

**FINAL**

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

**April 1, 2005**

The regular meeting of the Harris Chain of Lakes Restoration Council (Council) was held at 9:00 AM on April 1, 2005 at the Lake County Board of County Commissioners' Chambers, 315 West Main Street, Tavares, Florida.

**Members Present**

Hugh (Dave) Davis II, Chairman  
Skip Goerner, Vice Chairman  
Thomas A. Cook, MD, Secretary  
Charles C. Clark  
Keith Farner  
Robert Kaiser, P.E.  
Don Nicholson

**Members Absent**

W. Thomas Brooks  
Rick Powers, P.G.

**1. CALL TO ORDER**

Chairman Dave Davis called the meeting to order at 9:10 AM.

**2. INVOCATION AND PLEDGE OF ALLEGIANCE**

The Invocation was given by Councilman Robert Kaiser, followed by the Pledge of Allegiance.

**3. ROLL CALL**

V. Chairman Goerner called roll. Councilmen W. Thomas Brooks and Rick Powers were absent.

**4. APPROVAL OF MINUTES**

A call for discussion of the Site Visit Summary from February 4, 2005 was made. No edits or comments were offered. A vote to approve the Site Visit Summary passed unanimously. A call for discussion of the minutes from the March 4, 2005 meeting was made. Several comments and edits were offered by Vice (V.) Chairman Skip Goerner, and councilmen Robert Kaiser and Charles Clark. A vote to approve the Meeting Minutes from the February 4<sup>th</sup> meeting with the suggested edits passed unanimously.

## **5. DISCUSSION ITEMS**

### Quarterly Budget Report – 1<sup>st</sup> Quarter FY04-05, Tom Brooks

Councilman Brooks was absent from the meeting, therefore the quarterly budget review was postponed until the May meeting.

### Council Members Business Cards – Gene Caputo (SJRWMD)

Gene Caputo of the St. Johns River Water Management District (SJRWMD) provided examples of two different formats for business cards of the Council members. Councilman Keith Farnier suggested that the cards include the Council's website address, to which the Council generally agreed. A vote to approve the format with the Council's name at the top and to include their website address passed unanimously.

A second motion was made for the Council to approve the expenditure of up to \$80 total for the printing of business cards for the Council members. A vote on the motion passed unanimously.

### Council Website Update – Gene Caputo

Mr. Caputo also told the Council that the University of Florida will continue Council website maintenance services for this fiscal year at a cost of \$1,875.00. A motion to approve the payment of \$1,875.00 to the University of Florida for Council website maintenance services was made and seconded. The vote passed unanimously.

### Purchase of Computers – Gene Caputo / Mike Perry

Mike Perry, Executive Director of the Lake County Water Authority (LCWA) said that he had spoken with Mr. Caputo regarding the use of LCWA laptop computers by the Council members desiring a computer for Council business. They determined that it would be easiest for the Council members to receive maintenance on the computers through the Water Authority's office in Tavares, as opposed to the SJRWMD office in Palatka. Mr. Perry offered Council members the use of existing laptop computers from the LCWA for as long as they desired them. Mr. Perry also explained that the computers would need to be physically inventoried each year. V. Chairman Goerner asked about the ownership of the computers and Mr. Perry explained that the LCWA would own the computers as assets purchased with public funds. After a lengthy discussion it was determined that it may be in the best interest of the Council to not maintain any physical assets.

V. Chairman Goerner asked if the LCWA laptop computers would have wireless capabilities. Mr. Perry explained that if they currently didn't, it could be installed if the Council members receiving them desired that capability.

Councilman Clark asked about the Public Records law and whether it pertained to Council documents on personal computers. Mr. Perry said that it may be the obligation of the Council members to maintain a record of that information. Mr. Caputo said that the Council should defer that question to the County Attorney and said that he would arrange for a presentation on the matter for a future meeting.

Chairman Davis and V. Chairman Goerner agreed to try the computers to see if they would fulfill their needs.

## **6. PRESENTATIONS**

### **Status of the NuRF Project – Lance Lombard (LCWA)**

Lance Lombard of the LCWA gave a presentation on the Lake Beauclair Nutrient Reduction Facility (NuRF) to be constructed near the north end of the Apopka-Beauclair (A-B) Canal.

