on the DOH website.

Mr. Perry reviewed the DEP reuse inventory database, providing paper copies of the 2016 reuse inventory as of May 2017 to Council. Mr. Perry noted Florida ranks #1 with reported reuse. Most significant was a summary table of reuse, showing Lake County reusing 100% of wastewater, through a combination of residential, golf course, or municipal irrigation. In Orange County, Mr. Perry noted only Winter Garden is not at 100% reuse. Mr. Perry suggested since the County is already 100% reuse, the Sustainable Water Investment Group (SWIG) technology is not applicable. Chairman Grow noted that at the November 13 Governing Board meeting the SWIG flow was directed into secondary treatment for discharge, whereas Lake County reuses water.

Mr. Perry discussed a series of loading estimates developed by Dr. Rolland Fulton, SJRWMD's appointed TAG member, for lake systems, for all sources, including point sources/septic. Mr. Perry showed graphs of the estimated annual external total phosphorus loads and concentrations of TP and chlorophyll-*a* for Harris Chain lakes. Mr. Perry also provided a summary table of 2017 TP loading estimates to Upper Ocklawaha River Basin lakes. The highest estimated contributions from septic tanks 7.3% and 7.2% for Lakes Harris and Eustis respectively. The bottom line is that ostds are not contributing much to TP loading in the Harris Chain of Lakes.

Chairman Grow inquired as to why Winter Garden was not 100% reuse. Mr. Perry suggested they were probably moving more toward 100% reuse, likely as a regulatory requirement.

**Council Member Dunn offered to meet with Winter Garden officials and report back to Council at the next Council meeting.**

Chairman Grow observed a downward trend in the graphs presented, but still observed algae blooms in the lakes. Mr. Perry noted there will always be algae in the lakes, with more in the summer and less in the winter.

Mr. Perry suggested having **administrative support contact Roxanne Groover, Executive Director, Florida Onsite Wastewater Association, and invite her to address the Council**

**regarding reducing phosphorus in the Harris Chain of Lakes area.** Chairman Grow suggested having Ms. Groover discuss the situation with individual septic tanks, what is known about their operation, and are there recommendations for reducing phosphorus. Kevin Coyne, DEP, offered to coordinate with Ms. Groover and develop a possible presentation in June.

Mr. Coyne noted the whole upper basin includes Lake Apopka and other lakes in the Harris Chain, with just under 60,000 ostds in total. Mr. Coyne reported DOH is conducting a county-by-county inventory to update those numbers. In addition, for information about ostds management, Mr. Coyne noted DOH would be the point of contact. Mr. Coyne also reported that when DEP evaluates the Total Maximum Daily Load (TMDL) compliance, adherence to the TMDL requirement occurs over a period of time, not just at a single point in time. DEP also evaluates biological responses in relation to TMDL compliance.

**6. FOR INFORMATION**

Update on SJRWMD contract with Phosphorus Free Solutions to remove phosphorus from Lake Apopka, presented by SJRWMD's Robert Zammataro, P.E., Bureau Chief for the Bureau of District Projects and Construction.

Robert Zammataro P.E., SJRWMD Bureau Chief for the Bureau of District Projects and Construction, provided an update on the Lake Apopka Innovative Total Phosphorus (TP) Removal Project. Mr. Zammataro reported the SJRWMD awarded a pay for performance contract to Phosphorus Free Water Solutions, LLC to remove approximately 6-12,000 pounds of TP from Lake Apopka. Milestones accomplished to date include completion of a procurement contract and lease agreement signed, site selection, preliminary design, site investigations, site survey, in-lake submerged aquatic vegetation surveys, pre-application meetings, and DEP application submittals.

Mr. Zammataro reported the next steps in the process (which are underway) include review of submitted applications to Orange County and the U.S. Army Corps of Engineers, with construction slated to begin August 2019. Plans call for operations to begin fall of 2019.

Mr. Zammataro gave a brief overview of the \$2 million project, designed to treat 7,000 gallons per minutes, or 10 million gallons per day, at a site off Hooper Road in the northeast quadrant of the North Shore. Water from an intake pipe receives primary filtration to remove particulates. The effluent is then pH adjusted and passed through a proprietary filter system to remove dissolved P. Water is then discharged back to the lake with total suspended solids, particulate P and dissolved P removed.

Council Member Stump inquired about the filtration media used in the treatment process. Mr. Zammataro noted the primary media is a pre-filtration product that is moved offsite. Mr. Stump also inquired about the half-life of the tertiary media. Mr. Zammataro did not know the half-life as it is a proprietary product. Mr. Zammataro did note that the company is marketing the media as a lightweight aggregate, for parking garages, or lightweight roofing material. The project is intended for research and development, with the company bringing in its own venture capital. The contract is strictly pay for performance based on the mass of TP removed. The company has two years to get up and running with a capped dollar amount available from SJRWMD. Mr. Zammataro noted a pilot study was very successful, so the company is now trying to see if scale-

up will work with same media. Chairman Grow asked whether the operation will run out of material. Mr. Zammataro noted due to natural circulation and flow within the lake there should always be available P.

