

# Chapter 3: 2009 Priority List and Schedule for Minimum Flows and Levels, Water Reservations and Water Availability Rules

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## INTRODUCTION

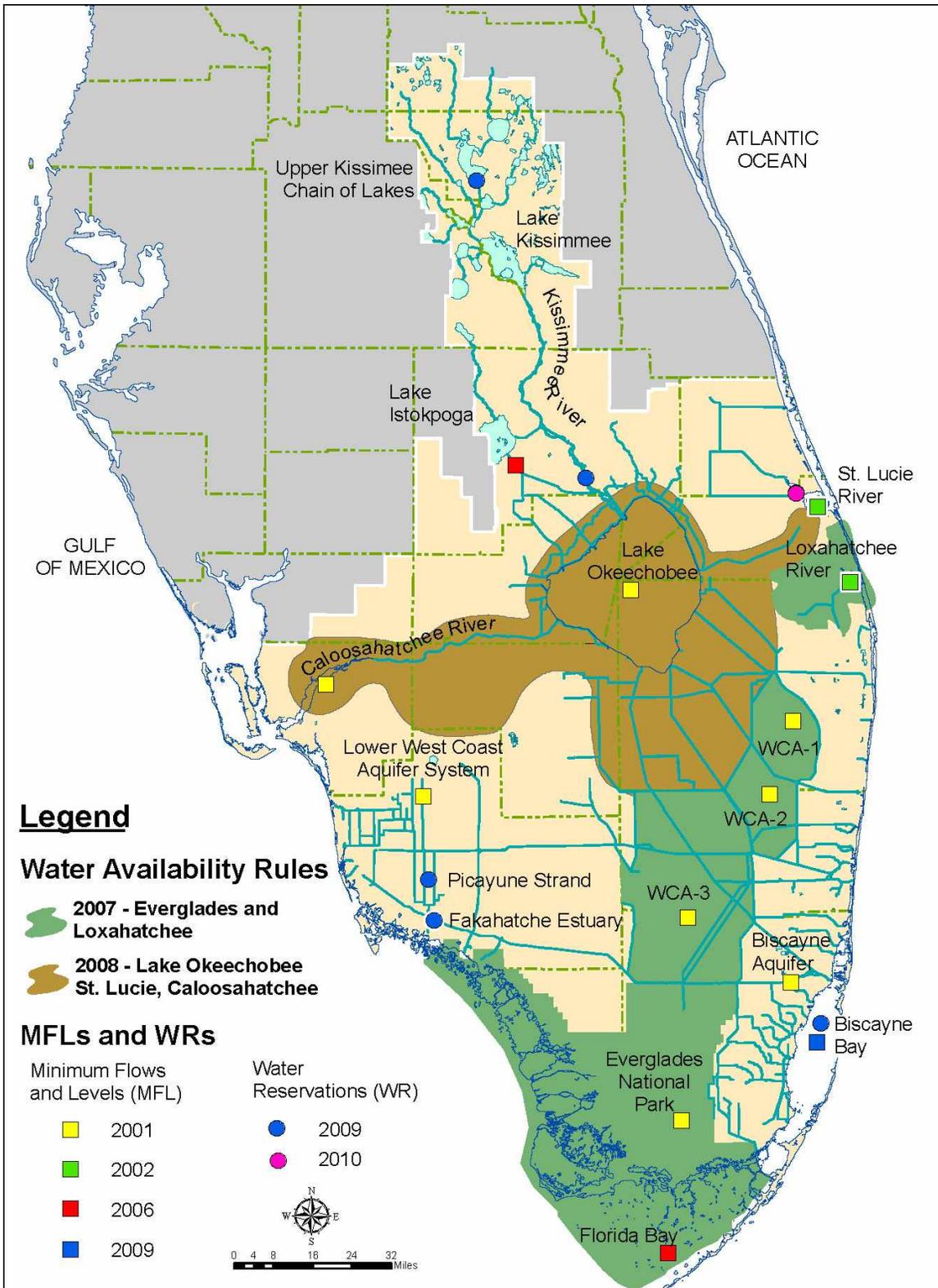
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There are three primary mechanisms the South Florida Water Management District (SFWMD or District) uses to protect water supplies for natural systems: (1) Minimum Flows and Levels (MFLs), (2) Water Reservations, and (3) Water Availability Rules. Natural systems include wetlands, rivers, lakes, estuaries, bays, and aquifers. The following chapter provides a summary of current rules in effect during 2009 and the priorities and schedule for developing new rules planned for 2010.

