



## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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**ADM 06-08 RF: 20-0140**

January 15, 2003

Noel Andress, Chairman  
Southwest Florida Watershed Council, Inc.  
P.O. Box 61063  
Fort Myers, FL 33906-1063

Dear Mr. Andress:

**Subject: Caloosahatchee River Minimum Flows and Levels (MFL) Process**

Thank you for your letter dated December 3, 2002, concerning the Caloosahatchee River Minimum Flows and Levels (MFL) process. We appreciate the continuing concerns expressed by the Watershed Council regarding protection of water resources in the Caloosahatchee River and provide the following information that we hope will address these concerns.

A draft technical document that summarizes recent research, conclusions and management recommendations will be distributed to the public in January 2003. The South Florida Water Management District (SFWMD) will then hold a public workshop in late January or early February to discuss the document, adequacy of the present MFL, existing management policies and practices, and recovery options. Your organization will be provided with a copy of the draft document and notified of the meeting dates as soon as they are available. The document will then be revised in response to comments received from the public and other agencies. We encourage your organization to remain actively involved in the document review and the revision process that will help address this complex issue.

When the Caloosahatchee MFL Rule was adopted in September 2001, it was recognized that, under existing conditions in the watershed, the proposed MFL criteria could not be achieved. Therefore, a recovery plan was needed to provide additional storage in the watershed and deliver additional flow through the S-79 water control structure during dry periods. Analyses conducted in conjunction with development of the regional water supply plans indicated that the projects in these plans and the Comprehensive Everglades Restoration Plan would provide the necessary storage and facilities during the next 20 years to achieve the MFL criteria. In the meantime, the SFWMD would take action, consistent with the Minimum Flows and Level Rule and the Adaptive Management Plan for Lake Okeechobee to provide additional flow to the estuary to reduce the frequency and duration of MFL exceedances during dry periods.

A further condition of adoption of the MFL rule was that the SFWMD would review the adequacy of the rule and technical criteria with one year. This review is based on results from ongoing and new studies of the effects of salinity on *Vallisneria americana*, development of improved modeling capabilities, and field studies to more accurately determine the relationships between flow from the river and salinity in the estuary.

The present version of the Caloosahatchee MFL Rule states that a minimum mean monthly flow of 300 cfs (cubic feet per second) at S-79 is necessary to prevent an MFL exceedance. This magnitude of flow was developed based on a statistical relationship between 30-day average

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Noel Andress, Chairman

January 14, 2003

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flow at S-79 and salinity at the Ft. Myers Yacht Basin and the determination that, on average, a 30-day mean flow of 300 cfs results in a salinity of 10 ppt (parts per thousand) at Ft. Myers. At a salinity of 10 ppt, a viable community of wild celery, *Vallisneria americana*, can exist in the upper estuary. An MFL exceedance occurs when the 30-day average salinity concentration exceeds 10 ppt at Ft. Myers. In practice, 30-day mean flow and 30-day mean salinity are calculated as 30-day moving averages.

During the 2001–2002 dry season, the SFWMD made releases (provisional average 557 cfs) to the Caloosahatchee estuary from mid-December to mid-May. These releases lowered salinity sufficiently to allow *Vallisneria*, which had begun to recover from the drought of 2001, to be protected through the 2002 dry season in the upper estuary. During the period referenced in your letter of December 3, 2002, 30-day mean flow at S-79 fell from a high of 4798 cfs on 10/1 to a low of 354 cfs on 11/16. Concurrently, 30-day mean salinity at Ft. Myers rose from 0.25 ppt on 10/1 to a high of 4.1 ppt on 11/21. These conditions are well within an acceptable range for growth of *Vallisneria americana*. We can therefore anticipate that the grass will continue to recover during this dry season and should be very healthy by next summer.

SFWMD staff have now completed the review of flow, salinity and vegetation studies conducted during the past year. The forthcoming technical document describes results of these investigations and their implications for management of the river and estuary. We look forward to receiving your review and comments on the draft document and participation in the upcoming workshop to discuss the document, adequacy of the present MFL, existing management policies and practices, and CERP implementation. The SFWMD hopes to work closely with your organization during the coming months to ensure that the final document will be the best possible work product to support protection of water resources of the Caloosahatchee River and Estuary from significant harm.

If you have any questions, please contact Michelle Percy, Director of Water Supply & Planning Division at 561-682-2174.

Sincerely,



Henry Dean  
Executive Director  
South Florida Water Management District