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July 18, 2011

Melissa Meeker Executive Director South Florida Water Management District 3301 Gun Club Road West Palm Beach, FL Via Email: mmeeker@sfwmd.gov

Subject: Lake Okeechobee MFL Violation

Dear Ms. Meeker:

This letter is to request and recommend the implementation of additional and effective recovery measures for Lake Okeechobee in recognition of the violation of the Lake's Minimum Flows and Levels (MFL) rule. We make this request in full and sympathetic knowledge of the changes and challenges the South Florida Water Management District's (District) leadership faces. Recognizing that the District has many competing and shifting priorities, it is important to make sure that managing Lake Okeechobee to avoid significant harm to fish and wildlife is one of those priorities.

Excess water withdrawals and the current extraordinary drought have caused the water level of Lake Okeechobee to be in violation of the state rule meant to protect the Lake from harm. During the 2010-2011 dry season a number of water allocation decisions placed the public and the environment at risk. Despite widespread and well-known forecasts of severe drought, water supply decisions favored supporting continued delivery of Lake Okeechobee water for sugarcane irrigation and other consumptive uses. Instead of rationing water earlier, the District released up to 22 inches of water for consumptive users throughout the dry season. In late May, the District installed and operated temporary forward pumps to continue allocations of water for sugarcane irrigation and other users despite extreme dry conditions.

Audubon calls on the District to undertake recovery measures with increased focus on efficiency and conservation to guard against future water shortages. Avoiding extreme low water levels in Lake Okeechobee is important for the people who rely on the Lake's water and the environment. Among other things, water from the Lake is essential to maintain the proper functioning of

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<sup>&</sup>lt;sup>1</sup> Water conditions and operations: Past, present and 2011 wet season outlook. SFWMD presentation to WRAC for the Adaptive Protocols for Lake Okeechobee Operations. June 2, 2011. West Palm Beach. Slide #8.

Stormwater Treatment Areas, and for small releases of fresh water to maintain the productivity of the Caloosahatchee estuary.

The most important step the District can take is finally cutting back water allocations from Lake Okeechobee for sugarcane irrigation during upcoming dry seasons. We recognize that the District is obliged to deliver water to permitted users and that agricultural users have a permitted claim. However, persistent and frequent droughts have become a part of the weather pattern in South Florida. As the agency responsible for balancing water supply with environmental protection, it is time for the District to hold major users accountable for excess water use.

## Lake Okeechobee Minimum Flows and Levels Rule Violation

We believe that a violation of the Lake Okeechobee MFL rule has occurred. A Lake Okeechobee MFL violation occurs when the Lake's level falls below 11 feet for 80 days more than once in a six year period.<sup>2</sup> The Florida Legislature in Florida Statutes Section 373.042 established MFLs to protect water resources from significant harm resulting from over-allocation of water withdrawals. That harm has now occurred<sup>3</sup> and it is time for the District to take action to ratchet back users.

As a result of 80 consecutive days of levels below 11 feet, the water body experienced significant harm including dry littoral zones, loss of apple snail habitat and failure of Everglade Snail Kite nests. The Everglade Snail Kite is a key ecological indicator for the health of the Everglades- one of only three "Total System-wide Performance Measures" for the Comprehensive Everglades Restoration Plan. Largely as a result of water management practices, this endangered species no longer has viable populations through its historic range in the Greater Everglades. In late May 2011, six of the remaining nine endangered Everglade Snail Kite nests on Lake Okeechobee littoral zones failed, apparently resulting from parental abandonment related to low water levels and lack of available food. The loss reflected deteriorating habitat conditions in the Lake that continue to threaten the survival of newly-fledged young and adults.

Lake Okeechobee's low levels have also impacted public water supply. In mid June, West Palm Beach was within weeks of running out of water to supply its residents. The surface water the city depends on for supply was inadequate and Lake Okeechobee, the backup water supply, was too low to sufficiently supply the city. As a result, Florida Department of Environmental Protection Secretary Vineyard signed an emergency water shortage order to supply West Palm Beach with water from the L-8 Reservoir, despite reports of high levels of chloride from this source.

