

FINAL

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

October 13, 2006

The October meeting of the Harris Chain of Lakes Restoration Council (Council) was held at 9:00 AM on October 13, 2006 at the Lake County Board of County Commissioners' Chambers, 315 West Main Street, Tavares, Florida.

Members Present

Skip Goerner, Chairman
Rick Powers, P.G., Secretary
Robert Kaiser, P.E.
Richard Royal

Members Absent

Hugh (Dave) Davis II, Vice Chairman
Keith Farner
Don Nicholson
Edward M. Schlein, M.D.
Ted Woodrell

1. CALL TO ORDER

Chairman Skip Goerner called the meeting to order at 9:10 AM.

2. INVOCATION AND PLEDGE OF ALLEGIANCE

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

3. ROLL CALL

Chairman Goerner called roll. Vice Chairman Dave Davis and Council members Keith Farner, Don Nicholson, Edward M. Schlein, and Ted Woodrell were absent. Councilman Kaiser made a motion that the Council function as a "Committee as a Whole" to conduct business in the absence of a quorum. The motion passed by unanimous vote of attending members.

Gene Caputo of the St. Johns River Water Management District (SJRWMD) notified the Council that Dr. Larry Battoe of the SJRWMD and member of the Technical Advisory Group (TAG) to the Council had recently suffered a heart attack and would not be attending the meeting. Chairman Goerner requested that Mr. Caputo send Dr. Battoe a card from the Council. Mr. Caputo agreed.

4. APPROVAL OF MINUTES

Mr. Caputo handed out an updated version of the September meeting minutes, stating that he had requested a modification to the minutes after they were sent to the Council. The Council received the updated minutes and no further action was taken due to the lack of a quorum.

5. DISCUSSION ITEMS

Continuing Services Contract for Recording Secretary

Mr. Caputo explained that the SJRWMD had conducted the bid opening for the position of Recording Secretary to the Council and accepted the bid submitted by Patrick Hunter of Hunter Environmental Consulting, Inc. He said that the total for the three year contract is \$74,310 at a rate of \$24,770 per year. Mr. Hunter added that the contract will run from December 1, 2006 through November 30, 2009. Chairman Goerner asked if the contract would encumber the Council for three years even if they cease to exist. Mr. Caputo said no.

A vote to accept the information received passed with three approving votes and Chairman Goerner casting a dissenting vote. Chairman Goerner requested a copy of the contract for review. Mr. Caputo said that all of the Council members will receive the contract packages once the review and verification of Mr. Hunter’s proposal is completed by the SJRWMD.

Funding Request to the LCWA, Status; Skip Goerner

Mike Perry, Executive Director of the Lake County Water Authority (LCWA) said that the LCWA Board of Trustees (Board) had given final approval for their Fiscal Year (FY) 2006-2007 Budget and that funding provided by them for operation of the Council was approved. He explained that at the end of their fiscal year, the LCWA sends a purchase order to the SJRWMD for an amount not to exceed the \$40,000 received by the Council for operating expenses minus the \$10,000 provided by the SJRWMD and the in-kind funding match. Mr. Perry said that for the past fiscal year, that amount was approximately \$18,000. Chairman Goerner offered his appreciation to the LCWA Board for their continued funding support.

Chairman Goerner then discussed the funding received by the Council from their 2005-2006 Funding Initiative from the Florida Legislature. He provided the following summary of that funding:

<u>Requested</u>	<u>Purpose</u>	<u>Received</u>
\$300,000	Largemouth Bass Restocking	\$147,800
\$300,000	Revegetation of Aquatic Habitat/Cypress Tree Planting	\$147,800
<u>\$150,000</u>	Invasive Aquatic Plant Management	<u>\$ 73,900</u>
\$750,000		\$369,500

Chairman Goerner explained that when the Council made their request for funding from the Legislature, that it was a lump sum request for \$750,000. He said that it is up to the Council to decide how that money is spent. Chairman Goerner asked Mr. Caputo to

prepare a resolution for the Council to transfer the \$369,500 they received, to the LCWA for the projects as outlined. Mr. Caputo said he would provide the resolution at the next Council meeting.

Chairman Goerner went on to say that of the \$2 million requested by the Council in their 2005-2006 Funding Initiative to assist with the Lake Griffin access canal dredging, they received \$850,000. He then asked if that money had been transferred to the LCWA. Mr. Perry said they are moving forward with an agreement from the SJRWMD to transfer those funds.

