Impacts of Freshwater Releases from Lake Okeechobee on Sanibel Island and the Coastal Waters of Lee County

The freshwater plume extends out of Redfish Pass into the Gulf of Mexico on July 10, 2013.
The freshwater plume is clearly visible in the Gulf of Mexico through Blind Pass on Sanibel Island on July 10, 2013.
The freshwater plume extends past the Sanibel Causeway and Sanibel Lighthouse Beach Park on July 10, 2013.
The freshwater plume extends out of Redfish Pass into the Gulf of Mexico on July 10, 2013.

Photos by Sanibel Captiva Conservation Foundation

Impacts of Freshwater Releases from Lake Okeechobee on Sanibel Island and the Coastal Waters of Lee County
The typically clear beaches at Sanibel’s Lighthouse Beach Park are covered with expanses of dead seagrass on July 26, 2013, just over a month after the freshwater plume hit the Gulf of Mexico.
Impacts of Freshwater Releases from Lake Okeechobee on Sanibel Island and the Coastal Waters of Lee County

Spatial Extent of Impacts
Lake Okeechobee Water Releases
SANIBEL LEGISLATIVE AND FUNDING PRIORITIES

FEDERAL PRIORITIES

1. Fully support the 2013 Water Resources Development Act (WRDA) bill, which includes authorization for the Caloosahatchee C-43 West Basin Reservoir Project; and appropriate the necessary funds to implement the C-43 Reservoir Project. (Reservoir will provide 170,000 acre-feet of storage within the Caloosahatchee basin and help address high and low flow issues.)

2. Fast track the Central Everglades Planning Project (CEPP) and get congressional support and funding for the project. (The project will move approximately 250,000 acre-feet of water south of Lake Okeechobee and will reduce some of the damaging flows to the St. Lucie and Caloosahatchee estuaries.)

3. The Federal Government needs to fund their share of the Comprehensive Everglades Restoration Plan (CERP) and implement the projects agreed to in the plan. (A majority of the lands needed for the projects have been purchased by the State and need Federal funding to move forward with the projects.)

4. Continue to keep pressure on the Army Corps to move as quickly as possible to rehabilitate the Herbert Hoover Dike. (The project will protect the communities around Lake Okeechobee and provide more freeboard and temporary storage in the lake to reduce peak flows to the estuaries.)

STATE PRIORITIES

1. Purchase the additional 153,209 acres of US Sugar lands south of Lake Okeechobee within the Everglades Agricultural Area at fair market value. The State currently owns 26,790 acres of land that was purchased for $197,396,088 ($7,400/acre) from U.S. Sugar Corp. as part of the Reviving the River of Grass Project, with an option to purchase an additional 153,209 acres. Initial purchase of the land would have short- and long-term benefits to the Caloosahatchee and St. Lucie estuaries by reducing the need for flood control on those lands (at a minimum, it could temporarily store 200,000 acre-feet of water). The purchase would also increase capacity in the stormwater treatment areas (STAs) south of the Lake, allowing more water within Lake Okeechobee to be moved into the Water Conservation Areas. When completed, this project could store or convey approximately 500k acre-feet of water south of Lake Okeechobee.

2. Interim storage on C-43 West Reservoir site – Project would significantly increase the amount of water that can be stored on the C-43 West Reservoir (Barry Groves) property. It would require additional infrastructure including building berms and installing larger pumps to put more water on the site. It could be considered phase I of the larger C-43 West Reservoir CERP federal project and could be included in the state cost share for the federal project. Estimated cost is $655,000 to increase total amount of storage on the site to 15,000 acre-feet.

3. Lake Hicpochee Restoration Project – Additional funds needed to complete planning and construction on south side to increase storage and treatment. Estimated cost is $4.5 million for construction of Lake Hicpochee South. Project benefits come from creation of a spreader canal that slows the rate water gets to the Caloosahatchee and improves water quality.

4. Increase distributed storage in Kissimmee, Lake Okeechobee, and Caloosahatchee basins. Additional funds are needed for the state to partner with large land owners in the Kissimmee, Lake Okeechobee and Caloosahatchee basins to store more water on the land so that it is not discharged to Lake Okeechobee or to the Caloosahatchee River. No cost estimate available, but new partners could be brought on as funds become available.

5. West coast site visit by Governor Scott with Mayor Ruane by air to see the impact the freshwater releases are having on the coastal communities.

Note: “The state needs to continue to fully support the Comprehensive Everglades Restoration Program (CERP) projects. Our biggest relief from the freshwater releases in the Caloosahatchee are going to come from the larger federal projects, which have much larger water storage benefits and can move water south into the Everglades. The state needs to continue to work with our federal partners to come up with strategies to move more water south of Lake Okeechobee.”
CITY OF SANIBEL

Mayor Kevin Ruane
James Evans,
Director of Natural Resources
800 Dunlop Road
Sanibel, Florida 33957
239.472.3700
James.Evans@mysanibel.com
www.MySanibel.com