



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD)  
WATER RESOURCES ADVISORY COMMISSION (WRAC)**

**Lake Okeechobee Committee Meeting**

**WEDNESDAY, SEPTEMBER 30, 2009, 09:00 AM**

**Indian River State College - Okeechobee Campus**

**2229 NW 9th Avenue**

**Okeechobee, FL 34972**

**MEETING MINUTES**

**Members and Alternates Present:**

<b>Douglas Bournique</b>	<b>Noel Chandler</b>
<b>Newton Cook</b>	<b>Don Fox</b>
<b>Ted Guy</b>	<b>William "Chad" Kennedy</b>
<b>Mary Ann Martin</b>	<b>Linda McCarthy</b>
<b>Barbara Miedema</b>	<b>Roland Ottolini</b>
<b>Jeff Schmidt</b>	<b>Ray Scott</b>
<b>Charles Shinn</b>	<b>John Winfree</b>
<b>Paul Reynolds</b>	<b>Jacqui Weisblum</b>
<b>Linnette Matheny</b>	<b>Roel Herrera (Seminole Tribe)</b>

**Item 1. Welcome and Introductions - Kevin Powers, Chair**

Chair Powers introduced himself and welcomed everyone. Pursuant to Chapter 120, F.S., he changed the agenda for good cause by moving Item 8: Adaptive Protocols Update to Item 5; moved subsequent items down one, and renumbered. He asked members and alternates to introduce themselves and the organizations they represent.

**Item 2. Member Issues**

**MaryAnn Martin (Roland and Mary Ann Martin Marina):**

- Interagency Group on Aquatic Plant Control should use mechanical harvesters to control water hyacinth and water lettuce.
- Private drainage districts should control hyacinths and water lettuce before those plants reach the lake.
- Bird and plant life have recovered on the Lake: Fishing (and economy) should be better this year.

Doug Bournique (FL Citrus League):

- Water farming is being seriously discussed. Can store more water on fallow acreage at much lower cost.
- Need dispersed water storage in the Kissimmee Basin.
- Ten Mile Creek reservoir: Inability to store water there is hurting the citrus industry.
- Status of Lake Okeechobee Burn Plan?  
Rick Smith (SFWMD): This committee and WRAC supported a recommendation on dispersed water storage (within SFWMD budget limitations).
- Phase I of the burn program is in place. Phase II is being developed.
- The U.S. Army Corps of Engineers (USACE) could not be here today; will work with the Corps to get a presentation to the Committee and WRAC on Ten Mile Creek.
- Chair Powers recognized new members Paul Reynolds (Sanibel) and Linnette Matheny (Osceola County).

Honorable Noel Chandler (Okeechobee Co. Commission):

- Thanked SFWMD, FDEP, and USACE for removing Brazilian pepper and other exotic invasive plants in the Okeetantee area.

Barbara Miedema (FL Sugar Cane Grower Cooperative):

- Thanked Kevin Powers for taking on Chair of the Lake Okeechobee Committee.
- Need to “Save the Lake to Save the Everglades”. The Northern Everglades Program (NEPP) is a good first step to improve water quality, timing and distribution.
- Ninety-eight percent of nutrients come from north and west of lake; only 2% from the Everglades Agricultural Areas (EAA).
- The EAA feeds the eastern United States for 8 months per year. Agriculture is an important economic sector that has been steady through the recession. Agricultural activities and ecosystem can coexist.

Ray Scott (FDACS):

- The U.S. Department of Agriculture recently ruled that cost share payments for Best Management Practices (BMPs) capital projects can exclude cost share from farmers Adjusted Gross Income for tax purposes.

Don Fox (FWCC):

- Lake fishery is recovering and there is good reproduction of fish species. New regulations require more release of black crappie and speckled perch; shad are coming back.
- FWC is proposing to manage aquatic plants from Indian Prairie to the mouth of the Kissimmee River – FWC is now planning projects for next spring.
- Water hyacinth: There are 2,000 acres of hyacinth on the lake; FWC is aiming for 1%; so will be spraying more this year to catch up and prevent 2,000 acres expanding to 6,000 acres.
- If Water hyacinths go to seed, the plants can reproduce for up to 10 years - it is critical to keep plants under control.

Charles Shinn (FL Farm Bureau Federation):

- Lake level looks great, however, the USACE is concerned about safety of the Herbert Hoover Dike. Need water to stay in lake; don't know if drought will return in spring.
- Recent Ten County Coalition meeting agenda item on Lake Hicpochee restoration was interesting – the question will be water quality coming from Lake Okeechobee.
- Must fix the legacy phosphorous problem on Lake Okeechobee. Need to set a high priority and fund projects to resolve the water quality problems.

