

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

June 7, 2013

The regular meeting of the Harris Chain of Lakes Restoration Council (Council) was held at 9:00am on June 7, 2013 at the Lake County Board of County Commissioner Chambers, 315 West Main Street, Tavares, Florida

Members Present

Skip Goerner, Vice Chairman
Sid Grow
Don Nicholson
Lloyd Woosley

Members Absent

Hugh (Dave) Davis II, Chairman
Richard (Rick) Powers P.G., Secretary
Robert (Bob) Johnson
Edward Schlein, M.D.
Keith Truenow

1. CALL TO ORDER

Vice Chairman Goerner called the meeting to order at 9:02am.

2. INVOCATION AND PLEDGE OF ALLEGIANCE

Vice Chairman Goerner called for a moment of silence. The Pledge of Allegiance followed.

3. COUNCIL ROLL CALL; REMINDER FOR OTHERS TO SIGN IN

Vice Chairman Goerner called the roll. Chairman Davis, Secretary Powers, Councilman Johnson, Councilman Schlein and Councilman Truenow were absent.

Quorum was not obtained.

4. APPROVAL OF MINUTES

- Councilman Woosley noted that he had corrections to the February 1, 2013 minutes. He stated that he would contact Mr. McLane with the corrections.
- Mr. McLane stated that he had corrections from Ms. Linda Bystrak, Oklawaha Valley Audubon Society.
- Without quorum, no action was taken.

5. PUBLIC COMMENTS

- There were no public comments.

6. PRESENTATIONS / ACTIONS

- Brandon Thompson, Florida Fish and Wildlife Conservation Commission (FWC) gave a presentation on Lake Griffin Canal and Lake Fishery Analysis. He provided an overview of Lake Griffin that included the lake, canals and marshes. He stated that the canals are only one percent of the lake, but represent substantial shoreline and spawning habitat. Mr. Thompson stated that only the lake is monitored for fish sampling including electrofishing, creel surveys, and tagging system. In review of

electrofishing, Mr. Thompson stated that it is difficult to estimate the entire bass population on the lake, so the analysis relies on catch rates. He reviewed the catch rate of bass in Griffin and shared that the catch rates have been increasing annually since 2009. Mr. Thompson stated that the expansion of vegetation mainly submerged vegetation was likely the cause of higher catch rates. He continued and stated that FWC did not sample canals during 2012. Mr. Thompson stated that the lake is divided into transects and the catch per transect during 900 seconds of sampling. He stated that although randomly selecting the sites does cause variability, it provides statistical valid data that can be compared over time. Mr. Thompson reviewed the Lake Griffin angler survey for 2010-2011 that combined lake and canals. He stated that 300 reward tags were randomly distributed between lake and canals in Lake Griffin. Mr. Thompson stated that all fish were legal size and reviewed the percentages of fish tagged in lake and canals. He added that FWC is querying the anglers via surveys on harvesting to see what they want. Mr. Thompson provided an overview of his conclusions which included creel, electrofishing, and tagging. He stated that the data showed that extensive canals in Lake Griffin significantly contribute to the bass fishery. He also concluded that improvements in habitat continues to drive the entire Lake Griffin bass fishery (lake and canals).

Vice Chairman Goerner asked Mr. Thompson what the Council could recommend to the legislature to help sampling become more accurate.

Mr. Thompson stated that the lake itself would have standardized data. He added that variability in data could be reduced. He continued that it would be great to include marshes in the creel survey.

Vice Chairman Goerner stated that the Council believes that expanding the reconnection on the lakes everywhere is necessary.

Councilman Woosley recommended that the Council's annual report request restoration of funding to broadening the monitoring to all of the lakes in the Harris Chain for trend purposes.

- Mr. Nicholson arrived.
- Dan Canfield, University of Florida (UF) stated that he has submitted a letter of resignation regarding his representation of UF/Institute for Food and Agriculture (IFAS) on the Harris Chain of Lakes Restoration Council.

