Chapter 3: 2012 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 (SFWMD, 2010), 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 provides a summary of current rules in effect during 2011 and the priorities and schedule for developing new rules planned for 2012 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.

Section 373.042(2), Florida Statutes (F.S.), requires each of the five water management districts to provide the Florida Department of Environmental Protection (FDEP) an annual MFL priority list and schedule. The District 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.

This chapter will also summarize other future rulemaking activities. These other rulemaking activities will specify those water bodies where Water Reservations or RAA rules will be developed for the purpose of protecting natural system water from future consumptive use allocations.

The District is responsible for implementing the provisions of Section 373.042, F.S., requiring the establishment of MFLs for surface waters. 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. These criteria are applied individually to affected water bodies and define volumes of water, duration of flow, or water stage. A MFL is designed to prevent a loss of specific water resource functions that would require more than two years to recover. Changes and structural alterations to the hydrologic system must be considered when establishing a baseline condition for protected resource functions (373.0421(1), F.S.).

When a MFL is established, it must 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

(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. Each MFL water body, when adopted, has either a prevention or recovery strategy as depicted in **Figure 3-1**.

To date, MFL criteria have been adopted for 13 water bodies within the District boundaries. These water bodies include Lake Okeechobee, five areas within 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 and Estuary, the St. Lucie River and Estuary, the Northwest Fork of the Loxahatchee River and Estuary, Lake Istokpoga, and Florida Bay (Figure 3-1).

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 where significant harm to water resources occur, Water Reservations are established to set aside from consumptive use water for the protection of fish and wildlife or the public health and safety. Through implementing criteria, a Water Reservation clearly defines the water set aside from consumptive use, allowing unreserved water to remain available for future allocation.

Reservations can be adopted prospectively for water quantities anticipated to be made available [62-40.474(3), Florida Administrative Code (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 (USACE), consistent with Subsection 373.470 (3)(c), F.S. The District's first Water Reservation rule was adopted for Picayune Strand and the Fakahatchee Estuary in 2009. The second Water Reservation rule was adopted for the North Fork of the St. Lucie River in support of the CERP Indian River Lagoon – South Project (Figure 3-1).

The District also applies a third type of regulatory mechanism, known collectively 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 (SFWMD, 2010). 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 withdrawals 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.

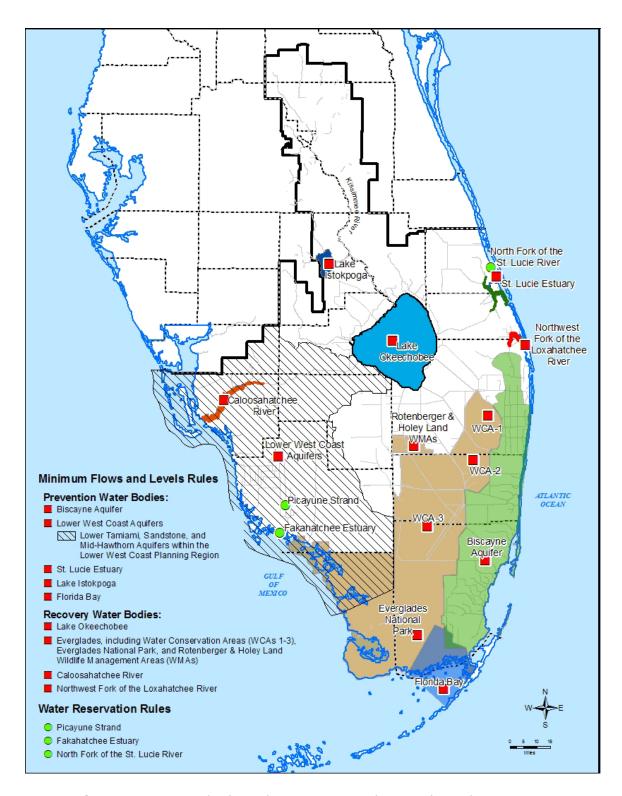


Figure 3-1. Water bodies where Minimum Flows and Levels or Water Reservations rules have been adopted.

