

MINUTES OF THE MEETING

**Citrus County Task Force  
of the  
Citrus/Hernando Waterways Restoration Council**

September 12, 2011

The Citrus County Task Force met at 2:04 p.m., September 12, 2011 at the Lecanto Government Building, Lecanto, Florida.

**Task Force**

**Members Present**

Robert Christensen  
Sandra Clodwick  
Michael Czerwinski  
Al Grubman, Chair  
Eric Latimer  
Michael Moberley, Secretary  
Wayne Sawyer

**Technical Advisory**

**Group Members Present**

Mark Edwards, Citrus Co.  
Allen Martin, FFWCC  
Philip Rhinesmith, SWFWMD

**Recording Secretary**

Jennifer Noland, SWFWMD

**Task Force**

**Members Absent**

**Technical Advisory**

**Group Members Absent**

Judy Ashton, FDEP  
Katasha Cornwell, FDOT  
Colonel Alfred Pantano, USACOE

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SWFWMD – Southwest Florida Water Management District  
FDEP – Florida Department of Environmental Protection  
FFWCC – Florida Fish and Wildlife Conservation Commission

FDOT – Florida Department of Transportation  
USACOE – United States Army Corp of Engineers  
TAG – Technical Advisory Group

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A list of others present who signed the attendance roster is filed in the permanent files of the Task Force. The numbers preceding the items listed below correspond with the published agenda.

**For further details of the meeting, an audio recording is available upon request.**

1. **Call to Order and Roll Call**

Chair Grubman convened the meeting. Ms. Jennifer Noland called the roll and noted a quorum was present.

2. **Pledge of Allegiance**

Chair Grubman led the Pledge of Allegiance. Chair Grubman also reviewed the public comment procedures.

3. **Approval of the July 11, 2011 Minutes**

Mr. Czerwinski stated the headers needed to be changed from May 9, 2011 to reflect the proper meeting date of July 11, 2011. Mr. Czerwinski also commented regarding Mr. Frank Heath's letter to the Task Force presented during the Public Input, the minutes should clearly state that Mr. Czerwinski recused himself from any type of voting on the issue due to a conflict of interest. Following consideration, Mr. Mike Moberley moved,

seconded by Mr. Michael Czerwinski to approve the July 11, 2011 meeting minutes as amended above. Motion carried unanimously.

4. **Restoration Plan for Kings Bay**

**approx. 6 minutes into the meeting**

- a. Mr. Norman Hopkins, Amy Remley Foundation, stated in a study of the freshwater lens conducted by Dr. Howard Kline in 1975, the freshwater lens no longer exists and the reasoning is over-pumping which allows for saltwater intrusion.

In the Hunter's Spring area, SWFWMD recorded an increase in concentration of nitrogen from the spring over the last few decades. This is not the standard for all springs within Kings Bay. In 1989, it was determined if the City of Crystal River stopped discharging effluent into Kings Bay it would reduce the nitrogen concentration by 72% and the phosphorous concentration by 78% and the waters would recover.

Mr. Hopkins stated from 2000 to 2010, the discharge from the springs was reduced from 630 million gallons per day for all springs combined to 410 million gallons per day. Though the flow was reduced by 1/3, the nitrogen concentration in the springs has not reduced rather it has increased. A report published by the Florida Geological Survey indicated as the flow rate decreases, the residence time for the nutrients increases. Therefore the nutrient content in the water is the main cause of degradation in Kings Bay and Crystal River. An essential component in any recovery program must address and control the nitrogen content. Gardens and golf courses, fertilizers, and manufactured fertilizers account for 600 tons of nitrogen per year and septic systems account for 212 tons of nitrates per year which discharges into the ground and can penetrate directly into the aquifer. Atmospheric nitrogen is actually the largest source and accounts for 1,150 tons per year. Mr. Hopkins stated it is imperative for a sustainable recovery to restore the balance of nitrogen to equate with the reduced flows that are now coming out of the springs.

