

FINAL

**MINUTES OF THE MEETING
of the
HARRIS CHAIN OF LAKES RESTORATION COUNCIL
June 9, 2017**

The regular meeting of the Harris Chain of Lakes Restoration Council (Council) was held at 9:00 a.m. on June 9, 2017 at the Lake County Board of County Commissioner Chambers, 315 West Main Street, Tavares, Florida.

Council Members Present

Robert Johnson, Chairman
Skip Goerner, Vice-Chairman
Don Nicholson, Secretary
Keith Truenow
Stephanie Bishop
John Stump

Council Members Absent

Sid Grow
Vacant, Attorney
Vacant, Physician

TAG Members Present

Dennis Renfro (Florida Fish and Wildlife Conservation Commission, FWC)
Kevin Coyne (Florida Department of Environmental Protection, DEP)

TAG Members Absent

Rolland Fulton (St. Johns River Water Management District, SJRWMD)
Mike Perry (Lake County Water Authority, LCWA)
Mark Hoyer (University of Florida, UF)

1. **CALL TO ORDER**

Chairman Johnson called the meeting to order at 9:00 a.m.

2. **INVOCATION AND PLEDGE OF ALLEGIANCE**

Councilman Nicholson gave the invocation. The Pledge of Allegiance followed.

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

Chairman Johnson called the roll.

4. **REMINDER FOR OTHERS TO SIGN IN & FILL OUT SPEAKER CARDS**

5. **APPROVAL OF MINUTES**

Minutes from April 7, 2017 were approved.

6. **PRESENTATIONS / ACTION ITEMS**

* Action items requested by councilmembers are in bold.

A. Update on state efforts to remediate impacts from onsite wastewater systems located in impaired waters by Kevin Coyne, FDEP

Chairman Johnson introduced Kevin Coyne, FDEP. Kevin provided a quick overview of septic tanks and springs, and how inputs are addressed. Mr. Coyne provided background information on the Basin Management Action Plan (BMAP) process, noting his presentation would focus on springs. Mr. Coyne reported the BMAP program, which falls under the Florida Watershed Restoration Act, was enacted in 1999, and amended in 2006, with updates presented in 2016.

The new update in 2016 was the addition of the Florida Springs and Aquifer Protection Act with specific provisions for Outstanding Florida Springs. Mr. Coyne discussed a map showing adopted BMAPs and BMAP activities in progress. There were no current BMAP activities in the Harris Chain. Mr. Coyne also presented an updated map showing the locations of the 30 Outstanding Florida Springs

Mr. Coyne discussed updated requirements for new or revised BMAPs. All new or revised BMAPs are required to have additional project information including ranking, cost and load reduction estimates, and funding sources. They must also delineate the springsheds, delineate a priority focus area (PFA) for each spring, identify point and nonpoint source categories with estimated load allocations, include onsite sewage treatment and disposal system (OSTDS) remediation plans where needed, and achieve listed total maximum daily load (TMDL) levels in 20 years. Mr. Coyne noted a Progress Report for Phase II of BMAPs is due July 1, 2018.

The Springs and Aquifer Protection Act specifically requires a fertilizer ordinance for all local governments and development of Agricultural Best Management (BMPs), and prohibits wastewater treatment facilities of greater than 100,000 gallons per day (GPD), unless advanced wastewater treatment (AWT) is used. It also prohibits new OSTDS on less than one-acre lots, if in conflict with a OSTDS remediation plan, a ban on land application of biosolids, and no hazardous waste facilities.

Chairman Johnson inquired how BMPs were developed. Mr. Coyne noted many were developed in coordination with the University of Florida's Institute for Food and Agricultural Sciences (IFAS) and the State to develop a model ordinance.

Mr. Coyne described the Nitrogen Source Inventory and Loading Tool (NSILT) for BMAP inputs in PFAs, developed to identify and quantify the major sources contributing nitrogen to ground water springshed. The NSILT is a GIS- and spreadsheet-based tool that provides spatial estimates of the relative contribution of nitrogen from various sources, and takes into consideration the transport pathways and processes affecting the various forms of nitrogen as they move from the land surface through soil and geologic strata into the Floridan aquifer. The NSILT is used as an estimate of nitrogen loading and is updated as new sources of data become available. The NSILT is dependent on recharge rates, and identifies sources for which reductions in N loading could achieve restoration of impaired waters. The NSILT is also customizable for individual spring basins.