Mr. Canfield gave a presentation on the project he is overseeing at Magnolia Park on the shore of Lake Apopka. He shared his insights on the project. Mr. Canfield wanted to clear up that this project is not about Lake Apopka or the Harris Chain of Lakes. Mr. Canfield added that he recommended to the legislature to dredge near Magnolia Park in Orange County. Clean-to-Green, Inc. was the environmental solutions company that was hired for the project. The project was to be for an estimated eight-week period. The project ended up going from Spring 2010 to December 2012 before it could get started. It was a public-private partnership that included UF/IFAS, Clean-to-Green Inc., and Comprehensive Environmental Solutions. The goal was an area of 100 feet by 100 feet. It expanded overtime, but is still a small area. In 2002, it was a mud flat & had very little water. The Clean-to-Green treatment was to include the following: in-lake dredging, remove large solids, treat to improve water quality, remove fine solids, return quality water to Lake Apopka, and beneficial use materials. A dredge was used at Magnolia Park that ran on cables so outboard motor turbidity was not caused. The treatment system was set up to remove the dredge material and have it trucked to another location. The problem was that the dredge material was too wet to be moved. If the area was larger and had two of the systems, it would have worked. Next was that the water needed to be treated. The theory was to pump the clean water back into the lake and to remove the dredge material in trucks. From January to

May 2013 total phosphorus dredge in-flow was high, but the clear water that came out had residual chlorine. A pond was needed to remove the residuals, but a treatment system was needed. Time was a factor of letting the residuals dry out for removal. Geotubes were brought in to handle the residuals, but several devices were needed and again the footprint is small and needed a larger area for these tubes. Mr. Canfield felt that digging a pond letting the water seep back into the lake and then remove the iron would work, but iron created a wall that would not allow the water to seep out and water needed to be pumped. Pumping of the water would have been very expensive. The project was ended on May 24 for various reasons. Mr. Canfield's added that it was his opinion is that alum will be reviewed and decreased use will be regulated by EPA and iron will be the new concept.

Responding to questions from the Council, Mike Perry, Lake County Water Authority (LCWA) stated that the cost to dredge Beauclair canal was \$9.2 million to move 1.5 million cubic yards at \$6 a cubic yard and Griffin canal cost \$7.2 million to move 450,000 cubic yards at \$16 per cubic yard.

Mr. Canfield stated that the cost of the project was \$1.25 million total, that did not all go to the dredger. He stated that included cost of miscellaneous expenses including UF. Mr. Canfield told the Council that more money has been appropriated from the legislature this year to come up with other options to work on the lake restoration.

- Rolland Fulton, Ph. D., Environmental Scientist VI, Bureau of Environmental Sciences, St. Johns River Water Management District (SJRWMD) gave a presentation on water quality trends in the Ocklawaha Chain of Lakes. He stated that he would focus primarily on trophic state measures; total phosphorus (TP) - nutrient that is required by all plants; chlorophyll-a – a measure of algal biomass - algae is one of the bases for the food chains in lakes, but algal concentrations too high can be detrimental; biovolume - which measure the amount of different types of algae in the water and secchi depth - which is a measure of water clarity. He shared lakes Apopka, Beauclair, Carlton, Dora, Harris, Eustis, Griffin, Yale and Trout Lake total phosphorus loads and concentration of TP and chlorophyll-a. Using charts, he showed Lake Apopka's reduced phosphorus loading, decreased chlorophyll (algae), phytoplankton taxa biovolume, and increased transparency. Dr. Fulton explained that water quality deteriorates during droughts due to concentration in smaller lake volume, nutrients released from wetland soils that dry out and oxidize, increased residence time allowing nutrients and algae accumulate in the lake rather than being washed downstream, and lower lake levels result in lower sedimentation of nutrients. He continued and shared Lake Beauclair, Apopka-Beauclair Canal, Lake Harris, and Lake Griffin's estimated annual external total phosphorus loads, total phosphorus concentrations, estimated annual external total phosphorus loads, concentration of TP and chlorophyll-a, phytoplankton bio volume, water quality data, and Secchi depths. Dr. Fulton reviewed charts of Lake Griffin average annual total phosphorus concentration related to external TP load from 1994-2001, and to gizzard shad harvesting from 2000 – 2011.