- b. Mr. Art Jones presented numerous aquatic plant samples to the Task Force members which were utilized in the restoration of the hydric hardwood hammock located adjacent to his property on Kings Bay. This was approximately a four year project which first involved the removal of invasive trees (Chinese Tallow Trees/Chinese Popcorn) allowing more natural rainwater to fill the hammock. Within the next year, Mr. Jones noticed Lyngbya took over the entire hammock and he began a raking removal process in an attempt to control it. Mr. Jones noted Duckweed started to appear which covered the entire hammock so the sunlight couldn't penetrate down to the Lyngbya and stopped it from growing. The Duckweed naturally died off in the fall leaving the pond perfectly clear. The next year Water Millfoil entered the hammock from the Bay. The Southern Niad is another type of green vegetation found in the hammock. The hammock water is now crystal clear, loaded with fish and is a completely balanced system in which the neighborhood loves. Mr. Jones stated this may be a key in restoring Kings Bay by allowing the natural vegetation to grow and filter the water. Mr. Jones noted that although Lyngbya does occur naturally, it is accelerated by the nitrogen in the water and as most other vegetation in Kings Bay is gone, Lyngbya has filled the void. The Lyngbya builds-up and takes oxygen out of the bay and

creates “dead zones” void of life. Mr. Hopkins stated he is proud of the work Mr. Jones has done in recovering the hammock and it is an example that can be followed elsewhere within Kings Bay.

Mr. Sawyer commented regarding the “dead zones”. Coming down from the Mississippi River, due to all the agricultural runoff, there was an enormous “dead zone” extending way out into the Gulf of Mexico with no life in it what-so-ever. Mr. Hopkins added it’s absolutely dead of oxygen and as the plants die they remove even more oxygen from the water which is what you are seeing specifically in the Hunter Springs run; as the algae dies it depletes the water of oxygen faster than it can be recreated.

Ms. Clodwick stated that Water Lettuce and Hyacinths are not native vegetation and are very prolific. In the case of Lake Rousseau, if not treated, it covers the whole lake. Mr. Jones commented that Hyacinths are very easily controlled using an aquatic weed harvester. In response to a question from Chair Grubman, Mr. Mark Edwards, Citrus County Aquatic Services, stated over the past two years they have only treated about a half-acre of Hyacinths in Crystal River area.

Mr. Czerwinski commended Mr. Jones on his plant examples. There are some things to consider that make Mr. Jones’ system different from Kings Bay: 1) there hasn’t been a lot of aquatic plant control in terms of historical spraying or plant removal, boat traffic or harvesters, 2) there is no real sediment build up as in Kings Bay and, 3) there is no strong tidal flow or creek system. Mr. Czerwinski stated the sediment build-up is one of the reasons we have a continuing source of nitrogen in Kings Bay as illustrated by the 2005 Bellingier study. Mr. Hopkins commented there is nitrogen, copper, lethal mercury and various other toxic elements in the sediment and the mercury is coming from the coal-fired plants and rock forms.

Mr. Jones stated he would like to start a Lyngbya removal project this fall like the one done in Hunter Springs. It would be a five-year plan involving volunteers’ hand-harvesting dense areas of Lyngbya and possibly working with Mr. Edwards to deposit on the conveyor belt of the weed harvester for easier removal. Chair Grubman thanked Mr. Jones for his presentation.

In response to a question from Ms. Clodwick, Mr. Hopkins stated 80% of the spring vents in Kings Bay have closed. There are some that can be reopened however others either have no access or have been built over.

5. **Water Quality-Tsala Apopka**

**approx. 33 minutes into the meeting**

- a. Aaron Rogge, SWFWMD, presented a slide depicting the various lakes within the Tsala Apopka Chain color coded to separate the three pools: Floral City, Inverness and Hernando. There are approximately 13 lakes with the best and most consistent sampling frequency and Lake Magnolia is the only lake without data. Mr. Rogge presented three slides depicting Total Nitrogen, Total Phosphorous, Total Chlorophyll, and Trophic State Index levels based on a Green=Good, Yellow=Fair, and Red=Poor rating system used to compare the lakes and noted the numbers were not official state standards. Mr. Rogge noted