In delineating PFAs, Mr. Coyne noted FDEP considered groundwater travel time to the spring, hydrogeology, nutrient load, and any other factors that may lead to degradation of an Outstanding Florida Spring. Mr. Coyne discussed a specific PFA example, in which the groundwater contributing area (CA) for the spring is established, regions within the CA where greatest recharge occurs are

identified, regions within the CA where the Floridan Aquifer is most vulnerable are identified. In addition, nitrogen loading and travel time are considered, and regions within the CA where soil conditions are most favorable for leaching of nitrogen from surface sources are identified. A PFA boundary is created that corresponds with identifiable boundaries, and regions within the CA to exclude or include based on land use and potential occurrence of pollutant sources are identified.

Mr. Coyne discussed a pie chart of nitrogen loading estimates for Wakulla Springs, as an NSILT example. Mr. Coyne noted the total nitrogen input applied to the land surface is multiplied by the environmental attenuation and recharge factors, and estimates of nitrogen loading to ground water are a function of the rate of recharge, the degree of aquifer confinement, and various environmental processes that can attenuate nitrate in the subsurface. The goal is to reduce what is in the aquifer, by reducing what is going to land surface.

Silver and Rainbow Springs were also presented. Mr. Coyne noted TMDLs have been adopted for Silver Springs, the Silver Springs Group, Upper Silver River, the Rainbow Springs Group, and the Rainbow Springs Group Run. BMAPs were adopted in October 2015 (Silver) and December 2015 (Rainbow). There is a joint OSTDS advisory committee working on an OSTDS remediation plan that is required by statute no later than the end of June 2018.

In the Silver Springs area, the estimated input of nitrogen loading to Upper Floridan aquifer, by major contributor is 38% for agriculture and 38% for OSTDS. Urban contributions are estimated at 14%, for a total load at the Upper Floridan of 1.66 million lbs-Nitrogen.

A pie chart of the Silver Springs PFA shows the OSTDS portion of loading increases, urban sources become more prominent, and agriculture loading decreases to 21.3%. In the PFA, the total load at Upper Floridan = 607,686 lbs-Nitrogen.

In the Rainbow Springs area, the estimated input of nitrogen loading to Upper Floridan aquifer, by major contributor is 67% for agriculture and 19% for OSTDS, while urban contributions are estimated at only 6%, for a total load at the Upper Floridan of 1.33 million lbs-Nitrogen.

Councilman Truenow inquired how the nutrient loads are calculated. Mr. Coyne indicated the total pounds was calculated from all sources by FDEP using all available information. Mr. Coyne acknowledged much of his analyses are based on modeling.

Councilwoman Bishop noted with cattle farms, there is an assumption that there is a certain loading per cow. Mr. Coyne indicated the starting points were based on IFAS estimates, and the goal is to improve BMPs, with loading to be adjusted moving forward. Councilwoman Bishop queried whether there was any kind of summary with urban contributions. Mr. Coyne noted septic contributions vary by location.

Mr. Coyne concluded his presentation with a discussion of OSTDS remediation plans, which are intended to help achieve TMDL reduction for these sources within 20 years. The parts of the Plan include the collection of scientific information, including the effects of nutrients on springs, a public education plan including OSTDS Information, and nutrient reducing projects that are both cost-effective and financially feasible. Mr. Coyne noted efforts are currently underway to secure funding to study septic tanks in lake areas.

Councilman Goerner noted the Council is primarily interested in surface waters and springsheds in the Harris Chain of Lakes, and how septic tanks are affecting the Harris Chain of Lakes. Mr. Coyne noted SJRWMD is assessing projects to create buffers in lake areas. Councilman Goerner expressed concerns about discharges from package plants. Mr. Coyne noted discharges are now being monitored and that FDEP is studying the Wekiva area in depth.

Councilman Nicholson noted how the Butler Chain of Lakes is much different than 10 years ago. Mr. Coyne noted future growth is a concern.

COUNCIL & AGENCY QUESTIONS & ANSWERS

A. Agency Updates

Kevin Coyne, FDEP had no updates for the month. **Mr. Coyne agreed to update the Council projects spreadsheet with Council staff.** Mr. Coyne reiterated there is no direct FDEP budgeting for the Harris Chain as it is pass-through funds to specific projects. Chairman Johnson noted the difficulties in figuring out the cost of the farm buyout.