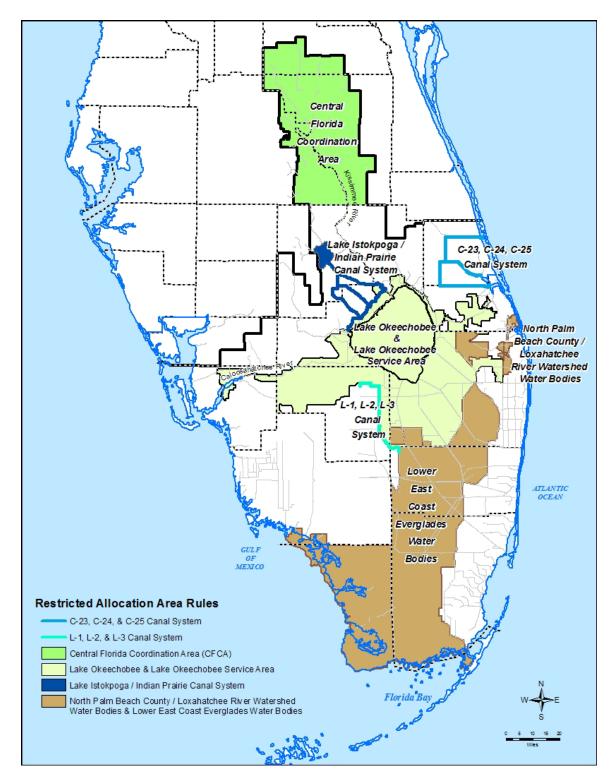


Figure 3-2. Water bodies where Restricted Allocation Area rules have been adopted.

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 (SFWMD, 2010). Additional information regarding Water Reservations can be found in Chapter 40E-10, F.A.C.

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 four 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. Conduct scientific peer review of available information 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. Submit a rulemaking request to the Office of Fiscal Accountability and Regulatory Reform (OFARR) for approval to initiate the rule development process. Once approved, 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 additional input throughout the steps.
- Step 4. Upon completion of the rulemaking process, if the Statement of Estimated Regulatory Costs prepared for the rule demonstrates that it will have an adverse impact on small businesses or is likely to affect economic growth, employment, private sector investment, business competitiveness, productivity, innovation, and regulatory costs in excess of certain monetary thresholds, then the rule must be ratified by the Florida legislature in order to become effective.

2012 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 2012 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 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 in 2013. Completion of these tasks is dependent on their prioritization among other projects to be funded in future years.

Specifically, the District's 2012 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.
 - 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 evaluation for a possible update of the Florida Bay MFL. Specific activities associated with the MFL evaluation are as follows:
 - Complete the technical evaluation and documentation of the existing MFL criteria in FY2012.
 - Evaluate and consider whether to update the MFL rule in 2013.

On December 15, 2011, the District's Governing Board adopted the 2012 MFL Priority Water Body List and Schedule, which was subsequently submitted to the FDEP for their review and approval.

ADDITIONAL RULEMAKING ACTIVITIES

Over the past several years, the SFWMD's priorities have focused on establishing Water Reservation and RAA rules for CERP projects and the Kissimmee River Restoration Project. 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. The Kissimmee Water Reservation rulemaking was pursued to protect the public investment in the Kissimmee River Restoration Project. These rulemaking activities are not listed on the 2012 priority list.

The rulemaking activities for each of these initiatives are outlined below:

1. CERP Caloosahatchee River (C-43) West Basin Storage Reservoir Project. Continue rule development for water associated with the project through engaging stakeholders with public workshops and submit the rule for review to the OFARR in 2012. Once approved by the OFARR, approval by the District's Governing Board will be sought. Legislative ratification may also be required if certain economic thresholds required by the Florida Administrative Procedures Act are triggered. The

- options for the next phase of water resource protection for the Caloosahatchee River will be determined at a future date.
- 2. **CERP Biscayne Bay Coastal Wetlands Project (Phase 1).** Continue rule development for project water associated with the project through engaging stakeholders with public workshops and submit the rule for review to the OFARR in 2012. Once approved by the OFARR, approval by the District's Governing Board will be sought. Legislative ratification may also be required if certain economic thresholds required by the Florida Administrative Procedures Act are triggered. The options for next phase of water resource protection for Biscayne Bay will be determined at a future date.
- 3. **Kissimmee Water Reservations.** Rule development efforts will be placed on hold for the Kissimmee River, its floodplain, and the Chain of Lakes until 2014 after completion of the Kissimmee Basin Modeling and Operation Study (KBMOS). Once these new operating criteria have been defined, the amount of water required for protection of fish and wildlife will be identified and the technical document will be finalized for peer review. Additional information for the KBMOS is provided in Chapter 9, Kissimmee River Restoration and Other Kissimmee Basin Initiatives. Specific water bodies included in the Kissimmee Water Reservation rulemaking initiative are as follows:
 - Kissimmee River and its floodplain
 - Lakes Kissimmee, Cypress, and Hatchineha
 - Lake Tohopekaliga
 - East Lake Tohopekaliga, Fell's Cove, and 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

LITERATURE CITED

SFWMD. 2010. Basis of Review for Water Use. South Florida Water Management District, West Palm Beach, FL.