# Chapter 3: 2014 Priority Water Bodies List and Schedule

Toni Edwards

#### INTRODUCTION

In addition to other water resource protection criteria contained in Chapters 40E-2 and 40E-20, Florida Administrative Code (F.A.C.), and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District (SFWMD, 2013; Basis of Review), the South Florida Water Management (District or SFWMD) uses three regulatory mechanisms, which are adopted by rule, to protect water supplies for natural systems: Minimum Flows and Levels (MFL), Water Reservations, and Restricted Allocation Areas (RAA). This chapter summarizes MFL, Water Reservation, and RAA criteria and rules in effect during 2013 and the priorities and schedule for developing new criteria and rules planned for 2014 through 2018.

Each year, in accordance with the requirements of Section 373.042, Florida Statutes (F.S.), the District identifies water bodies for which MFLs and Water Reservations must be established or updated. A Priority Water Bodies List and Schedule (Priority List) is submitted by November 15 annually to the Florida Department of Environmental Protection (FDEP), which contains the water bodies prioritized for MFL or Water Reservation establishment or update, and a schedule for doing so. Water bodies are placed on the list based on their importance to the state or region and the existence of, or potential for, significant harm to the water body or ecology of the area from existing or expected consumptive use impacts.

# **RULEMAKING**

As a resource protection tool for major water bodies, an MFL provides a basis for defining the point at which additional withdrawals will result in significant harm to the water resources or the ecology of an area. Significant harm is defined as a temporary loss of water resource functions that result from a change in surface or groundwater hydrology from which it takes more than two years to recover [Subsection 40E-8.021(31), F.A.C.; SFWMD, 2012]. MFL criteria are applied individually to affected water bodies and they define the minimum flow or level for surface water bodies, or minimum levels of groundwater in aquifers. When establishing or updating an MFL for a water body, the District must consider potential changes and structural alterations to the water body that may affect how it responds to the MFL [Subsection 373.0421(1)(a), F.S.]. Part of the MFL establishment process includes determining whether the flow or level in the water body currently is below proposed MFL criteria, or if it is projected to be below criteria within the next 20 years. When an MFL is adopted, the District must concurrently develop and expeditiously implement recovery or prevention strategies to ensure the criteria will be met in the future [Subsection 373.0421(2), F.S.]. A recovery strategy is needed for water bodies currently not meeting the MFL criteria. A prevention strategy is necessary when the MFL criteria are not currently being violated, but are projected to be violated within the next 20-year planning horizon. The goal of a prevention strategy is to prevent future violations from occurring. MFL recovery or prevention strategies are set forth in the applicable District regional water

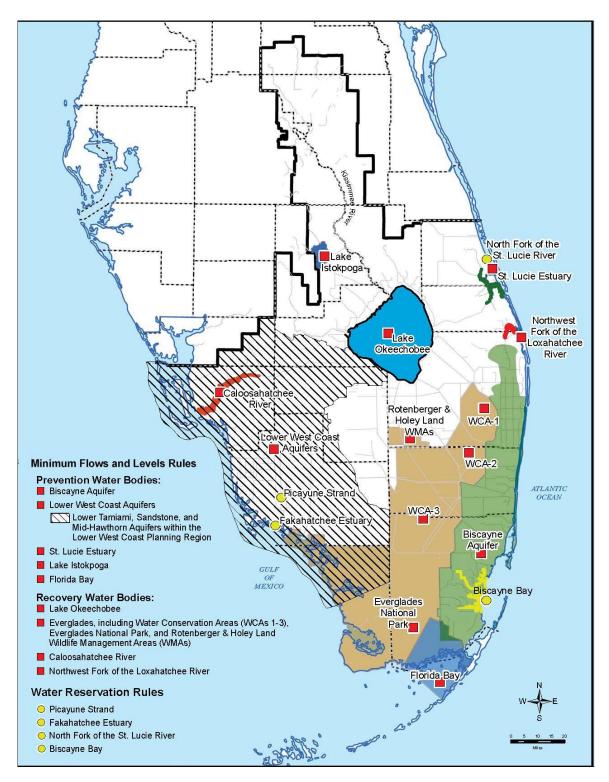
supply plan (available at <a href="www.sfwmd.gov/watersupply">www.sfwmd.gov/watersupply</a>). The District develops recovery or prevention strategies concurrently with MFL rule adoption for priority water bodies.

To date, nine MFL rules have been adopted within District boundaries, for Lake Okeechobee, the Everglades (Water Conservation Areas 1, 2, and 3; Everglades National Park; and the Rotenberger and Holey Land Wildlife Management Areas), Biscayne Aquifer, Lower West Coast Aquifers (Tamiami, Sandstone, and Mid-Hawthorn), Caloosahatchee River, St. Lucie Estuary, Northwest Fork of the Loxahatchee River, Lake Istokpoga, and the Northeastern Subregion of Florida Bay (**Figure 3-1**). MFLs for northeastern Florida Bay and the Caloosahatchee River are currently being updated.