in most locations, the water quality in 2011 is much better than 2010, the data for all lakes was well within state standards and are consistent with seasonal trends and averages. In response to Chair Grubman's question, Mr. Rogge stated rainfall and additional flow may be a contributing factor in the better water quality this year. Mr. Rogge presented the "Report Card" template that SWFWMD would like to implement in place of the current Water Quality handout. This format would streamline the data based on the Good, Fair, Poor system and have a narrative section that would summarize how the system is behaving. Mr. Czerwinski commented he would like to see wet season/dry season data differences on the report card as well. Upon no objection from the Board members, Chair Grubman stated they were in approval of the new format and requested staff to add detail as needed. Mr. Czerwinski stated he would like to see the "Report Card" system used on the 22 systems in the Coastal area affected by the 305D report. Chair Grubman thanked Mr. Rogge for his presentation.

6. **Nutrient Criteria**

**approx. 45 minutes into the meeting**

- a. Veronica Crow, Environmental Manager, SWFWMD, gave an update regarding the EPA's establishment of numeric nutrient criteria in Florida. Mrs. Crow presented the following background information: In February 1998, EPA published a Clean Water Action Plan stating they would establish criteria by 2000 to be adopted by all states by 2003/2004. In August 2008, EPA was sued by a coalition of environmental groups for failure to do so and violating the Clean Water Act. January 2009, EPA declared numeric nutrient criteria necessary for the state of Florida only and amended the lawsuit to include this declaration. August 2009, EPA signed a consent decree thus settling the lawsuit and creating a timeline in which criteria would be set (January 2010-Draft Freshwater Criteria/November 2010-Final, November 2011-Draft Estuarine & Coastal Criteria/August 2012-Final). So far, all timelines have been met. On December 6<sup>th</sup>, 2010, EPA published Final Freshwater Criteria, enforceable March 2012, limiting nutrient pollution entering lakes and streams statewide and streams outside of South Florida (Lake Okeechobee and South). The canal systems will be addressed in the Estuarine & Coastal portion of this rule due to lack of data for those systems. This rule includes a Site-Specific Alternative Criteria (SSAC) process for stakeholders who do not like the number set by EPA. Ms. Crow presented a slide showing the mechanisms for addressing site-specific conditions. SSAC can be developed for TN, TP, Chlorophyll a (lakes) and Nitrate+Nitrite (springs). It can be applicable to any length of a water body or watershed and can be more or less stringent than the applicable criteria.

Ms. Crow stated the EPA's cost estimate to implement the new rules range between \$200-230M and because the economic impact is dominating public discussion, they have agreed to an independent cost study analysis to be conducted by National Academy of Sciences.

Ms. Crow discussed the various legal challenges and stated it will likely be years before resolved however, the Federal Rules remain enforceable while under challenge.

In April 2011, FDEP petitioned EPA to withdraw their 2009 determination that NNC are necessary in Florida, halt nutrient rulemaking for Florida estuaries & South Florida canals and return nutrient control back to the State level. FDEP cited a March 18, 2011 memo from EPA's Office of Water which detailed eight elements needed for an effective program to manage nutrients and stated their petition was based on the fact they felt they were currently addressing all eight elements. EPA responded June 13, 2011, and took no action. EPA went on to state they would repeal the existing 12/2010 rule if FDEP approves protective criteria sufficient to address the 2009 Determination. FDEP is currently pursuing and drafting rule language pursuant to Chapter 32-302 and 62-303.

In response to a question from Mr. Martyn Johnson, citizen, and Mr. Czerwinski, Ms. Craw stated FDEP is responsible for implementation and enforcement however ultimately the responsibility will fall on the permit holders (local government, industrial discharger, etc.) to come into compliance with the numbers.