Councilman Richard Royal asked if the LCWA has any flexibility as to how the money transferred to them is spent. Mr. Perry said that how the funds are spent is outlined in an agreement with the SJRWMD and approved by the Council, therefore there is limited flexibility. One of the areas of flexibility he discussed included the installation of gravel beds at Venetian Gardens to improve aquatic habitat. Mr. Perry said that a portion of the funding received could be used for that effort.

Chairman Goerner also notified the Council that although it was approved by the Legislature, Governor Jeb Bush vetoed the \$250,000 the Council requested to assist in funding a toxic algae study in the Harris Chain of Lakes (HCOL).

6. PRESENTATIONS

Draft Review – 2006 Legislative Report; Patrick Hunter

Chairman Goerner opened the discussion with comments and edits to the draft annual report. The edits focused on three main topics of the report including Legislative funding received, the Council's 2006-2007 Funding Initiative, and their level of support for various restoration projects on the HCOL.

During the discussion of the draft annual report, Bill Johnson of the Florida Fish and Wildlife Conservation Commission (FWCC) said that they are gearing up the Richloam State Fish Hatchery to begin stocking various lakes in the Harris Chain. He said they are considering stocking Lake Apopka in addition to other lakes. Mr. Johnson suggested that if the Council were to request funding for bass restocking, the FWCC may consider offering matching funds for those efforts. Chairman Goerner and the Council members present agreed to include \$500,000 in their 2006-2007 Funding Initiative for bass restocking.

Mr. Johnson also mentioned that the Florida Department of Environmental Protection (FDEP) has funds available for revegetation efforts that the FWCC could request, which could offset funds received by the Council for aquatic revegetation. He suggested that the Council could then use funding received for other projects, including the sport fish restocking.

Mr. Johnson then discussed the success of gravel beds to improve aquatic habitat. He explained that the City of Eustis has constructed gravel beds that have worked very well in improving aquatic habitat. He said that Steve Crawford of the FWCC has been reviewing

that work and has more information, if the Council is interested in learning more about the matter. Chairman Goerner also mentioned that the City of Leesburg has offered matching funds to install gravel beds in some of their lakes. After additional discussion, Chairman Goerner and attending Council members agreed to include \$250,000 in their 2006-2007 Funding Initiative for the combined efforts of revegetation, aquatic habitat improvements and cypress tree plantings.

Mr. Johnson also notified the Council that recently the FWCC, in conjunction with the University of Florida (UF), had collected a large number of fish on which they intend to perform tissue sampling to determine any effects from toxic algae. After additional discussion on the efforts of Florida LAKEWATCH volunteers and the Florida Department of Health (FDOH) to sample and monitor for potentially toxic algae in the lakes, the attending Council members agreed to include \$250,000 in their 2006-2007 Funding Initiative to assist in those efforts.

There was also discussion of the Total Maximum Daily Load (TMDL) Program during which Councilman Richard Royal asked; when the FDEP developed the individual TMDLs for each lake, did they differentiate between external [nutrient] loading to the lakes versus the loading coming from upstream lakes. Barbara Bess of the FDEP said that she was not certain and would get an answer to the question prior to the next Council meeting.

After extensive discussion of edits and comments to the annual report, the Council decided to provide additional comments to Mr. Hunter via email.

Agency Updates

Other than the issues discussed during the review of the draft annual report, Mr. Johnson (FWCC) said that he did not have any additional updates for the Council.

Mr. Perry (LCWA) provided an update to the Council saying that due to reduced rainfall during the Summer, the lake levels are lower than desired as they move into the dry season and provided the following data:

<u>Lake</u>	<u>Current Level</u>	<u>Minimum Desirable Level</u>	<u>Regulatory Schedule</u>
Apopka	55.6 feet	66.5 feet	67.2 feet
Eustis	61.6 feet	62 feet	63.1 feet
Harris	61.6 feet	62 feet	63.1 feet
Dora	61.6 feet	62 feet	63.1 feet
Griffin	58 feet	58 feet	59.1 feet

Mr. Perry went on to say that the experts are predicting an El Niño influenced Winter which will be wetter and warmer than normal. Councilman Powers asked if the dredging schedule on the Lake Griffin canals will be affected by the lower lake levels. Mr. Perry said he had spoken with the dredging contractor and they do not anticipate any delays due to the drier conditions. He added that the area HCOL is approximately 16 inches below their average annual rainfall.

Councilman Royal asked if the lower lake levels are a benefit to the planting of near shore aquatic vegetation. Mr. Perry said that it is easier to plant aquatic vegetation but the elevation of the planting areas must be determined so the plants are not drowned when lake levels return to normal.

