

Chapter 3: 2013 Priority Water Bodies List and Schedule

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INTRODUCTION

In addition to the water resource protection criteria contained in the Basis of Review for Water Use Permit Applications (SFWMD, 2012a), the South Florida Water Management District (SFWMD or District) uses three additional mechanisms to protect water supplies for natural systems from consumptive uses: (1) Minimum Flows and Levels (MFLs), (2) Water Reservations, and (3) Restricted Allocation Area (RAA) rules. This chapter summarizes current rules in effect during 2012 and the priorities and schedule for developing new rules planned for 2013 through 2017. In recent years, the District's priorities have focused on establishing Water Reservation and RAA rules to facilitate the Comprehensive Everglades Restoration Plan (CERP) and construction of CERP project components. Federal law requires natural system water provided by CERP projects to be protected by Water Reservation or RAA rules prior to executing a cost-share agreement to construct. The District also continues to fulfill its statutory obligation to identify key water bodies for which MFLs should be developed or updated.

Section 373.042(2), Florida Statutes (F.S.), requires each of the five water management districts to provide an annual MFL priority list and schedule to the Florida Department of Environmental Protection (FDEP). The SFWMD provides an annual update to the FDEP to meet this statutory requirement. The priority list is based on the importance of the waters to the state or region and the existence of or potential for significant harm to the water resources or ecology of the state or region, and includes those waters that are experiencing or may reasonably be expected to experience adverse impacts. It also includes a schedule and identifies the specific water bodies for which MFL rules will be established or updated. The District is responsible for implementing the provisions of Section 373.042, F.S., requiring the establishment of MFLs for surface and groundwater. As a resource protection tool for major water bodies, MFLs provide 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, which result from a change in surface or ground water hydrology, that takes more than two years to recover [Rule 40E-8.021(31), Florida Administrative Code (F.A.C.); SFWMD, 2012b]. These criteria are applied individually to affected water bodies and define volumes of water, duration of flow, or water stage for surface water bodies; minimum levels are established for groundwater levels in aquifers. The District must consider changes and structural alterations to the water body that may affect the MFL [Section 373.0421(1)(a), F.S.].

When a MFL is established, it must be determined if the existing flow or level criteria is currently being exceeded or projected to be exceeded within the next 20 years. If the existing flow or level is below the relevant MFL, or projected to fall below the MFL within the next 20 years, then the District must develop and implement a recovery or prevention strategy [Section 373.0421(2), F.S.]. A recovery strategy is needed for water bodies currently below the MFL criteria. A prevention strategy is necessary when the MFL criteria are not currently being exceeded but are projected to be exceeded within the next 20-year projected planning horizon. The goal of a recovery strategy is to achieve the established MFL as soon as practicable, while

the goal of a prevention strategy is to prevent the existing flow or level from falling below the established MFL. MFL recovery or prevention strategies are presented in the regional water supply plans for the District's four planning areas (available at www.sfwmd.gov/watersupply). The District develops a recovery or prevention strategy for each MFL water body (as depicted in **Figure 3-1**) concurrently with the adoption of each MFL.

To date, MFL criteria have been adopted for nine water bodies within the District boundaries. These water bodies include Lake Okeechobee, the Everglades (Water Conservation Areas 1, 2, and 3; Everglades National Park; and the Rotenberger and Holey Land Wildlife Management Areas), the Biscayne aquifer, the Lower West Coast aquifers (encompassing three semi-confined aquifers), the Caloosahatchee River, the St. Lucie River, the Northwest Fork of the Loxahatchee River, Lake Istokpoga, and Florida Bay (**Figure 3-1**).

The second type of regulatory mechanism the District uses is Water Reservations, which are used to protect water for natural systems from allocation. Under Section 373.223(4), F.S., the District has the authority 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 MFLs are established to define the point at which significant harm to water resources occur, Water Reservations are used to prevent harm caused by consumptive uses from occurring to a water body. Water Reservations have also been used as part of the MFL recovery strategies to assist in achieving established MFLs. The District's Water Use Permitting program uses specific criteria for each reservation water body. The criteria used for each Water Reservation clearly defines the water set aside for the natural system, with unreserved water remaining available for future allocation.