#### Project Background

- During 1991 to 2000 the A-B Canal discharged an average of 19,744 kilograms per year (kg/yr) of total phosphorus (TP) causing a persistent algal blooms in the downstream lakes
- 93% of all phosphorus going into Lake Beauclair comes from the A-B Canal
- Acquisition of muck farms resulted in significant reductions in phosphorus in Lake Apopka
  - Before the acquisitions phosphorus concentrations in Lake Apopka were 218 parts per billion (ppb) and are currently 148 ppb.
- The Total Maximum Daily Load (TMDL) Target Concentration for Lake Apopka is 55 ppb
- The TMDL for TP in Lake Beauclair is 7,056 kg/yr and the Target Concentration is 32 ppb

#### Lake Apopka Marsh Flow-way

- Maximum discharge is 200 cubic feet per second (cfs)
- Phosphorus removal efficiency is 30%
- Provides “cleaner” water to the A-B Canal, Lake Beauclair and downstream lakes
- The objective is to reach the goal of 55 ppb for TP in Lake Apopka
- There is no timeline to meet the goal

#### NuRF

- The design objective is to meet the TMDL Target Concentration of 32 ppb for Lake Beauclair

#### Inputs to Lake Beauclair:

12,390 kg/yr (A-B Canal) + 1,448 kg/yr (others) = 13,838 kg/yr

TMDL (Maximum Load) = 7,056 kg/yr

Required Removal = 6,782 kg/yr

- Proposed site is 254 acres located at the A-B Lock and Dam
- To provide offline Alum treatment of water removed from the canal, then collect the floc that settles out
- The project will utilize gravity flow for water into and out of the facility
- The settling ponds will be cleaned with a mini dredge to move the material to drying beds
- Construction costs are proposed to be \$4,261,198

#### Expected Results

- Totally dependent on the volume of flow from Lake Apopka
- Reduce phosphorus by 8,659 kg/yr by treating 47,844 acre-feet of water
- Discharge water to within 7% of the TMDL (assuming 100 ppb mean total phosphorus)
- Increased water clarity and revegetation

#### Schedule

- Preliminary design is submitted
- Permitting process may take considerable time
- Need to complete the design phase
- Begin construction in approximately one year

#### Project Expenses

- Design and Engineering \$230,000
- Construction \$4,260,000 +/-
- Annual Operations and Maintenance Costs \$0 to \$1,500,000
- Cooperating agencies include the SJRWMD and the Florida Department of Environmental Protection (FDEP)

Councilman Kaiser suggested that the use of a parallel flow-way in the vicinity of the NuRF be considered to reduce the costs associated with pumping at the LAMF.

Councilman Clark provided a table indicating that without construction of the NuRF, the TMDL Target Concentration can not be met for Lake Beauclair. He explained that 13,000 kg of phosphorus was discharged in two months into the lake last year as a result of large discharges/flows and he suggested this project would have removed more than half of that phosphorus.

V. Chairman Goerner asked if the NuRF were not built and the TMDL for Lake Beauclair were not met, what would be the next step. Mr. Lombard said that the matter would be discussed with the Basin Working Group within the TMDL Program.

Councilman Don Nicholson asked if alum is always effective in removing phosphorus. Mr. Lombard said that it is effective in the presence of particles and sediments.

Councilman Nicholson also asked if there was any commercial value to the floc material that settles out within the NuRF. Mr. Lombard said that it can be applied to pastures to reduce phosphorus in the stormwater runoff; however it is not widely used in Florida.

Chairman Davis asked how the water flowed out of Lake Apopka before the A-B Canal was constructed. Mr. Lombard said that the majority of the flow into the downstream lakes was through overland runoff or sheet flow. Chairman Davis also asked if it was ever a consideration by the LCWA to shut down the A-B Canal to reduce the phosphorus entering Lake Beauclair. Mr. Lombard said it had been discussed but the aspect of that was out of his purview.

Councilman Clark asked about the whooping cranes at the NuRF site that had been observed during the February tour of the area. Mr. Lombard was not sure of the environmental implications associated with those birds, but said the situation would be properly addressed as necessary.

Councilman Kaiser asked about the feasibility of planting trees at the LAMF as a means to remove phosphorus and other TMDL nutrients. V. chairman Goerner explained that Richard Royal (agency?) gave a presentation to the Council on that issue and it was determined that cypress trees may be beneficial for nutrient reduction. Councilman Clark added that the Council included \$50,000 in their budget requests for cypress plantings.

#### Status Update on the Total Maximum Daily Load Program – Barbara Bess (FDEP)

Barbara Bess of the Florida Department of Environmental Protection (FDEP) provided a handout and general presentation of the status of program and rule development. She explained the TMDL process is a 5-year cycle that began with acquiring water quality data from all the various agencies to assess the Ocklawaha Basin. From the assessment the FDEP assembled a list of Impaired Waters, targeted for the TMDL Program and forwarded that list to the Environmental Protection Agency (EPA). The Verified Impaired Waters List was returned by the EPA and the FDEP began developing the TMDLs for the most critical water bodies first. Ms. Bess added that the EPA has allowed 12 years to develop TMDLs for all the water bodies.