MFLs provide technical criteria that are important management tools used by the District to protect major water bodies from significant harm due to reduction in water levels or flows. These criteria provide a basis for defining the point at which additional withdrawals will result in significant harm to water resources. Protection of non-consumptive uses may be considered and provided for in the establishment of MFLs [Section 373.042, Florida Statutes (F.S.)]. A baseline condition for the protected resource functions must be identified through consideration of changes and structural alterations in the hydrologic system [Section 373.042(1), F.S.]. If it is determined that water flows or levels are presently below the relevant MFL or will fall below an established MFL within the next 20 years, then the District must develop and implement a recovery or prevention strategy [Section 373.0421(2), F.S.].

This Priority List is developed by the District with consideration of additional information and comments from the Florida Department of Environmental Protection. The schedules for developing MFLs and projects that may be part of recovery or prevention strategies are also provided in the District's regional water supply plans (see Chapter 5A of this volume). The Priority List and Schedule also includes the name of the water body and the date (calendar year) in which the MFLs will be established. An opportunity to modify this list is provided each year by law.

To date, MFL criteria have been adopted for 12 water bodies within the SFWMD, including eight water bodies in 2001, two in 2002, and two in 2006. These water bodies include Lake Okeechobee, four areas of the Everglades, northern portion of the Biscayne aquifer, Lower West Coast Aquifers, Caloosahatchee River and Estuary, St. Lucie River and Estuary, the Northwest Fork of the Loxahatchee River and Estuary, Lake Istokpoga, and Florida Bay (**Figure 3-1**).



**Figure 3-1.** Water bodies on the 2009 Priority List and Schedule for Minimum Flows and Levels and Water Reservations, and date (calendar years) when the rules for these water bodies are scheduled to be adopted. The rule type for Biscayne Bay will be selected in 2009. Areas covered by Water Availability Rules are highlighted in green (2007) and brown (2008).

The District has additional authority, under Section 373.223(4), F.S., to “. . . reserve from use by permit applicants water, in such locations and quantities and for such seasons of the year, as may be required for protection of fish and wildlife or the public health and safety.” Whereas the MFL criteria are appropriately used to prevent significant harm from occurring to water resources, Water Reservations provide a different standard, i.e. to protect fish and wildlife resources.

The District is developing Water Reservations based on evaluation of existing water availability and consideration of future water that may be made available by water resource projects. Water provided by restoration projects and funded with federal funds under the Water Resources Development Act (2000, as reauthorized 2007) also requires a determination that such restoration water will be “reserved” for fish and wildlife and will not be permitted for consumptive use. This chapter includes the list and schedule for development of Water Reservations in relation to restoration projects. The District’s first Water Reservations are expected to be adopted for Picayune Strand and Fakahatchee Estuary in 2009 (**Figure 3-1**).

In 2007, the District adopted a third type of regulatory mechanism for protecting natural systems from adverse impacts due to consumptive uses of water. The Regional Water Availability (RWA) Rule was adopted by the District’s Governing Board on February 15, 2007. The RWA Rule amended Chapters 40E-2, 40E-8, and 40E-20, Florida Administrative Code, affecting the allocation of water taken from the Lower East Coast Everglades water bodies and North Palm Beach County and Loxahatchee River Watershed water bodies (**Figure 3-1**). The rule protects wetland, riverine, and estuarine resources by limiting the availability of water for allocation for consumptive use. A second RWA Rule was adopted on October 14, 2008 and includes the Lake Okeechobee, St. Lucie, and Caloosahatchee service areas (**Figure 3-1**). Water bodies covered by these two rules include:

#### **Loxahatchee Watershed**

- Northwest Fork of the Loxahatchee River
- Kitching Creek
- Cypress Creek
- Hobe Grove Ditch
- Moonshine Creek
- Jonathon Dickinson State Park
- DuPuis Reserve
- J.W. Corbett Wildlife Management Area
- Pal-Mar
- Loxahatchee Slough
- Grassy Waters Preserve
- Riverbend Park
- C-14 Canal
- C-18 Canal

- C-18W Canal
- C-18E Canal
- L-8 Reservoir
- L-8 Canal (from C-51 to L-8 Tieback canal)
- M Canal
- L-8 Tieback Canal

#### **Everglades**

- Water Conservation Area 1 (Arthur R. Marshall Loxahatchee National Wildlife Refuge)
- Water Conservation Areas 2A and 2B
- Water Conservation Areas 3A and 3B
- Everglades National Park
- Holey Land Wildlife Management Area
- Rotenberger Wildlife Management Area

#### **Lake Okeechobee Service Area**

- Lake Okeechobee
- Caloosahatchee Watershed
- St. Lucie River Watershed
- Everglades Agricultural Area
- Lake shore perimeter

Further details on MFLs, Water Reservations, and Water Availability Rules are available on the District's web site at [www.sfwmd.gov](http://www.sfwmd.gov) under the *What We Do, Water Supply* section. Rule development and peer-review activities can be viewed on the District's web site under the *Technical Data and Docs, Web Boards* tab.