Reservations can be adopted prospectively for water quantities anticipated to be made available [Rule 62-40.474(3), F.A.C.]. The District is developing Water Reservation rules 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 is required to use its reservation or allocation authority to protect water for the natural system identified by CERP projects prior to executing an agreement to construct these projects with the United States Army Corps of Engineers, consistent with Section 373.470 (3)(c), F.S. The District's first two Water Reservation rules were adopted for the Fakahatchee Estuary and Picayune Strand in 2009; the 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 (**Figure 3-1**). The District is currently in the process of developing two additional Water Reservations (see *Additional Rulemaking Activities* section of this chapter).

The District also applies a third type of regulatory mechanism, known as RAA rules, for protecting natural systems from consumptive uses. These rules are based on Section 373.223(1), F.S., which specifies the three-prong test used for issuing Consumptive Use Permits, and the statutory requirement to implement recovery plans for MFLs in Section 373.0421(2), F.S. The RAA rules can be found in Section 3.2.1 of the Basis of Review for Water Use Permit Applications. One of these RAA rules, which was adopted by the District's Governing Board in 2007, covers large areas in the Loxahatchee River watershed and the Everglades. This rule limits the allocation of water from these areas (**Figure 3-2**). Another RAA rule, adopted in 2008, applies to the Lake Okeechobee Service Area. This RAA rule limits consumptive use allocations from Lake Okeechobee and the C-43 (Caloosahatchee) and C-44 (St. Lucie) canals (**Figure 3-2**), by establishing a baseline of permitted water use.