Dennis Renfro, FWC, reported a new wildlife biologist will evaluate waterfowl. Chairman Johnson inquired who performs sample analyses. **Mr. Renfro reported FWC collects waterfowl samples and would respond back to Council about who performs sample analyses.**

Chairman Johnson also inquired about the FWC budget and what has been spent on the Harris Chain 1998-2010. Mr. Renfro reported no specific funds dedicated for Apopka or Harris Chain during that period, according to Tallahassee. Since 2010 there has been a specific position in the FWC budget for the Harris Chain. Funds spent from 2010 forward were included in a report previously provided by FWC on November 23, 2016 (pages 9-10). **Chairman Johnson requested a review of FWC budget information by Council staff to verify if it had been included in the Harris projects spreadsheet. Mr. Renfro agreed to refine the budget from the report with Council staff.**

In response to a previous Council inquiry about submerged aquatic vegetation costs (SAV) costs, Mr. Renfro reported bulrush costing about \$3/plant, and spatterdock about \$3/plant. In response to a previous Council inquiry about the V-clear project, Mr. Renfro noted Mr. Coyne had taken the lead on that request.

Mr. Renfro updated Council on Emeraldalda, noting the levees are scheduled to be breached in four places by end of this month. Mr. Renfro noted additional tussocks had been removed. Also, fish attractors for Lake Dora will be purchased in July, and installed in October with volunteers.

7. PUBLIC COMMENTS

None.

8. COUNCIL MEMBER COMMENTS

Chairman Johnson queried SJRWMD staff about farm buyout numbers, for Duda ranch, and associated properties.

Councilmembers discussed cancellation of the July meeting. Chairman Johnson opted to cancel the July meeting based in Council input. **Chairman Johnson requested Council staff to re-schedule the July speaker for August.**

Councilman Goerner discussed the SJRWMD meeting at the Sunnyhill Restoration Area and inquired as to **why there was no duck hunting allowed at Sunnyhill.** In addition, Councilman Goerner, discussed hog hunting, **requesting information on the qualifications of hog hunters, and how they are placed on the SJRWMD permitted hunters list.** Councilman Goerner also inquired as to the **amount of SJRWMD lands open to hunting, and how can more lands be made available.**

Councilman Stump reviewed the Harris projects spreadsheet and requested an update on projects prior to the next meeting. Councilman Stump noted existing entries indicating signed contracts and some projects and would like to see what progress is being made.

Chairman Johnson commented on need for projects Chairman Johnson discussed Action Item List, noting a request by Councilman Grow for a description of the \$5 million in projects. **Ms. Davis agreed to provide an update on the \$5 million in projects.**

Chairman Johnson inquired about name tags for Councilmembers. Susan reported nametags would cost about \$85. She would continue to work on the item. Funds from LCWA.

Chairman Johnson reported Dr. Canfield and Mark Hoyer had distributed report on chlorophyll in Florida Lakes, and **requested Council staff to copy Council on the report.**

9. REQUESTS FOR ACTION

- *Mr. Coyne agreed to update the Council projects spreadsheet with Council staff.*
- *Mr. Renfro was requested to identify the entity performing analyses on waterfowl samples.*
- *Council staff was requested to verify if FWC budget ad project information had been included in the Harris projects spreadsheet.*
- *Mr. Renfro agreed to refine the FWC budget data from the report with Council staff.*
- *Chairman Johnson queried SJRWMD staff about farm buyout numbers, for Duda ranch, and associated properties.*
- *Chairman Johnson requested Council staff to re-schedule the July speaker for August.*
- *Councilman Goerner requested information on why there was no duck hunting allowed at Sunnyhill Restoration Area.*
- *Councilman Goerner requested information on the qualifications of SJRWMD hog hunters, and how they are placed on the permitted hunters list.*
- *Councilman Goerner inquired as to the amount of SJRWMD lands are open to hunting, and how can more lands be made available.*
- *Councilman Stump reviewed the Harris projects spreadsheet and requested an update on projects prior to the next meeting.*
- *Chairman Johnson requested Ms. Davis to provide an update on the \$5 million in projects.*
- *Chairman Johnson requested Council staff to copy Council on a scientific report by Dan Canfield and Mark Hoyer.*

10. ADJOURNMENT

The meeting adjourned at 10:36 AM.