Mr. Zammataro also updated Council on the SJRWMD North Shore Interconnect Project. The purpose of the project is to construct a pumping station to move water back and forth across a north-south canal separating a Duda property from other cells in the north shore. The project will give staff the ability to move water within the north shore to prevent discharges to the lake. The project contractor is Four Waters Engineering. The contract allocates \$185,000 for design of the \$1.2 million-dollar project. The project is currently in the design phase. **Council Member Stump requested an overview map of the North Shore Interconnect Project.**

7. **AGENCY UPDATES**

a. LCWA

Mike Perry, LCWA, no comments.

b. SJRWMD

Jim Troiano, SJRWMD, updated Council on SJRWMD activities, reporting Harris Council related expenses for the previous month, including Florida Administrative Register notification, and administrative support payments. Mr. Troiano discussed the upcoming SJRWMD Governing Board meeting, noting it was to be held May 14, 2019, offsite at the Canaveral Port Authority. Mr. Troiano reported the agenda and a summary of items that may be of interest to the Council would be emailed as soon as it is available. One item of interest was tentative approval of a work order for the Lake Apopka North Shore. Mr. Troiano noted the District had also provided four emails to Council on SJRWMD news releases. The complete SJRWMD update is included as backup material to the minutes.

Mr. Troiano reported as requested at the April Council meeting, that Dr. Rolly Fulton's name was removed from the agenda and website and "various" was inserted as the SJRWMD TAG. Chairman Grow recited from the draft April minutes the statement that "Ms. Kelley noted SJRWMD has named a particular individual per state statute." Mr. Troiano responded that individual was Dr. Fulton.

Mr. Troiano provided a project update on dredging in Lake Apopka, noting that navigational access was limited between April 11 and April 23 as the connection between the sump and the mouth of the Apopka-Beauclair Canal was created. As noted previously, Mr. Troiano reported levee improvements along the North Shore were continuing, with the project on track at approximately 30% complete.

Council Member Stump remarked he would be in communication with Annuvia regarding dredge tailing chemical analyses.

c. FWC

Scott Bisping, FWC, noted last month Ryan Hamm had mentioned the mechanical harvesting project on Lake Yale. Mr. Bisping reported 3 of 14 tussocks had been harvested so far.

Mr. Bisping also noted a fishing rule change for Area 3 of Emerald Marsh. As of April 10<sup>th</sup>, bass can now be harvested from the area under the same regulations as the rest of the lake.

d. DEP

Kevin Coyne, DEP, reported that on Monday the newly appointed DEP Chief Science Officer Tom Frazer, the former Director of the University of Florida's School of Natural Resources and Environment, starts his new position. Mr. Coyne also noted DEP will be establishing a blue-green algae task force that Council should probably monitor as the process could be useful to Council going forward.

8. **PUBLIC COMMENTS**

Linda Moss, private citizen affiliated with the Lake Gem Clean Water Project, presented information about the Apopka-Beauclair Canal. Ms. Moss announced through her website that a commitment for dredging was received from Lake County Commissioner Sean Parks. Ms. Moss expressed her gratitude to John Miklos for assisting in the dredging effort.

Ms. Moss also thanked the Harris Council for their support. Chairman Grow inquired as to how the dredging was going to be funded. Ms. Moss indicated Mr. Parks was going to seek legislature funds for seed money, as well as from SJRWMD, LCWA, and a developer on Tammi Drive. Ms. Moss suggested that dredging Tammi Canal means the Apopka-Beauclair canal needs dredging as well.

Ms. Moss inquired as to when the nutrient reduction facility (NuRF) return to operation. Mr. Perry reported the center of the centrifuge was sent out for repair, with a repair completion date of June 2<sup>nd</sup>. Mr. Perry expected the NuRF to be operational by the end of June.

9. **COUNCIL MEMBER COMMENTS**

a. **Chairman Grow**

No comments

b. **Council Member Bishop**

No comments

c. **Council Member Dunn**

No comments

d. **Council Member Stump**

No comments

10. **REVIEW OF ACTION ITEMS\* REQUESTED DURING MEETING**

\*New Action Items are highlighted in bold in the text

Mr. Troiano reported that all action items from the previous month were completed. There were no pending or open requests. Mr. Troiano noted he had provided the Council a list of all action items requested beginning from January 2019.

Mr. Troiano noted Council Member Stump had requested the project list, and that list had now been provided to Council.

**Council Member Dunn offered to meet with Winter Garden officials and report back to Council.**

**Chairman Grow requested administrative support to contact Roxanne Groover, Executive Director, Florida Onsite Wastewater Association, and invite her to address the Council regarding reducing phosphorus in the Harris Chain of Lakes area.**

**Council Member Stump requested an overview map of the North Shore Interconnect Project.**

11. **DISCUSSION OF NEXT SCHEDULED MEETING.**

**Chairman Grow requested administrative support to contact Roxanne Groover, Executive Director, Florida Onsite Wastewater Association, and invite her to address the Council regarding reducing phosphorus in the Harris Chain of Lakes area.**

Kevin Coyne, DEP, reported he would coordinate with the Florida Department of Health and Lake County Health Department to review septic status and report back in June.

Council Member Dunn reported he would contact officials with Winter Garden to review the city's reuse plans, and possible have a representative from the City address the Council.

Chairman Grow suggested Council take a bus tour of the North Shore for the July 12<sup>th</sup> meeting. Mr. Troiano agreed to work on the logistics for the request and provide an update at the June meeting.

12. **ADJOURNMENT**

Meeting adjourned at 10:33 a.m.