

Southwest Florida Regional Planning Council
Caloosahatchee Basin Board Subcommittee Report

The inaugural meeting of the CBB subcommittee was held on March 16, at the SFRPC office

The first meeting was a get acquainted and committee direction meeting the attendees were:

County Representatives

Commissioner John Albion, Lee County BOCC
Commissioner Tom Henning, Collier County BOCC
Commissioner Darrell Harris, Hendry County BOCC
Commissioner Paul Beck, Glades County BOCC

City Representatives

Mayor Jay Arend, City of Bonita Springs
Vice Mayor Mick Denham, City of Sanibel
Councilman Bill Willkomm, City of Naples
Mayor Mali Chamness, City of Clewiston
Councilman David Lyons, City of LaBelle
Councilman Mickey Rosado, City of Cape Coral

Agency Representatives

Ms. Carla Palmer, SFWMD – South District Office
Ms. Rhonda Haag, SFWMD
Mr. Jon Iglehart, FDEP

Staff

Mr. Wayne Daltry, Lee County Smart Growth
Mr. David Burr, SWFRPC
Mr. David Crawford, SWFRPC

after the preliminary introductions the key topics were as follows:

- It was agreed that this meeting would focus on short term actions less than one year
- Members gave inputs as to their key concerns, interesting to note there was a lengthy discussion on the concerns of runoff along the Caloosahatchee, unincorporated Lee County with

particular concern on septic systems contamination of the waterway

- The committee agreed that a timetable of all actions that are planned to improve the water quality in the Caloosahatchee Basin over the next 6 to 8 months would be provided to the committee, and the committee would actively monitor progress I expect to receive the end of this week
- I was able to circulate to all committee members the following document:

Proposed list of City of Sanibel Priorities Regarding Excessive Discharges of Polluted Freshwater from Lake Okeechobee into the Caloosahatchee Estuary

Copy of report attached

The next meeting will be on April 20

Mick Denham

8. OLD BUSINESS

b. Water Quality Issues

6. Proposed list of City of Sanibel priorities regarding excessive discharges of polluted freshwater from Lake Okeechobee into the Caloosahatchee Estuary

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Proposed List of City of Sanibel Priorities Regarding Excessive Discharges of Polluted Freshwater from Lake Okeechobee into the Caloosahatchee Estuary

Statement of the Problem:

The waters surrounding Sanibel define our island community. The quality of our waters, and the marine life within, is now at risk because of massive and prolonged water discharges from Lake Okeechobee into the Caloosahatchee River. These discharges contain heavy nutrient loads, especially nitrogen and phosphorus, that contribute to algae blooms, as well as dense sediments that can cover grass beds and be re-suspended whenever the wind blows. Impacts to seagrass beds, vital to the health of the estuary, have been particularly severe. The agencies responsible for these discharges are the South Florida Water Management District and U.S. Army Corps of Engineers. It is the City of Sanibel's intent to get these agencies to change their policies and construct the necessary changes to the Lake Okeechobee water management infrastructure so that our estuaries are no longer threatened.

Tier 1. Proposed Top Priorities:

1. The Lake Okeechobee operational model used by the South Florida Water Management District (SFWMD) to predict Lake inflows and levels needs to be updated to account for current wetter climatic conditions and more runoff from developed areas. The existing model underestimates inflow from the north (Kissimmee Basin) as a result of being based on the assumption of drier conditions than are now occurring and expected to occur for the next 30 years and major changes in land use to the north that are increasing flows to the Lake. This underestimate of predicted Lake levels results in too much water being kept in the Lake for water supply (for agriculture and human consumption), such that as a consequence, more frequent excessive Lake releases are made to the estuaries on both coasts.
2. As a result of the anticipated wetter years and the reality of more flows from the north as a result of rapid land development, it is clear that the volume of proposed storage and other methods of handling excess water as a part of the Comprehensive Everglades Restoration Project (CERP) will be woefully inadequate. An additional @ 1 million acre-feet of storage is necessary to substantially reduce the likelihood of harmful "emergency" releases to the Caloosahatchee and St. Lucie Estuaries. We ask that the State and the Federal Government recognize this shortfall and work together to identify now how to handle this additional water and begin implementation of land purchases and projects to make this happen.

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3. The City supports and encourages the State to purchase and place Temporary Forward Pumps at Lake Okeechobee water supply outflows to enable the Lake to be managed at lower level. We also urge the Governor to encourage the SFWMD District and FDEP to support new U.S. Army Corps of Engineers Lake Okeechobee Water Supply Environment (WSE) Release Schedules and accompanying Decision Trees that operationally reduce discharges to the estuaries and that consider the health of marine seagrass in the Caloosahatchee estuary as a primary Decision Tree component.
4. We strongly encourage the State to work with the Corps to finance, design and construct a significant WQ component for the C-43 Reservoir. A Stormwater Treatment Area (STA) area is essential for the C-43 reservoir project so that water quality improvements are made prior to any releases from the reservoir into the Caloosahatchee. Lands necessary for the STA adjacent to the C-43 Reservoir need to be acquired as soon as possible to prevent conflicting land uses from blocking the project.