10. **Public Input (Item taken out of agenda order.)**

Capt. Ray Wright, citizen, stated the fisheries in the area have declined and need to be rebuilt. The aquatic weeds need to be managed for fisheries. Chair Grubman stated the water is low and rainfall is needed. In response to Mr. Sawyer, Capt. Wright stated he did get with Mark Edwards and the County and they have done some projects that have been helpful but more is needed. Chair Grubman stated Mr. Edwards and Allen Martin have been the best source of restoration work in the county. Mr. Czerwinski suggested Mr. Wright prioritize and map out areas he and other guides believe need work then bring back to the Board to work with Allen and Mark to determine funding possibilities and add to the Report to the Legislature.

7. **Chassahowitzka Dredging Update**

**approx. 1 hour, 36 minutes into the meeting**

Mr. Philip Rhinesmith, SWFWMD, stated the consultant has completed final design for the project. The Request for Bid was released September 9<sup>th</sup> with the pre-bid meeting scheduled for September 26<sup>th</sup> and the bid opens October 11<sup>th</sup>. Mr. Rhinesmith stated FDEP has issued a Notice General permit. To date, the US Army Corps of Engineers has not issued the Nationwide 27 permit as it requires approval by the State Historic Preservation Officer-Cultural & Historic Resources Preservation and NOAA-Division of Marine Fisheries but is confident it will be received prior to the April thru October construction window. SWFWMD is currently routing a Memorandum of Agreement for signature by Citrus County BOCC to perform site prep and pavement remediation. In response to a question from Mr. Johnson, Mr. Rhinesmith stated the benefits of dredging Homosassa and Chassahowitzka Rivers is water quality, sediment removal and recreation.

8. **Report to the Legislature Preparation**

**approx. 1 hour, 44 minutes into the meeting**

Chair Grubman provided a handout regarding potential projects to be included in the draft Report to the Legislature.

Mr. Czerwinski provided a draft proposal for restoration of Kings Bay. Ms. Clodwick stated Lake Rousseau needs a management plan for birding, fisheries and recreation to

include stakeholder input. The group agreed they would hold a special conference(s) in 2012 to gather information for determining a management plan.

Mr. Czerwinski stated Tallahassee is looking for projects that include the funding requirements. All members agreed to include the Draft Proposal for Kings Bay Restoration in the report to the Legislature.

The group discussed the possibilities of getting more water into Tsala Apopka. Chair Grubman stated he would like to see inlets created that connect the river to the Inverness and Hernando pools to move water into the pools when the river is high or possibly utilize pumps. Mr. Sawyer commented regarding dredging of the Orange State Canal or modify the gate system. The group discussed the USACOE study that SWFWMD has taken over. In response, Ms. Craw stated to her knowledge, it was to be completed this year however the model was delayed to March 2012. Mr. Rhinesmith later confirmed Ms. Craw's response. After some concerns raised by Mr. Mark Edwards, it was determined a feasibility study and alternatives analysis may be needed.

Chair Grubman stated he would like to see accomplishments by other agencies/organizations consistent with the task force mission but not necessarily the result of the task to be included in the report.

Mr. Moberly stated to use caution when asking for funding especially when recurring costs are needed.

The group discussed possibly including prior guest speaker's presentations/comments and if they want to include the requested items from last year's report. It was decided the only project from the 2010 Report to be included in the 2011 Report should be Point Lonesome Harvesting.

Ms. Craw confirmed the items the group decided to include in the 2011 report to the legislature as follows:

1. Potential Kings Bay Restoration Plan to include SAV replenishment and dredging.
2. Tsala Apopka/Feasibility Study and Alternatives Analysis-create inlets for the Inverness and Hernando pools.
3. Lake Rousseau Management Plan (Reference Only-No \$ Requested)
4. Accomplishments by other agencies constant with Task Force mission.
5. Remove all 2010 requests with the exception of Point Lonesome and Improvement of Marsh Habitat sections.
6. Possible inclusion of noting presentations to the Task Force.
7. Identifying matching funds from local partners that may be available.

11. **Agenda Items for Next Meeting**

Follow-up on the Report to the Legislature

12. **Actions Items for the Next Meeting**

None.

13. **Adjournment**

There being no further business or announcements presented before the Task Force, the meeting was adjourned at 4:55 p.m.