## DEVELOPMENT OF CRITERIA

MFL criteria are developed pursuant to the requirements contained within Sections 373.042 and 373.0421 F.S., of the Florida Water Resources Act. These statutes require Florida's water management districts to establish MFLs for surface waters and aquifers within their jurisdiction [Section 373.042(1), F.S.]. The minimum flow is defined as the "limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area."

Based on the MFL Priority List and Schedule, the District undertakes research, analysis, and interpretation of data necessary to develop "technical criteria" for each water body to determine low water conditions (water levels and/or flows) that may cause significant harm to water resources of the region. The criteria typically consist of a minimum water level or flow rate, a duration of time that this level can occur before damage occurs, and a return frequency (that is, how often such conditions can occur over a specified time period).

There are three major steps in the development of District rules, as summarized below. It has been the District's experience that the schedule for rule development is driven by the combined results of scientific peer review and public discussion of the rule proposal.

- **Step 1.** Compile into a report the relevant science linking water resource functions that are to be protected by regulation and the water needs associated with those functions.
- **Step 2.** Conduct scientific peer review of the information available to determine if the linkage between natural resource functions and water necessary to protect those functions is scientifically sound.
- **Step 3.** Complete rule development where data are sufficient. If peer review concludes that data are insufficient, conduct additional research and repeat peer-review process.

Once the proposed technical criteria are approved by the District's Governing Board, rule development and rulemaking processes, including public workshops and opportunities for administrative challenge, are initiated to implement these criteria. This developed rule defines the resources that are at risk and the water levels or flows necessary to protect these resources from significant harm. The rule is not considered to be "established" until the final rule is approved, adopted, and published in the Florida Administrative Weekly.

## 2008 ACCOMPLISHMENTS

Scientific peer review and rule development for the proposed Picayune Strand and Fakahatchee Estuary Water Reservations were completed in 2008. The project is in the final stages of rule development with the final rule planned to be adopted by the Governing Board in 2009. Once approved, these will be the District's first Water Reservations.

The District's Governing Board approved an MFL Recovery Strategy for Lake Okeechobee. This was necessitated by the implementation by the U.S. Army Corps of Engineers 2008 Lake Okeechobee Regulation Schedule which will hold the lake at lower stages while the Herbert Hoover Dike is strengthened. Under the previous schedule, the lake was not expected to exceed the MFL criteria. Operations by the U.S. Army Corps of Engineers pursuant to the new schedule may cause violations of the lake MFL but should improve performance for the Caloosahatchee River and Estuary MFL.

The District made significant progress on Biscayne Bay. An independent scientific peer review of the available scientific information was held on October 28 and 29, 2008. The peer-review panel's final report, which was received on November 13, 2008, will be an important factor for the District Governing Board's selection of an approach to rule development (i.e., MFL or Water Reservation) in 2009.

## **2009 PRIORITY LIST**

Highlights of the District's priority list for 2009 are presented below.

- Picayune Strand and Fakahatchee Estuary Water Reservations – Publication of a final Water Reservation rule which includes water for both freshwater wetlands and a downstream estuary.
- Kissimmee River and the interconnected Chain of Lakes Water Reservations – The Water Reservations will target 19 lakes related to Kissimmee River restoration, including Kissimmee, Hatchineha, Cypress, Tohopekaliga, East Tohopekaliga, Fell's Cove, Ajay, Hart, Mary Jane, Myrtle, Preston, Joel, Gentry, and the Alligator Chain (Alligator, Brick, Lizzie, Coon, Center, and Trout). These water bodies are a high priority due to the importance of restoring the Kissimmee River, and to identify future public water supplies in the Central Florida Coordination Area. The expedited process is designed to complete rule making in 2009.
- Biscayne Bay – The District anticipates selecting the rule type (MFL and/or Water Reservation), developing technical criteria, completing peer review, and completing rule development in 2009.

The priority list also identifies water bodies for which rules publication is scheduled for Fiscal Years 2010 (Indian River Lagoon – South Water Reservation), 2011 (Estero Bay MFL or Water Reservation), and 2012 (Rookery Bay MFL). The District will continue to modify the list in the future as necessary to reflect authorizations and appropriations by the U.S. Congress for specific Everglades restoration projects that would require Water Reservations in advance of Project Cooperation Agreements with the U.S. Army Corps of Engineers.

## **GOVERNING BOARD ADOPTION AND STATE APPROVAL**

The 2009 Priority List and Schedule was adopted by the Governing Board on October 9, 2008. A letter describing the 2009 Priority List will be sent to the Florida Department of Environmental Protection, and comments are expected to be received by January 2009.