Mr. Perry also mentioned that the Clairmont Chain of Lakes had experienced blue-green algal blooms earlier this Summer and that samples were collected and sent to Dr. Daniel Canfield's laboratory at the UF for analysis. He said that one of the blooms was determined to include *Microcystis* and the toxin Microcystin was present at 3 micrograms per liter ($\mu\text{g/L}$) which is above the 1 $\mu\text{g/L}$ concentration for drinking water but well below the 20 $\mu\text{g/L}$ concentration standard for recreational use. Councilman Kaiser asked if there is any airborne hazard by this toxin. Mr. Perry said that does not appear to be a problem.

With respect to the Lake Griffin access canal dredging Mr. Perry said that they had completed Channel 13 and were moving forward with Channel 14. He also discussed issues of water quality and turbidity within the disposal area saying that possibly due to the alum and polymers injected in the water as it is discharges, the installed turbidity barriers appear to be experiencing deterioration. He said that water quality at the site remains within the parameters set forth in their permit to operate the disposal site. Mr. Perry said they will continue to monitor that situation. He also said that the dredging contract had been extended until November 2007 and expects the project will be completed by that time.

Mr. Perry then discussed the Lake Beauclair dredging project saying that they have agreed on a "footprint" of the disposal facility and they are authorizing BCI Engineers to complete the engineering plans for the project. He said that they continue to review alternative technologies to complete this work; one of which involves a conveyor press that reportedly can dewater sediments onsite, prior to being trucked to a disposal facility. Councilman Rick Powers said he was familiar with that technology and understands that the volume of sediments that can be processed is not as large as might be needed for large scale projects. Mr. Perry said that he had heard that issue and they intend to allow the dredging contractor to pump at a greater rate than is being pumped in the Lake Griffin canals.

Chairman Goerner noted that he had recently read an article in the Orlando Sentinel which said the SJRWMD was not going to assist in the funding for the Lake Beauclair project. Mr. Perry explained that the LCWA is continuing to review the issue of sediments in the Apopka-Beauclair Canal and have requested an analysis of the velocity of water that would be required to move sediments down the canal and into Lake Beauclair. He said once that information is received, they may reinitiate talks with the SJRWMD on dredging the Apopka-Beauclair Canal.

Chairman Goerner expressed his concern that if velocities of discharges down the canal are in the 1,000- 1,500 cubic feet per second range as they were during the hurricanes of 2005, that large quantities of sediments will flow into Lake Beauclair from the canal.

Councilman Powers also suggested that dredging the Apopka-Beauclair Canal should be a consideration in conjunction with the lake Beauclair dredging because the permitting of

such a project is very difficult. He believes that including that dredging now in the current permit application may save a lot of time and effort in the future.

Ms. Bess (FDEP) provided a handout and brief update on the Channeled Apple Snail by answering questions posed by Council members during her presentation at the September Council meeting. With respect to the issue of the rat lung parasite asked by Councilman Kaiser, she said that it can also be found in other host creatures besides the channeled apple snail. Ms. Bess also addressed a question by Councilman Keith Farner as to why the issue of channeled apple snails was not addressed when first discovered in Florida lakes in the 1970s. She explained that at the time they were not expected to spread as much as they have. Ms. Bess went on to say that more study of the bilge water released by ships is going to be conducted by the U.S. Environmental Protection Agency because it may be the source of other exotic species that are entering the state, such as the zebra mussel.

Ms. Bess also mentioned an article in the Orlando Sentinel saying that another variety of channeled apple snail exists in south Florida. She said that the representative from the FDEP may attend an upcoming meeting on the new species of snail in the near future. Copies of her handouts and the newspaper article are provided in Attachment 1 of these minutes.

Ms. Bess also briefly discussed the progress of the TMDL program saying there is ongoing review of the Basin Management Action Plan (BMAP) being conducted and finalizing the plan has been postponed while they continue to discuss various actions that can be taken to meet the goals of the program.

Chairman Goerner asked if the channeled apple snail can be eaten. Ms Bess said that although they are eaten in some parts of the world, she would caution against it because of the potential for the rat lung parasite.

7. COUNCIL MEMBER COMMENTS

Mr. Caputo provided an additional update on the status of Dr. Battoe saying that he had been in contact with him via email during the meeting and said that he is still at Shands Hospital in Gainesville. He also said that Dr. Battoe has experienced damage to his heart muscle due to the heart attack, but is currently doing better. Additionally, Dr. Battoe did not know when he would be released from the hospital.

Mr. Caputo then provided a copy of the 2007 Council meeting date schedule. A copy of that schedule is provided as Attachment 2.

