

## **Caloosahatchee Minimum Flow**

January 18, 2011

By Commissioner Ray Judah

At their January 13 meeting, the South Florida Water Management District Governing Board, with the exception of Chairman Eric Buermann and West Coast representative, Charles Dauray, rejected reconsideration of water releases from Lake Okeechobee to the Caloosahatchee River. The lake water level is generally managed between 12.5 and 15.5 feet but is at 12.43 feet.

The SFWMD's decision to effectively shut off environmental releases to the Caloosahatchee while continuing to provide 100 percent allocation of water to agriculture in the Everglades Agricultural Area south of the lake and to utilities on the east coast, reflects blatant inequity of water distribution to natural systems.

The SFWMD uses the term "shared adversity" to justify excessive or no releases to the Caloosahatchee and coastal estuaries. However, it is apparent that only Lee County shares the adversity and devastation to our environment. While the SFWMD is quick to cut off flow to the Caloosahatchee, there are no water restrictions or conservation limits imposed on agriculture and the SFWMD continues to allow east coast counties, such as Palm Beach, to irrigate landscape three days a week while Lee County residents comply with year-round irrigation restrictions of two days a week under a local ordinance since 2005.

Coastal residents understand that excessive releases of water laden with phosphorous and nitrogen from Lake Okeechobee during the wet season results in harmful algae blooms, fish kill and increased frequency of red tide.

Less understood is that a minimum flow of freshwater during the dry season is critical to maintaining salinity levels for the health, productivity and function of the Caloosahatchee and coastal estuaries. Minimum flow is needed to sustain optimum salinity levels for submerged aquatic vegetation, prevent toxic algae blooms, and reduce risk of high chloride concentration resulting in costly operations or closure of the Olga Water Treatment Plant.

Freshwater tapegrass is an important indicator of healthy conditions in the upper estuary of the Caloosahatchee. Tapegrass provides critical nursery habitat for snook, redfish, shrimp and the larvae of stone and blue crabs. Manatees feed on the grass blades but, in the absence of the plants, are forced to migrate 20 miles downriver to find food. This travel distance requires the manatee to expend precious energy during cold winter months and increases risk of manatee/boat collisions.

Recent scientific assessment of conditions in the Caloosahatchee by the Sanibel Captiva Conservation Foundation indicate that the current salinity level is between 14 and 16 parts per thousand. Tapegrass becomes stressed and dies back above 10 ppt. Hundreds of acres of tapegrass in the upper estuary have been lost due to disruptive rate and volume of freshwater flow from Lake Okeechobee to the Caloosahatchee. Minimum flows are necessary to ensure tapegrass recovery when conditions improve. Without these flows, the Caloosahatchee will again experience the buildup of blue green algae that is a public health threat and lethal to fish and wildlife.

In 2009, during a prolonged dry season, Lee County government appealed to the United States Army Corp of Engineers to overrule the SFWMD decision to stop fresh water releases from Lake Okeechobee to the Caloosahatchee. The SFWMD argued that releases to the Caloosahatchee would be detrimental to agriculture. Fortunately, the USACOE exercised their authority to support freshwater releases on three separate occasions. These freshwater releases totaled 1.02 inches from Lake Okeechobee. The sugar cane industry, with the primary crop in the Everglades Agricultural Area, enjoyed one of their most productive years on record. Such findings proved that the survival of our river and estuaries is measured in inches.

The Caloosahatchee and coastal estuaries are critical to our environment and economy. Tragically, the cycle of destruction to our quality of life will continue as the sugar industry, the largest abuser and user of Lake Okeechobee water supply, and with greatest political influence, will continue to squeeze the lifeblood from our community.

Lake Okeechobee is a public resource but continues to be managed for private interests.