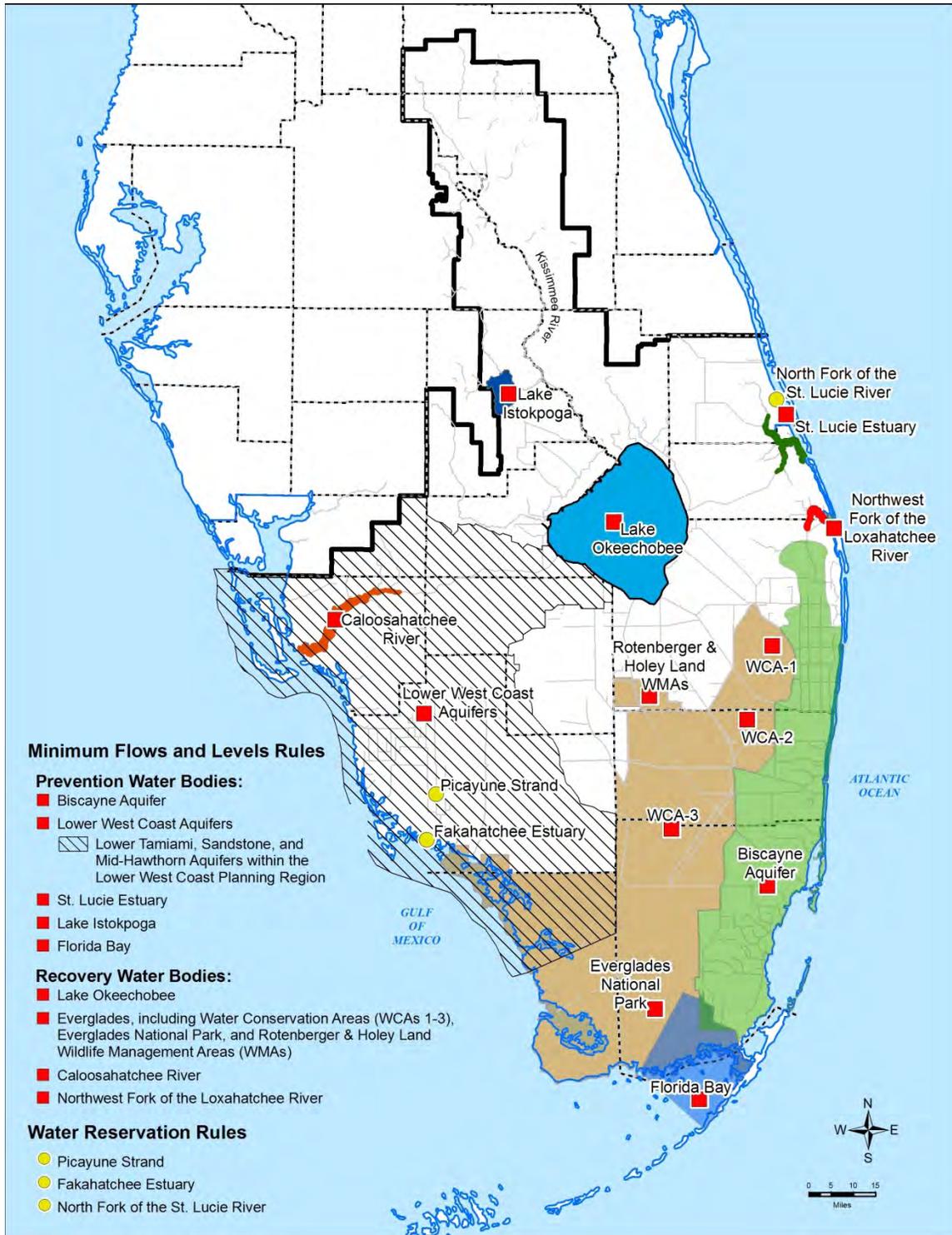


Figure 3-1. Water bodies where Minimum Flows and Levels or Water Reservations rules have been adopted.