Council Member Comments

Chairman Goerner notified the Council that he was scheduled for heart surgery on October 24th and he may not be able to attend the November 3rd meeting. He suggested that it may be necessary to schedule a meeting for the middle of November to finalize the annual report.

Mr. Caputo suggested that a second meeting in November may be necessary so that Chairman Goerner could attend. Additionally, Mr. Caputo said that Mr. Hunter would have a week to incorporate any additional comments from the Council either via email or from the first meeting in November.

Mr. Hunter said that his contract with the SJRWMD specifies that the final report will be delivered to them by November 17th. He further suggested that any additional comments that will be provided by the Council via email, be submitted by a certain deadline.

Mr. Caputo suggested that the comments should be submitted by the Council at least one week before the draft report is due to the SJRWMD, prior to the next meeting. Mr. Hunter said he would send out an email to the Council members announcing the deadline for additional comments.

No additional Council member comments were made.

Discussion of November 3, 2006 Meeting

Mr. Caputo suggested that the Council move forward with the November 3rd meeting date to continue review of the annual report and possibly keep November 10th open for a second meeting to finalize the report, when Chairman Goerner may be present. He then provided a brief summary of the agenda items for the November meeting:

- Discussion of the Draft Annual Report to the Legislature
- Presentation of the Resolution for Transfer of Funding to the LCWA

8. PUBLIC COMMENTS

No public comments were made.

9. ADJOURNMENT

The meeting was adjourned at 11:34 AM.

Respectfully submitted by:

Chairman Skip Goerner

Secretary Rick Powers, P.G.

Attachment 1

Channeled Apple Snail Information

presented by

Barbra Bess

Florida Department of Environmental Protection

October 13, 2006

From: Denson, Dana
Sent: Monday, October 09, 2006 8:24 AM
To: Bess, Barbara
Subject: RE: CAG questions
Hi Barb,

Larry might have answered your questions already, but here is my \$0.02 worth...

1) The following excerpt is from a website (<http://www.answers.com/topic/rat-lungworm>) about rat lung worm:

Adults live within the blood vessels of the lungs of the rodent host. Females produce eggs that hatch in the lungs and then attach to the terminal branches of the pulmonary arteries. First-stage juveniles enter the respiratory tract and, from there, the juveniles move up the trachea, where they are then swallowed and later passed in the host's feces; juveniles can be detected in feces 40-60 days after infection. Requires an intermediate host (**usually snails, but it can be found in almost any invertebrate such as oysters, slugs, and crabs**) to complete its lifecycle. The rodent or human host is infected when it ingests an intermediate host (such as snails and slugs) containing infective juveniles. The infective juveniles develop to adults through two stages in 2-3 weeks. Adults enter the pulmonary arteries and the lungs where they become mature; they eventually enter the rodent host's brain. Adults then migrate back to the host's lungs via the venous circulation. In human hosts, the parasites enter the brain, but do not develop further and die.

2) I expect that they become reproductive within a year. I have raised some in a tank that got full-sized in less than a year.

3) Probably 3, maybe 4 years max. I would guess that most live no more than 2 years.

Hope this helps.

Dana

-----Original Message-----

From: Bess, Barbara
Sent: Friday, October 06, 2006 1:51 PM
To: 'larry.connor@myfwc.com'; Denson, Dana
Subject: CAG questions

Gents -- my presentation on Channeled Apple Snails was very well received by the Harris Restoration Council. A few questions were asked for which I didn't have answers. Perhaps you can fill in the blanks.

- 1) Is the rat lung worm found in other species of snail?
- 2) How quickly does the CAG become an adult?
- 3) What's their life span?

I never have an idea what questions the Council members will think up!
THANKS! Barb

Barbara Bess

Orlando Sentinel

<http://www.orlandosentinel.com/news/custom/growth/orl-snails1106oct11.0.757946.story?coll=orl-home-headlines>

Fighting the channeled apple snail

New pests pick up destructive pace

Robert Sargent and Ramsey Campbell
Sentinel Staff Writers

October 11, 2006

For years, biologists thought they had identified the channeled apple snail as the ravenous monster attacking lakes across Florida.

Now a South Florida researcher says they have discovered a nearly identical twin that is bigger and badder.

"They are both bad news, but one is worse," said Timothy Collins, an associate professor of biology at Florida International University in Miami.

The finding comes as the destructive snails have started showing up in Lake Apopka, posing a new threat to one of Florida's most-polluted bodies of water -- one that has already undergone millions of dollars in restoration efforts.