<sup>&</sup>lt;sup>2</sup> An MFL violation occurs in Lake Okeechobee when an exceedance occurs more than once every six years. An "exceedance" is a decline below 11 feet NGVD for more than 80, non-consecutive or consecutive, days, during an eighteen month period. Chapter 40e-8.221(1), F.A.C. *See* Section 373.042(2), Florida Statutes.

<sup>&</sup>lt;sup>3</sup> Significant harm criteria for Lake Okeechobee are based on the relationship between water levels in the lake and the ability to: a) protect the coastal aquifer against saltwater intrusion; b) supply water to Everglades National Park; c) provide littoral zone habitat for fish and wildlife; and, d) ensure navigational and recreational access. *See* Lower East Coast Water Supply Plan Update, Appendix H: Minimum Flows and Levels Criteria and Recovery and Prevention Strategy, pg. 5-6, 2008.

<sup>&</sup>lt;sup>4</sup> Emergency Order for the Purpose of Immediate Water Supply Relief for the City of West Palm Beach and its Public Water Supply Utility Service Area, Water Shortage Order 2011-095-DAO-WS, June 24, 2011, pg. 4.

## **Minimum Flows and Levels Recovery Plan**

When a water body falls below or is projected to fall below its MFL, Florida law requires that the water management district develop and expeditiously implement a recovery and prevention strategy. After the Lake Okeechobee Regulation Schedule took effect in 2008, the Lake Okeechobee MFL was projected to be violated and a recovery strategy was drafted. The Lake Okeechobee MFL recovery strategy currently consists of:

- 1. Environmental enhancement projects to be implemented during extreme low Lake stages
- 2. Regulatory constraints on consumptive use of Lake water
- 3. Water shortage restrictions as described in Chapter 40E-22, F.A.C.
- 4. Capital projects that improve storage capacity both within and adjacent to the Lake.

For a variety of reasons, the Lake Okeechobee recovery plan has not been effectively implemented. The recovery plan lists 300,000 acre feet of water storage from the Comprehensive Everglades Restoration Plan for capital projects – 250,000 acre feet listed as Lake Okeechobee Storage and 50,000 acre feet and the Taylor Creek/Nubbin Slough Reservoir. With reduction of the District's budget, completion of these projects is not on the horizon.

Water shortage restrictions were not put in place soon enough or effectively enough to reduce withdrawals of Lake Okeechobee water to guard against risks to ordinary households or the environment. Water shortage declarations are designed to prevent MFL violations<sup>8</sup> but did not prevent the Lake Okeechobee MFL violation this dry season. When weather conditions produce severe droughts – more than a 1 in 10 year drought – as in 2011, the District must equitably distribute available supplies to prevent serious harm to the water resources and avoid putting human health and public water supply at risk. The restrictions placed on sugarcane irrigation were too late, too little and ultimately ineffective.

## **Steps to Protect Lake Okeechobee**

Audubon of Florida requests and recommends that the District begin processes, including rule-making, to revise and implement recovery measures for Lake Okeechobee that emphasize conservation and efficiency, especially for water used by sugarcane irrigation. In the future, the District should focus on conservation efforts to guard against future water shortages. We recommend that the District craft a framework that more equitably shares the benefits and burdens between water users and conservation when water shortages are predicted. Audubon suggests revisiting the District's water shortage plan and increasing cutbacks for users earlier in the dry season. The 2012 five year update of the Lower East Coast Water Supply Plan also

<sup>&</sup>lt;sup>5</sup> Section 373.0421(2), Florida Statutes.

<sup>&</sup>lt;sup>6</sup> Chapter 40E-8.421(2)(e), F.A.C.

<sup>&</sup>lt;sup>7</sup> Supra note 3, Appendix H, pg. 5.

<sup>&</sup>lt;sup>8</sup> Supra note 3, Appendix H, pg. 2.

<sup>&</sup>lt;sup>9</sup> Chapter 40E-8.441, F.A.C.

provides an opportunity to prioritize these solutions. These regulatory methods have virtually no costs and can be used in lieu of, or while waiting for, completion of water storage capacity.

By making these requests and recommendations and justifying them with a discussion of the events of the past several months, we imply no criticism of the District's staff or Governing Board members. We are simply giving a voice to the environmental needs of Lake Okeechobee and hope to work with you in the coming year to develop proactive solutions that protect this important resource.

Sincerely,

Eric Draper

Executive Director Audubon of Florida