Vice Chairman Goerner requested that the Council be updated regularly of the current nutrient levels within the lakes, as well as algal counts.

Responding to questions from the Council, Dr. Fulton stated that the Department of Environmental Protection (DEP) developed a basin management working group to develop a Basin Management Action Plan (BMAP) to implement the total maximum daily load (TMDL). He added that DEP is looking to address Trout Lake, Lake Yale, and Lake Harris that are not meeting their TMDLs. He continued and stated that Lake Apopka is expected to meet the TMDL's under the planned restoration actions. In response to a request from the Council, Dr. Fulton agreed to updated his presentation file to include additional charts of estimated annual external total phosphorus loads, and concentration of TP

and chlorophyll-a, phytoplankton biovolume, and Secchi depths for Lake Dora, Lake Eustis and Lake Yale.

- Kraig McLane, SJRWMD informed the Council that the District decided to terminate their contract with Wildwood Consulting, Inc. that has developed the annual report for the Council. Mr. McLane introduced Mr. Steve Fitzgibbons and his role in preparing the Council's annual report. Mr. Fitzgibbons provided the Council a handout of the 2013 annual report preparation schedule. He told the Council that he was glad to be able to work with them in the future. The Council had no concerns with the approach or schedule.

7. COUNCIL & AGENCY QUESTIONS & ANSWERS

- Dennis Renfro, FWC told the Council that four groups/organizations that volunteered to assist the FWC to install woody brush fish attractors on Lake Apopka. They included Friends of Lake Apopka (FOLA), Hawthorne Fishing Club, Mosquito Creek Outdoors, and Harris Chain Bassmasters. Mr. Renfro stated that each group constructed a quarter acre fish attractor consisting of 100 woody brush units along the south shoreline providing quality habitat enhancements. He stated that FWC has identified 30 additional sites for a contractor to install fish attractors on Lake Apopka within the next two months. Mr. Renfro added that Earth Balance (contractor) has completed construction of six fish attractors to date. He continued and stated that all fish attractors will be marked with state regulatory buoys and after completion of the first phase FWC will produce a map of fish attractor locations for distribution to the anglers.
- Ron Hart, LCWA updated the Council on the lake levels prior to the tropical storm. Rain gauges in Lake County showed an average of 2 to 2.5 inches. Lake levels were reported: Lake Apopka prior to a recent storm showed 2.5 inches below the regulation schedule, Harris, Dora & Eustis was 2.1 feet below regulation schedule, and Lake Griffin was 2.6 feet below regulation schedule. The Lake Beauclair dredging has been complete and the contractors are cleaning up and pulling out equipment. Mr. Perry wanted the Council to know that he has proposed the Council to receive \$5,000 in the draft budget to the LCWA Board for approval.
- Dan Canfield, UF recommended the Council to contact Vice President Payne to appoint a replacement for Mr. Canfield to the Council.
- Mr. McLane stated that he will get the changes from the member of the public and Councilman Woosley on the February minutes and have them ready for the Council to take action at the next meeting.

8. COUNCIL MEMBER COMMENTS

A. Comments

Vice President Goerner stated that the Legislature did not appropriate the funding requested by the Council.

B. Discussion of Next Scheduled Meeting:

After discussion, Vice Chairman Goerner agreed not to hold a Council meeting in July and that their next meeting would be August 2, 2013. He asked that FWC keep the Council updated on their efforts to quantify marshes in relation to fisheries and how the Council can present it better to the legislature.

Councilman Woosley requested an update on the water budget and discussion of what will represent a healthy marsh for the restoration area.

9. **ADJOURNMENT**

The meeting was adjourned at 12:37 pm.