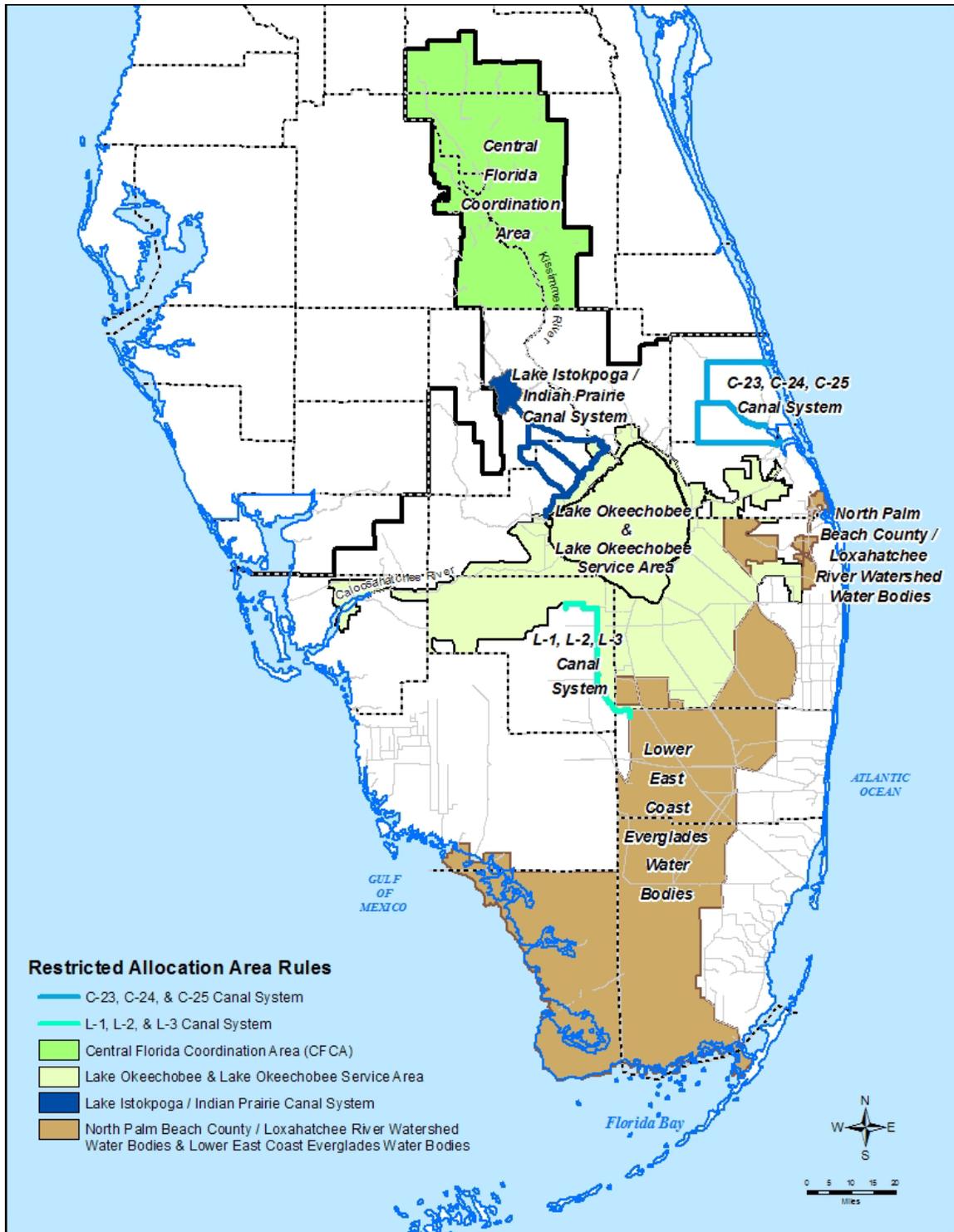


Figure 3-2. Water bodies where Restricted Allocation Area rules have been adopted.

Further details on MFLs, Water Reservations, and RAA rules are available on the District's website at www.sfwmd.gov/reservations. Related rule development and peer-review activities are presented on the District's website at www.sfwmd.gov/webboards, under the *MFLs and Water Reservations Technical Document Peer Review for Rule Development* link. Information on RAA rules is detailed in Section 3.2.1 of the Basis of Review for Water Use Permit Applications. Additional information regarding Water Reservations can be found in Chapter 40E-10, F.A.C. (SFWMMD, 2010).

RULE DEVELOPMENT PROCEDURES

Rulemaking is conducted consistent with the procedures in Chapter 120.54, F.S. However, due to the nature of these rules potentially affecting consumptive uses, rule development relies upon technical information to support the rule, which are documented in a technical report and then peer reviewed by an independent scientific panel. The three major steps of the rule development process are as follows:

- **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.** If mandated by statute or otherwise determined by the District to be necessary, scientific peer review of available information is conducted to determine if linkage between water resource functions and water necessary to protect those functions is scientifically sound. If this review concludes that data are insufficient, then conduct further research and repeat the peer-review process until sufficient data and information are achieved.
- **Step 3.** Coordinate with the Office of Fiscal Accountability and Regulatory Reform (OFARR) concerning the rule development process. The rulemaking steps include drafting the rules, drafting the Statement of Estimated Regulatory Costs, decision making by the District's Governing Board to enter rulemaking, and holding a public hearing to consider adoption of the final rule. The District engages the public and other stakeholders through workshops, dedicated web pages, notifications to interested parties, and updates at Governing Board and Water Resource Advisory Commission meetings for input throughout the rulemaking process. Legislative ratification of the rule may be required for the rule to become effective if certain thresholds of economic impacts to small business are determined to be exceeded as part of the development of the Statement of Estimated Regulatory Costs associated with the rule.

2013 PRIORITY LIST

The priority list submitted to the FDEP this year is focused on MFL-related activities in accordance with Section 373.042(2), F.S. Other ongoing rulemaking activities not related to MFLs are outlined in the *Additional Rulemaking Activities* section of this chapter. Planned activities in 2013 for the priority list and schedule include continuing progress on the MFL evaluation for the Caloosahatchee River and Estuary and Florida Bay.