"It could take years to eradicate, or it may not be possible," said Jim Peterson, a St. Johns River Water Management District field supervisor for Lake Apopka who heads out twice a week to find and destroy the exotic snail eggs. "But we can try to limit how they spread."

Plotting the battle could change now that researchers, using techniques similar to those of police crime labs, try to learn more about the threat from the invasive snails and how they spread, devouring most aquatic plants in their path.

Next month, a newly formed joint task force will meet in Tallahassee to allow top experts to discuss the new information and how it may affect their coming war against the enemy.

"A few weeks ago we thought we could identify them -- now we're not sure," said Sherman Wilhelm, director of the state Division of Aquaculture. "It's very confusing."

The channeled apple snails are different from their smaller relatives, Florida's native apple snails. The native snails are considered an important part of the state's waterways. They provide food for birds and animals, while their numbers are controlled by predators.

If the golf-ball-sized apple snail is the good guy, the baseball-sized channeled apple snail is the villain. The huge snails reproduce quickly and can destroy aquatic plants at an alarming pace. But in addition to the common channeled apple snail, Collins has discovered a separate variety, the island channeled apple snail, in several Florida water bodies.

Though the adult island snail is a bit bigger, its eggs are smaller, allowing it to reproduce faster.

Both are awful news.

"It's a little like the difference between knowing you have a slow-growing cancer and a fast-growing one," he said.

Word of the new adversary has unnerved state officials, who have watched the spread of the channeled apple snails in horror.

Biologists thought the common channeled apple snail had spread like crazy throughout Florida in the past decade -- sometimes removing virtually all signs of other life from infested lakes. However, the new research shows the more exotic island snail should take most of the credit.

The channeled apple snails have long confounded experts.

The first channeled apple snails were discovered in Florida in West Palm Beach in the late 1970s, but that was a subspecies that never spread beyond the area.

The channeled apple snails have few, if any, predators. They're also tolerant to changing environmental conditions and are difficult to control with chemical pesticides.

Channeled apple snails have affected several Central Florida lakes, including Lake Brantley in Seminole County, Lake Tohopekaliga in Osceola County, Shingle Creek in Orange County and Lake Linda in Lake County. They've been found in most parts of Central and South Florida, and are turning up around Jacksonville and Tallahassee.

Attention to the island snails started recently when Collins presented information to the National Park Service about slimy critters taking hold in the Everglades. Collins linked that species to water bodies across the state.

Collins has been conducting two years of federally funded research with snail experts Robert Cowie and Ken Hayes at the University of Hawaii. They took samples of channeled apple snails in South America as well as those found in Florida's natural-history museum collections and different water bodies in the Sunshine State.

The group used tissue samples, analyzing their genetic makeup through DNA to identify them. That showed that Florida, for a large part, is dealing with the island snail.

"Once we have the genetic data in hand, it is easier to discriminate these things," Collins said. "What we called channeled apple snails are really three distinct things, and we have been treating

them as one."

Knowing more about their enemy could help the state study them. "This might have implications to trying to stop the spread of these things," Collins said.

Collins and others say that even though the different types of exotic snails all have certain effects on the environment, knowing exactly which ones they are dealing with can help to understand what they eat, how much they eat and how quickly they can reproduce.

"We don't need an uncontrolled aquatic-vegetation eater out there," said Scott Hardin, exotic-species coordinator with the Florida Fish and Wildlife Conservation Commission.

Wilhelm said Collins, as well as other biologists and state agencies, are all doing their own studies of the problem. He hopes that next month's task-force meeting will be the first of many where they jointly work toward finding a solution.

"They all have pieces to this puzzle. This will bring all the people together and put those pieces together," Wilhelm said.

Robert Sargent can be reached at rsargent@orlandosentinel.com or 352-742-5909. Ramsey Campbell can be reached at rcampbell@orlandosentinel.com or 352-742-5923.

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Attachment 2

Harris Chain of Lakes Restoration Council

2007 Meeting Schedule

HARRIS CHAIN of LAKES RESTORATION COUNCIL

2007 MEETING SCHEDULE

The scheduled dates for the calendar year 2007 are as follows:

- January 5th.
- February 2nd
- March 2nd
- April 6th
- May 4th
- June 1st
- July 6th
- August 3rd
- September 7th
- October 5th
- November 2nd
- December 7th

All meetings are scheduled for 9 AM on the first Friday of each month in the BCC Meeting Room at the Round Courthouse in Tavares, but may be modified as to time and place throughout the year.

Due to the time and effort necessary to prepare and review the Council's Legislative Report, as well as the need for issues of special attention, additional meetings and/or workshops may be held throughout the year. They will be scheduled as necessary.