Newton Cook (United Waterfowlers - UWF):

- Recent news article “Lake O Pollution Levels Spike”: 572 tons/Phosphorous (P) per year, and there are no current cleanup plans for 100 tons of that amount. “P” loading also coming from the Kissimmee Basin. UWF supported a bill in Legislature last year to require zero percent P in urban turf fertilizer sold in Florida. The bill almost passed and will try again this year. SFWMD needs to support the legislation.
- Results: Recently surveyed Home Depot and other retailers: 80% fertilizer stocked had P a year ago. Now down to 40%. That represents hundreds of tons that won't go to water bodies - at no cost to the taxpayers.
- Announced FWC rule hearing on 10/1/09 to change definition of “take”. Current definition is “can't molest”; FWC is proposing to change definition to “cannot harass”. This will apply to threatened as well as endangered species. Dozens of small creatures will be included. SFWMD needs to be aware.
- Chad Kennedy (FDEP): Following the Fort Pierce protected barrier island project, FDEP was requested not to initiate additional island projects. City of Pahokee and Glades County are working on permits for island projects. Need everyone to be aware that there is a moratorium on these projects.
- Roland Ottolini (Lee Co. Natural Resources): Good progress on the C-43 Reservoir moving ahead; hope to see a Chief's Report very soon. Lee County has an active fertilizer ordinance which bans fertilizing during the rainy season to avoid runoff. County is continuing work on water quality and the “Total Maximum Daily Load” (TMDL) standards for the Caloosahatchee system.

**Item 3. Water Conditions Update - Cal Neidrauer, Chief Engineer, Operations Control Dept., SFWMD:** Cal Neidrauer presented. No questions or discussion.

**Item 4. Lake Ecology Update - Dave Unsell, Director, Lake Okeechobee Div., SFWMD:** Dave Unsell presented. Discussion:

- Mary Ann Martin: Any plans for dredging the center (pelagic) area of the lake?
- Dave Unsell (SFWMD): There are 300 square miles and 100 million cubic yards of material. There is a need but it would be very expensive. Disposal siting and costs put the project beyond our resources at this time.
- Mary Ann Martin: Storms from the north create high waves which stir up the bottom and shift the sediments around. Need to make this a priority or there will always be polluted lake water.

- Chad Kennedy: Status of the soil tilling demonstration?
- Dave Unsell: Results were good – can bring back more detail to the Committee.

**Item 5. (Was Item 8). WRAC Issues Workshop on Adaptive Protocols for Lake Okeechobee - Status Update: Susan Gray, Ph.D., Dep. Director, Watershed Mgt. Dept., SFWMD:** Susan Gray presented.

- Roland Ottolini: What are optimum flows to the Caloosahatchee?
- Susan Gray (SFWMD): Working on the optimum flow envelope for the estuaries and will discuss at the upcoming workshops.
- Barbara Miedema: Include on Adaptive Protocols e-mail list (workshop dates conflict with schedule).
- Rick Smith (SFWMD): Will make sure information is sent to all interested persons and the Committee.
- Don Fox: Adaptive Protocols workshop needs to address nesting needs of the Snail kite during the upcoming dry season.
- Susan Gray: Need information from the FWC on nesting needs and depth of the water in order to develop appropriate performance measure for the Snail kite.
- Chad Kennedy: When new Adaptive Protocols are recommended, will need to reevaluate the Minimum Flows and Levels for Lake Okeechobee. FDEP will need to revisit the recovery plan.

**Item 6. Northern Everglades and Estuaries Protection Program (NEPP) Update - Pinar Balci, Ph.D., Northern Everglades Lead Technical Program Specialist, Everglades Restoration and Capital Projects, SFWMD:** Pinar Balci presented. Discussion:

- Barbara Miedema and Ray Scott: Questions and discussion about:
  - Number of acres, and volume of water being treated in the pilot projects
  - Size (acres) at Lakeside Ranch?
  - Dave Unsell: About 2,000 total – 900 at one site and 1,100 at the other.
  - Could technology help improve performance of STAs in the EAA; and costs?
- Dave Unsell: Most are small acre projects and if added up would likely not exceed 40 acres. Not equivalent to Stormwater Treatment Areas (STAs), and not enough acreage at this time to help meet the Lake Okeechobee TMDL. They are, however, showing 80-90% treatment efficiency. Volume of water is about 10 cfs now. Good chance of scaling that up. Transfer technology to EAA is speculative at this point and cost would be higher than STAs.
- Newton Cook: Challenge is to get water quality in the lake to 110 parts per billion (ppb). Need SFWMD support for urban turf fertilizer bill in the 2010 Legislature. The Kissimmee Chain of Lakes is the best STA we have and it is cost free. Need to keep reasonable amount of submerged aquatic vegetation (SAV) to help remove nutrients, but still need to control water lettuce, hyacinth, etc.
- Pinar Balci (SFWMD): Can emphasize passive treatment options in upcoming rule making and can extend “Works of the District” rule to estuaries.
- Jacqui Weisblum (Audubon of FL): Lake Okeechobee Technical Plan does not meet the Lake TMDL by 2015. There are other opportunities to help reach the

target. Removing nutrients north of the lake will help.

- Roland Ottolini: Glad to see the synoptic flow measures in the water quality monitoring plan – is that anticipated to go more than one year; and when is new Environmental Resource Permit rule expected? When in place, that will improve the runoff situation.
- Pinar Balci/Temperince Morgan (SFWMD): Water quality monitoring funded for 5 months by SFWMD; however, FDEP will provide additional data to help continue the effort. The ERP rules are under discussion so don't have a schedule. SFWMD looking at using existing authorities. Will move forward as quickly as possible.
- Chad Kennedy: FDEP Statewide Stormwater Rule moving forward and Citizens Advisory Committee still meeting to work on it.
- Mary Ann Martin: Questions about use of water hyacinth as a treatment plant. SFWMD needs to be more involved in selective spraying on the Lake.
- Dave Unsell: The roots are coated with alum which helps absorb more phosphorous. The treatment cells dry down in dry season and when the plant dies, they are tilled into the soil.
- Chad Kennedy: The stormwater rule is moving forward. Mostly focuses on new construction.
- Paul Reynolds: Question about how the monitoring sites in the Caloosahatchee system were selected and time of year data will be collected: Time of year is very important. SFWMD (P.Balci): 16 primary sites and 14 secondary sites were selected based on existing and proposed monitoring needs; analyzed past data. SFWMD is currently collecting data and will provide a report on flows and water quality monitoring.

#### **Public Comment:**

- Charles Lee, Audubon of Florida: "Water farming" or "distributed storage" has evolved. Because of fiscal climate, SFWMD should start shifting to dispersed storage instead of building expensive large reservoirs with high dikes. This afternoon, options will be presented to the Committee. This should be a District priority. SFWMD needs a comprehensive effort to look at the opportunities and the locations; inventory farm ditches and canals over about 1.5 million acres. Retaining an additional foot of water on 1.5 million acres would avoid need to build new reservoirs. Need to expand pilot projects to next level; will help landowners stay in business and protect endangered and threatened species.

#### **Item 7. Working Lunch - 12:15**

#### **Item 8. Dispersed Storage and Treatment Update**

**A. Dispersed Storage and Treatment Overview - Benita Whalen, Deputy Department Director, Regulation, SFWMD.** No questions or discussion.

**B. Florida Ranchlands Environmental Services Project (FRESP) Update - Sarah Lynch, Director, Agriculture, World Wildlife Fund. Discussion:**

- Doug Bournique and Barbara Miedema: Questions and discussion about:
  - Length of the contract with the ranchers?
  - Sara Lynch: Began with 3 year contract; extended to 5 years to match funding with the pilot program.
  - Availability of federal funding for these projects?:
  - Have had meetings, but need to work out common sense approach to endangered and threatened species issues with U.S Fish and Wildlife Service.
  - Will return be similar to growing crops?
  - Depends on costs/acre to grow. Trees take 15 years to produce fruit so could hold 2-3' of water for 10-12 years. Need option for 200,000 acres of fallow land in Indian River and St. Lucie counties, otherwise property appraisers are going to tax at higher rates. Could not if those lands are storing water.
  - Sarah Lynch: Working on best reimbursement options.