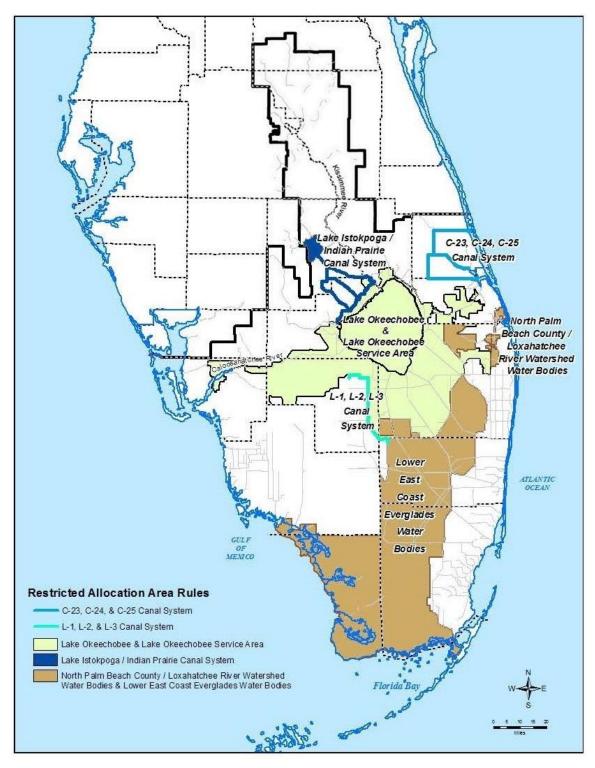
Whereas MFLs are established to define the point at which significant harm to water resources occurs, water reservations protect water for natural systems by setting water aside, thereby preventing allocation of the reserved water to consumptive uses. Specifically, Subsection 373.223(4), F.S. authorizes the District 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." A District priority is the establishment of water reservations to facilitate construction and implementation of Comprehensive Everglades Restoration Plan (CERP) projects. Federal law requires that water provided by a CERP project be legally protected by rule before a cost-share agreement to construct the project is executed with the United States Army Corps of Engineers. Per Subsection 373.470(3)(c), F.S., the increased water supply expected to result from the project must be identified in the Project Implementation Report (PIR) for the project, and this additional water must be allocated or reserved pursuant to Chapter 373, F.S. Water Reservations are also used as part of MFL recovery or prevention strategies for meeting MFL criteria.

A Water Reservation rule clearly defines the volume of water being set aside for the associated natural system; any unreserved water remaining is available for allocation to consumptive uses. Water Reservation rules can be adopted prospectively for water quantities anticipated to be made available [Subsection 62-40.474(3), F.A.C.]. In such cases, the District develops the rule based on the evaluation of existing water availability and consideration of future water that may be made available by CERP and other restoration projects. The District's first two Water Reservation rules were adopted for the Fakahatchee Estuary and Picayune Strand in 2009. A third Water Reservation rule was adopted in 2010 for the North Fork of the St. Lucie River in support of the CERP Indian River Lagoon – South Project. A fourth Water Reservation rule was adopted in 2013 for Nearshore Central Biscayne Bay (**Figure 3-1**). The District is currently in the process of developing two additional Water Reservations for the Caloosahatchee River [CERP (C-43) West Basin Storage Reservoir Project] and the Kissimmee Basin.

Similar to Water Reservations, RAA criteria are established to protect natural systems from consumptive use impacts. RAA criteria are based on Subsection 373.223(1), F.S., which specifies a three-prong test used for issuing consumptive use permits. RAA criteria established for specific areas of the district are listed in Section 3.2.1 of the Basis of Review, which is incorporated by reference into Chapter 40E-2, F.A.C. RAA criteria may be established as part of MFL recovery or prevention strategies required in Subsection 373.0421(2), F.S. RAA criteria were adopted in 2007 for large areas of the Loxahatchee River watershed and the Everglades (**Figure 3-2**) that limit the allocation of water from these areas to base condition water use as described in the Basis of Review. In 2008, the District adopted RAA criteria by rule for the Lake Okeechobee Service Area (LOSA), including Lake Okeechobee and C-43 Canal (Caloosahatchee River) and the C-44 Canal (St. Lucie River), which are integrated conveyance systems that are hydrologically connected to the lake. The RAA criteria for these waters limit allocations to historical condition water uses that occurred from April 1, 2001 to January 1, 2008.



**Figure 3-1.** Water bodies where Minimum Flows and Levels and Water Reservations rules have been adopted.



**Figure 3-2.** Water bodies where Restricted Allocation Area criteria have been adopted by rule.

Further details on MFLs, Water Reservations, and RAAs are available on the District's website at <a href="www.sfwmd.gov/reservations">www.sfwmd.gov/reservations</a>, as well as Chapters 40E-8 and 40E-10, F.A.C., and Section 3.2.1 of the Basis of Review. Related rule development and peer-review activities are presented on the District's website at <a href="www.sfwmd.gov/webboards">www.sfwmd.gov/webboards</a>, under the MFLs and Water Reservations Technical Document Peer Review for Rule Development link.