The update of the existing MFL criteria for the Caloosahatchee River and Estuary—one of the first MFLs established—is scheduled to continue, and the technical evaluation for possible update of the Florida Bay MFL criteria is expected to conclude at the end of 2013. Completion of these tasks is dependent on their prioritization among other projects to be funded in future years.

Specifically, the District's 2013 Priority List and Schedule are as follows:

1. Continue the MFL evaluation for the Caloosahatchee River and Estuary. This evaluation involves data collection and its analysis, model development and application, and drafting of the technical report to support updating the Caloosahatchee River MFL rule. Specific activities associated with the MFL evaluation are as follows:
 - Quantify the habitat value of American eelgrass (*Vallisneria americana*) in 2014–2015.
 - Continue data collection and its analysis for the Tidal Basin including its tributaries, and develop a model and apply it to understanding the sources and their contribution to the Caloosahatchee Estuary through 2014.
 - Investigate effects of MFL flows on oysters, benthic macrofauna zooplankton, ichthyoplankton, and phytoplankton through 2015.
 - Apply hydrodynamic/salinity/*Vallisneria* models and develop a return frequency to improve the existing MFL criteria for the Caloosahatchee River and Estuary through 2015.
 - Complete technical analysis and its documentation in 2016.
 - Complete peer review in 2017.
 - Submit rule to OFARR for review per Executive Order Number 11-72 in 2017.
 - Present draft rule to the District's Governing Board to consider for adoption in 2017.
2. Continue the technical evaluation for a possible update of the Florida Bay MFL. Specific activities associated with the MFL evaluation are as follows:
 - Part 1 of the technical document, which incorporates the ecological changes since adoption of the Florida Bay MFL rule, is expected to be submitted to the FDEP by the end of 2012.
 - Part 2 of the technical document, which includes the integration of both the ecological and hydrological components, is planned to be completed and submitted to the FDEP by the end of 2013.
 - Based on the completed technical analysis, a determination will be made in 2014 on the need for any revisions to the existing MFL criteria.

On October 11, 2012, the District's Governing Board adopted the 2013 MFL Priority Water Body List and Schedule, which was subsequently submitted to the FDEP for their review and approval on October 17, 2012.

ADDITIONAL RULEMAKING ACTIVITIES

Over the past several years, the SFWMD's priorities have focused on establishing Water Reservation and RAA rules for CERP projects. State and federal law requires Water Reservation or RAA rulemaking for CERP projects to set aside water created by the project for natural systems. These rules are required prior to execution of project cost-share agreements with the federal government. A Water Reservation is also planned in the future for the Kissimmee Basin. These rulemaking activities, which are not listed on the 2013 priority list, are briefly outlined below:

- **CERP Caloosahatchee River (C-43) West Basin Storage Reservoir Project.** Continue Water Reservation rule development for water associated with the project through engaging stakeholders with public workshops, obtain approval by the District's Governing Board to submit rule for review by the OFARR and for publication in the Florida Administrative Register in 2012–2013.

- **CERP Biscayne Bay Coastal Wetlands Project (Phase 1).** Continue Water Reservation rule development for water associated with the project through engaging stakeholders with public workshops, obtain approval by the District's Governing Board to submit rule for review by the OFARR and for publication in the Florida Administrative Register in 2012–2013.
- **Kissimmee Basin Water Reservation.** The Kissimmee Water Reservation rulemaking was initially pursued to protect the public investment in the Kissimmee River Restoration Project. Rule development efforts have been placed on hold for the Kissimmee River, its floodplain, and the Chain of Lakes until 2015 after planned completion of the Kissimmee Basin Modeling and Operation Study (KB MOS). Once these new operating criteria have been defined, it is anticipated that the amount of water required for protection of fish and wildlife will be identified and a technical document will be finalized for peer review. Additional information regarding the KB MOS, Kissimmee River Restoration, and other Kissimmee Basin initiatives is provided in Volume I, Chapter 9.

LITERATURE CITED

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