**C. Wetland Reserve Program (WRP) Update- John Winfree, Senior Field Representative, The Nature Conservancy. Discussion:**

- Don Fox: According to the CERP and NEPP plans we'll need 900,000 to 1 million acre feet of added storage. Any estimate of evapotranspiration (ET) and infiltration losses from the dispersed storage sites? Need to run model simulations as part of the River of Grass Phase II planning process. Any assurance that ten years from now there will be equivalent storage without reservoirs?
- Sara Lynch: Purpose is to store excess water. Some ET losses will be acceptable. Contracts would be step-wise and as one closes out, new contracts could move forward. Many FRESP projects can be changed to provide maximum storage; however, will need to integrate into the regional system.
- Newton Cook: The District can't depend on this type of shallow storage. Permanent easements better than 10-15 year contracts. If SFWMD spends money on this and can't do other projects, won't reach goals.
- John Winfree: We can solve state problem and accomplish federal objectives at the same time. These are tools. The funding is there now and we need to take advantage of it. These are permanent easements. The "6-10 years" referred to funding opportunities.
- Jeff Schmidt (USDA/Natural Resources Conservation Service - NRCS): Wetlands Reserve Program (WRP) is very popular, good for some but not for others. We received \$80 million for WRP this year. We are hiring a team to go from application to implementation in Florida. This group will be getting program funding from beginning to end. Not everyone that signs in gets into the program. There are many requirements including contribution to other conservation goals. New grazing provisions are appropriate where the other conservation goals can

be met. The program was not designed for Florida and needs to be adapted and plugged into the next Farm Bill.

- Ray Scott: The WRP is important to Florida for restoration and control of invasive plants. The grazing rights part of the program is compatible with the WRP management plan.
- Temperince Morgan: SFWMD is and will continue to evaluate dispersed and distributed water storage. Expect some sites to perpetually store water: important to see duration of benefits, lowering of P concentrations, etc. Will evaluate mix of distributed storage, and regional storage and treatment. Regional facilities will still be needed to meet plan goals and objectives.
- Benita Whalen: New water storage areas can reduce water demand from other sources.

**D. Wrap Up - Benita Whalen, Deputy Department Director, Regulation, SFWMD:**

- Comments on approach, program emphasis and level of effort?
- Comments on Program Management: Should SFWMD develop a project solicitation process where proposed projects would be compared to standards and select the most cost effective and beneficial?
- **Members discussed aspects of these questions. There appears to be support for SFWMD to move forward with the program and to evaluate options. No Committee action was taken at this time.**

**Public Comment:**

- Martha Musgrove, representing the Marshall Foundation: Need to keep agriculture viable and the best way to preserve agriculture is to keep it profitable. Everglades Coalition Conference will meet in January of next year. Paul Gray and Sara Lynch will do a presentation on FRESP and John Marshall will do a presentation on how to assess the value of ecosystems. We agree that there is a need for different types of storage, but want to emphasize the value of preserved wetlands as storage. Data on the value of the ecosystems can be found in the "Costanza" report.
- Charles Lee, Audubon of Florida: The NRCS programs and others, have limitations. The SFWMD needs to evaluate those as pilot models. Need to look at how much dispersed storage can be created (with help from landowners). What is cost to store a foot of water? Analyze the costs, and decide the most cost efficient benefit. The facts should drive the decision. Explore all the alternatives.
- Pam Fentress, 4D Citrus and Sod Farm: We own groves in Highlands and Glades Counties. One grove is adjacent to Lykes Westwater Marsh. The FRESP projects are great but adjacent landowners need protection. Monitor wells for phosphorus testing have to be in place. The SFWMD must assure that no adverse impacts will occur to adjacent property owners from excessive water storage.
- Paul Reynolds: STAs advantage is filtration. Stacking water in the hot Florida sun does not help provide water quality improvement. Don't see advantage of creating numerous areas with water quality problems.
- Rick Smith/Temperince Morgan: Explained origin of Committee

recommendations for increased water storage. Evaluating all the water storage and treatment options south and north of the lake as part of the River of Grass Phase II Project Planning process. Believe with engineering and modeling can address the problems with combination of dispersed/distributed and regional storage and treatment systems.

- Benita Whalen: Assured Ms. Fentress that the SFWMD investigates to provide assurance to property owners that there will be no adverse impacts from projects. Have and will continue to provide information to 4D Farms and to resolve these issues.
- Charles Shinn: Agree. Spend years evaluating possible impacts of federal assistance programs on adjacent landowners. Need to be prepared to make the adjacent property whole through compensation, mitigation or other.

Rick Smith: Future Meetings:

- December 3 joint meeting of WRAC and Lake Okeechobee Committee in Key Largo
- Next Lake Okeechobee Committee meeting February 24 in Clewiston; will try to organize a site visit to the Lake.

**Item 9. Adjourn: 2:45 p.m.**