Tier II and III Priorities:

1. Once Lake Okeechobee is at a lower level that can be operationally maintained, releases to the Caloosahatchee River should be of a maximum of 800 cubic feet per second (cfs) average over a 30 day period as measured at the Franklin Locks (S-79) during the dry season (November-May), and a maximum of 2800 cfs average over a 30 day period at S-79 during the wet season (June-October). These maximum release levels are based on the findings of SFWMD biologists in order to protect the most important estuarine components including marine seagrasses, spotted seatrout and oysters.
2. New flow-ways through the EAA and WCA's and more storage are needed to enable the release of more Lake water south into the Everglades. These new waterbodies could benefit local communities as recreational amenities.
3. The State should plan together with the federal government to fund the full "skyway" road along Tamiami Trail to allow more water to flow towards Florida Bay as part of the proposed "Mod-Waters" CERP project. Currently the 11 miles that was proposed by the scientific community has been scaled back to 3 miles due to budget restraints.
4. The current design of water control structures at s-77 and s-79 releases water from the bottom, which results in discharges of polluted Lake sediments and churns this muck into suspension in the water column, severely reducing water clarity. Releases over the top of the structure would result in undesirable floating vegetation and debris reaching the estuary. The City urges the redesign of these two structures so that they release from the middle of the water column rather than the top or bottom. A mid-water release could reduce high phosphorus sediment loads in the Caloosahatchee Estuary. A program of mechanical removal

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of sediments and floating debris upstream of each structure could then remove these pollutants from the system.

5. It would be helpful for the State and the Corps to clearly state short term operational goals for the Lake this Spring so everyone knows what to expect. A goal stated by both the Corps and District staff at the February 22nd Lake Okeechobee Water Resources Advisory Committee of the SFWMD was to perform releases that result in a Lake level of @ 12.5' before the rainy season to allow for enough freeboard to handle another expected wet rainy season. This goal (if it truly is one) should be stated publicly to avoid misconceptions.
6. Some way must be found to remove the polluted muck from the center of Lake Okeechobee. One encouraging suggestion includes the dredging of muck from the bottom onto newly created spoil islands in the lake that could be designed with filter marshes to improve Lake water quality.
7. The District should accelerate currently proposed projects and plan for additional storage north of the Lake in the Kissimee River Basin. Operationally, water should be temporarily held in northern basin Lakes even above regulation schedules if necessary to assist Lake Okeechobee in recovering from its current condition.
8. The District and the Corps should re-examine regulatory schedules for Water Control Areas (WCAs) that release water to canals along Florida's east coast to allow for more water to be released from the Lake to these same WCA's. The current conservative regulatory schedules contribute to the lack of capacity for releases to the south.
9. Work with Department of Agriculture and federal entities to temporarily halt spraying for cattails and exotic vegetation along Lake Okeechobee to reduce accumulation of dead organic matter. In the Lake's degraded condition, this dead material is reducing oxygen in Lake waters and contributing to the excessive nutrient load.
10. Direct the Florida Department of Community Affairs, the SFWMD and FDEP to help prevent conversion of EAA lands to residential subdivisions or other development that will forever preclude the ability to utilize these lands for water storage and flow-ways.
11. The Aquifer Storage and Recovery (ASR) component of CERP is vital in providing an alternative destination for excessive Lake water. However, the initial design and permitting of experimental ASR wells have been blocked and delayed by excessive State and Federal red tape. We need to know very quickly whether this technique is going to be viable and the red tape needs to be removed.

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12. Recently, more consideration has been given to the idea of abandoning the pulse releases into the Caloosahatchee River, at least temporarily, in favor of a steady release level at a lower rate. The pulse release format is designed to mimic a rainfall event and from a salinity standpoint alone that appears to make good common sense. However, since the water quality of the Lake has declined so drastically, the highest daily release levels of those pulse events now results in extraordinary pollutant loading to the Caloosahatchee River and Estuary. With the elimination of the highest releases at the top of the pulse, natural rainfall events and basin run-off could then serve to dilute the polluted Lake water and reduce nutrient related impacts to the River and Estuary. The City supports a careful analysis by the State and Corps of the pluses and minuses of switching to a lower level, and more steady releases to the Caloosahatchee.
13. Accelerate the Total Maximum Daily Load (TMDL) determination and implementation for the Caloosahatchee River, especially for nitrogen and phosphorus loading. The timetable for this project is currently not until 2009 and FDEP needs to make this much more of a priority for this severely impacted waterbody.
14. Consider the use of Recyclable Water Containment Areas for storage on agricultural land as proposed by E. A. Hanlon. "Water Farming" needs to be put into place quickly to the greatest degree possible until more permanent solutions are implemented.
15. Land acquisitions in all areas of the basin should be prioritized and accelerated wherever possible, since every little bit of storage helps to reduce and treat urban runoff and land is not getting any cheaper.
16. Prohibit all back pumping of agricultural water back into the lake regardless of lake level. Currently this damaging practice is still done during times of high water in the EAA.