#### **RULE DEVELOPMENT PROCEDURES**

Rulemaking for establishing MFLs, Water Reservations, and RAA criteria is conducted in accordance with the provisions of Section 120.54, F.S. Rulemaking is also supported by technical information, which is sometimes documented in a report that might undergo an independent scientific peer review. This ensures the basis of the rule is scientifically sound. Major activities of rulemaking include the following:

- Research or technical evaluations are conducted to characterize the water resources involved, link their functions to water needs, and establish scientifically based criteria for meeting the intent of the rule.
- If appropriate, the scientific approach utilized and conclusions reached are documented in a report that supports the rule.
- Stakeholders are engaged through a series of workshops, dedicated web pages, and notifications.
- The draft rule is presented to the District's Water Resources Advisory Commission for discussion and additional stakeholder input.
- The draft rule is brought before the District's Governing Board to request authorization to publish a Notice of Proposed Rule and to transmit the proposed rule to the Joint Administrative Procedures Committee (JAPC) and the Office of Fiscal Accountability and Regulatory Reform (OFARR).
- If a Statement of Estimated Regulatory Costs (SERC) is developed, it is made available to the public when the Notice of Proposed Rule is published. A SERC evaluates the economic impacts of the proposed rule. If economic impacts of rule implementation are expected to exceed certain thresholds of impact to small businesses, the proposed rule must be ratified by the State Legislature.
- At least 28 days after publication of the Notice of Proposed Rule, a public hearing is held where the Governing Board considers any additional comments from stakeholders and representatives of JAPC and OFARR. If no changes are made to the rule at the public hearing, it is then adopted by the Governing Board.
- The District forwards the adopted rule to the Department of State and it becomes effective 20 days later.

## 2014 PRIORITY WATER BODIES LIST AND SCHEDULE

The District's 2014 Priority List is shown below, which includes both MFLs and Water Reservations, in accordance with Subsection 373.042(2), F.S. The 2014 Priority List was adopted by the District's Governing Board on October 10, 2013, and submitted to the FDEP for review and approval on October 23, 2013. MFL-related activities planned for 2014 include continuing progress on the reevaluation of the Caloosahatchee River and Florida Bay MFLs. Development of Water Reservations for the CERP Caloosahatchee River (C-43) West Basin Storage Reservoir Project and the Kissimmee Basin will also continue in 2014. The goal this year is to achieve the milestones noted for completion in 2014 and continued progress toward meeting future milestones.

#### MINIMUM FLOWS AND LEVELS

#### Caloosahatchee River - MFL Reevaluation

- Continue data collection and analysis for the Tidal Basin, including its tributaries; develop a model and apply it to understand the sources and their contribution to the Caloosahatchee Estuary through 2014.
- Investigate effects of MFL flows on oysters, benthic macrofauna, zooplankton, and ichthyoplankton through 2015.
- Apply hydrodynamic/salinity/ecological models and hydrologic information to develop a return frequency to improve the existing MFL criteria for the Caloosahatchee River through 2015.
- Complete the technical analysis and report in 2016.
- Complete peer review in 2017.
- Incorporate new technical information into a proposed rule revision in 2017.

#### Florida Bay - MFL Reevaluation

- Finalize the updated technical analysis and report, and submit the technical report to FDEP in December 2013. The technical report will include an integrated review of the hydrological and ecological changes that have occurred since rule adoption in 2006.
- Based on the updated technical analysis, a determination will be made in 2014 on the need for any revisions to the existing MFL criteria.

#### WATER RESERVATIONS

# CERP Caloosahatchee River (C-43) West Basin Storage Reservoir Project

- Finalize the technical report for public review by December 2013.
- Finalize rule development and hold public workshop(s) by March 2014.
- Present the draft rule to the Governing Board to obtain authorization to publish a Notice of Proposed Rule in April 2014.
- Adopt the rule in June 2014.

#### **Kissimmee Basin**

Water bodies include:

Kissimmee River and its floodplain
Lakes Kissimmee, Cypress and Hatchineha
Lake Tohopekaliga
East Lake Tohopekaliga, Fell's Cove, Lake Ajay
Lakes Hart and Mary Jane
Lakes Myrtle, Joel and Preston
Alligator Chain of Lakes (Alligator, Brick, Lizzie, Coon, Center and Trout)
Lake Gentry

• Adopt rule in December 2015.

## LITERATURE CITED

- SFWMD. 2010. Water Reservations Rule, Chapter 40E-10, F.A.C. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2012. Minimum Flows and Levels, Chapter 40E-8, F.A.C. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2013. Basis of Review for Water Use Permit Applications within the South Florida Water Management District. South Florida Water Management District, West Palm Beach, FL.