For the past year the FDEP has been meeting with local governments and stakeholders to develop a Basin Management Action Plan (BMAP) to implement the TMDL Program. Ms. Bess said that due to the Impaired Waters of the Ocklawaha Basin, the TMDLs and BMAP are being developed first. Once the BMAP is complete they will get local government officials to approve it, then it will be their [local governments'] responsibility to provide funding to implement the primarily stormwater management projects to meet the TMDLs. At the end of the first 5-year cycle Ms. Bess explained, a reassessment of the water quality, projects, and program goals will be conducted and adjustments made accordingly. She said the 5-year cycle will repeat until all the goals of the program are met. Ms. Bess then went on to explain the parameters in the handouts provided.

In summary, Ms. Bess' presentation focused on the many hurdles to overcome with local governments and future development to implement projects and Best Management Practices (BMPs) to meet the goals of the program. She explained, that it the purpose of the Basin Working Groups and development of the BMAP; to determine a course of action and who is going to pay for the projects.

Councilman Farner asked when she expects the decisions of how to handle future growth will be made. Ms. Bess replied that it should be in the next few months because the BMAP is scheduled to be complete by the end of 2005.

V. Chairman Goerner asked about agricultural exemptions and how they will affect the TMDL Program. Ms. Bess explained that the FDEP is working with various industries to implement BMPs to assist in meeting the TMDLs. She said if necessary, the FDEP may introduce statutes to address compliance with the program.

Councilman Farner expressed his concern that certain industries or owners may not be willing to act on the program if they were not forced to do so. Ms. Bess said that the need for stronger regulation to ensure compliance will be addressed in the next 5-year cycle.

V. Chairman Goerner expressed his concern for the financial burden being placed on local governments to pay for the projects to come into compliance with the State's TMDL Program.

An extensive discussion ensued on the issues of financial responsibilities and how to pay for the projects required under the TMDL Program, to reduce pollutants in surface waters.

#### Agency Updates

Bill Johnson of the Florida Wildlife and Conservation Commission (FWCC) gave a brief update saying they are continuing creel sampling in lakes Dora, Beauclair and Eustis. He also said the harvesting of gizzard shad with gill nets is also continuing.

Dr. Canfield of the University of Florida and member of the Technical Advisory Group (TAG) to the Council gave an update on the bass restocking program saying that to date 4,100 bass have been relocated. Their efforts have included relocating approximately 1,000 bass that were 8"-10" and that all fish were tagged. He said those greater than 10" were fitted with a special tag for future identification. He explained that the FDEP would assess a value of greater than \$100,000 for the bass that had been relocated.

Dr. Canfield also said that they were going to conduct electrofishing in Lake Griffin in April or May and provide a report on the findings by the end of May. He explained that this information will be used to evaluate the percentages of natural bass to relocated bass, to determine whether more bass will be moved into Lake Griffin.

Councilman Farner asked how much money has been invested for these efforts and Dr. Canfield said that the LCWA has provided \$130,000 for the relocation. Dr. Canfield also

said that they conducted a plant survey on Lake Apopka and determined that the abundances of emergent and submergent plants are at the same levels as they were in 1986. He explained that the submergent plant coverage is approximately 3% of the lake's surface area and that 12% would be more beneficial. Dr. Canfield also said that much of the revegetation efforts in the lake were destroyed by the wind and waves from the hurricanes of 2004.

Councilman Kaiser asked if the dumping of trees was being conducted in Lake Apopka. Dr. Canfield there was a proposal to dump trees and brush into the lake after the hurricanes to possibly provide habitat for fish, but it was never approved.

Dr. Canfield also expressed his opinion that if it is the goal of the Council to return the lakes to the healthy water bodies they were in the 1930s and 1940s, they should evaluate more than just the numerical quantities of phosphorus and other nutrients. He suggested they should put more consideration into the biology of well-balanced lakes.

Mr. Perry (LCWA) gave an update on the progress of the Lake Griffin access canal dredging saying that the contractor was setting up the piping and containment area, and that the dredging should begin in either June or July. He offered to arrange a site visit to the project site for the Council. The Council members generally thought that was a good idea.

Mr. Perry also said that Dr. JoAnn Burkholder of the University of North Carolina (UNC) had reviewed the water quality data collected by the LCWA and recently gave a presentation to the LCWA Board of Trustees. Dr. Burkholder provided suggestions on how to better collect and record water quality data in order to improve its value within the scientific community. She also verified that although there are potentially toxic algae present in the lakes, the greatest concern would be within dense algal blooms that form in the lakes.

Mr. Perry also mentioned that the same week Dr. Burkholder gave her presentation to the Board of Trustees, representatives from the local health department, the Florida Department of Health (FDOH) and the Centers for Disease Control (CDC) in Atlanta, met in Tavares to discuss water quality and potential concerns about toxic algae. He said the medical professionals were responding based on the amount of monitoring that has been done in the lakes and also the efforts of the Council in creating public awareness to this health concern.

Mr. Perry explained that the health professionals would like to conduct a study to evaluate the risk of exposure to potentially toxic algae, such as microcystin. In order to conduct the study they are going to seek volunteers to recreate (swim, wade, jetski, etc.) in areas where algal blooms are occurring. From this study they hope to determine if there is a measurable risk from recreational exposure to the algae.

Councilman Farner reminded the Council of the presentation given by Dr. Ritchie Shoemaker who believed that although someone may be exposed to a toxin, the symptoms may not be exhibited for an extended period of time; maybe as long as five years.;

Council Secretary Thomas Cook, M.D. asked Mr. Perry if he know of any calls to the Toxic Hotline of the CDC, to report symptoms of exposure. Mr. Perry said that he didn't ask during the meeting but said it is important to keep the availability of that phone number in the public's mind. Councilman Farner asked if there is funding available to advertise the Toxic Hotline numbers. Mr. Perry said that he will ask the CDC and State health agencies for advertising materials such as signs, brochures, refrigerator magnets, and similar items and he would make them available to the public. He also thought it would be a good idea to post the phone numbers at boat ramps and public beaches in the area.

V. Chairman Goerner offered his gratitude to both the LCWA for their efforts and expenditures in collecting the volume of water quality data they had; and also for Dr. Burkholder to offer her time and efforts to address the Council and for the suggestions she provided to improve the water quality monitoring program.

Mr. Caputo (SJRWMD) then provided a handout as an update from Dr. Larry Battoe of the SJRWMD, but did not have any additional information from him.

No further agency updates were provided.

## **7. COUNCIL MEMBER COMMENTS**

### Discussion of May 6, 2005 Meeting

Mr. Caputo provided a summary of scheduled agenda items for the May 6<sup>th</sup> Council meeting including:

- A presentation by Pearce Jones, Ph. D., Director of the Energy Extension at the UF to speak on alternate energy sources, as requested by Councilman Kaiser
- Quarterly Budget Report by Councilman Brooks
- Mr. Caputo made arrangements for a presentation of the laws regarding public records, as requested earlier in the meeting

Councilman Clark asked if Rolland Fulton (SJRWMD) could speak to the Council about phosphorus load calculations. Dr. Canfield suggested that Eric Marzolf (SJRWMD) may be a more qualified candidate for a discussion on load calculations in Lake Apopka. The Council agreed to hearing a presentation by Dr. Marzolf during the June meeting.

### Council Member Comments

V. Chairman Goerner said he was recently in Tallahassee and learned that the Florida House of Representatives had approved \$200,000 of the \$850,000 funding request the Council submitted for bass restocking, cypress tree plantings, aquatic plant revegetation and aquatic plant (weed) control. He said they had also approved \$200,000 of the \$3.25

million funding request submitted by the Council for the Upper Ocklawaha River Basin Funding Initiative. V. Chairman Goerner went on to say that next week the Florida Legislature will meet again and there is a possibility that additional money may be approved for water quality projects, which may include more funding for the Council's budget requests. Once the final amounts are approved by the Legislature, those amounts will go to the Governor for approval and the V. Chairman believed the funding for these projects should meet approval.

Dr. Canfield explained that the Florida Senate is in the process of reviewing projected income for the State and felt confident there was a good possibility that additional funds may be approved for the Council's requests. He said the fact that the House approved funding for the budget requests opened the door for additional funding. Dr. Canfield said if the House of Representatives had not approved any funding, the Senate wouldn't have approved any funding either.

Secretary Cook gave an update to the Council on the progress of the Public / Physician Education Program that he was involved with, reminding the Council that the Lake County Medical Society had agreed to allow articles concerning potentially toxic algae to be included in their quarterly publication, The Monitor. A total of four articles will be published including one by Secretary Cook, and one each by Mr. Perry (LCWA), Dr. Burkholder (UNC), and Andrew Reich (FDOH). Secretary Cook said his article would appear first and was currently being printed.

Councilman Kaiser expressed his personal appreciation for the efforts of Dr. Burkholder and suggested if the Council hadn't paid her a stipend for her presentations to the Council and the local public, he felt they should. Mr. Caputo assured the Council that she had received the full amount approved by the Council [\$2,500], which was in excess of her actual expenses for her travel to Florida.

There were no additional comments made by the Council.

## **8. PUBLIC COMMENTS**

No public comments were made.

## **9. ADJOURNMENT**

The meeting was adjourned at 12:45 PM.

Respectfully submitted by:

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Chairman Dave Davis

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Secretary Thomas Cook, M.D.