

## MEMORANDUM

**TO:** Governing Board Members

**FROM:** Kenneth G. Ammon, P.E., Deputy Executive Director, Everglades Restoration Resource Area

**DATE:** September 25, 2007

**SUBJECT:** Memorandum of Agreement with Florida Department of Transportation Modifying Specific Obligations Related to U.S. Highway 1 Reconstruction

**Background:**

The SFWMD is the Local Sponsor for the C-111 Spreader Canal (C-111 SC) ecological restoration project, which Congress approved as a Comprehensive Everglades Restoration Project (CERP) under the Water Resources Development Act 2000. The project will improve the quantity, quality, timing, and distribution of water deliveries within the Southern Glades and Model Lands, which lie contiguous to U.S. Highway 1 in south Miami-Dade and northern Monroe counties. The project also will raise water tables in proximity to the Florida Department of Transportation's (FDOT's) U.S. Highway 1 Safety Improvement (Reconstruction) Project. FDOT determined that using black asphalt base instead of the traditional limestone base would allow water table elevations to be raised higher than pre-project levels.

In support of the proposed C-111 SC project, on June 10, 2004, the District and FDOT entered into a Memorandum of Agreement (MOA), which in part, required FDOT to construct a bridge over the proposed C-111 Spreader Canal as part of its U.S. Highway 1 Safety Improvement Project. The MOA set forth a time by which SFWMD had to provide the required bridge location and other design information to FDOT. As a result, in January of 2006, after consultation with the Quality Review Board and Governing Board, staff advised FDOT that the U.S. Highway 1 bridge over the proposed C-111 Spreader Canal should be located so as to support the SW 432nd Street spreader canal alignment.

On July 20, 2007, SFWMD & FDOT entered into a Joint Participation Agreement (JPA) which required SFWMD to fund the increased costs, estimated at \$3.66 million, to use asphalt base in portions of the U.S. Highway 1 Safety Improvement Project due to expected water table elevations resulting from the proposed C-111 Spreader Canal Project implementation.

To date, significant uncertainties exist regarding the feasibility of constructing a large-scale spreader canal along the SW 432<sup>nd</sup> alignment, where FDOT presently intends to construct the bridge. Moreover, modeling indicates that a large-scale spreader canal constructed on the SW 432<sup>nd</sup> alignment could have significant adverse flooding impacts to privately owned lands within the C-111 Basin. Because these issues are not likely to

be resolved in the near future, the potential risks associated with constructing a bridge prior to resolution of these uncertainties, and the substantial cost savings to both the SFWMD and FDOT, as well as FDOT's willingness to install a concrete box culvert under U.S. Highway 1 at SW 432<sup>nd</sup> Street, and asphalt base under non-elevated portions of U.S. Highway 1, at no cost to the District, staff believes FDOT should be released from its commitment to construct the U.S. Highway 1 bridge over the proposed C-111 Spreader Canal.

**How this helps meet the District's 10-Year Strategic Plan:**

This new agreement for FDOT to proceed with using asphalt base in certain areas of its U.S. Highway 1 Safety Improvement Project and for the District to cancel its request for the bridge construction will free up approximately \$3.66 million of current District funds, which can be used to support other projects in the 10-Year Strategic Plan. Installation of a concrete box culvert at SW 432<sup>nd</sup> Street will support construction of a spreader canal of sufficient dimensions to hydrate a portion of wetlands of the Southern Glades and Model Lands that lie near the Atlantic Coastal Ridge.

**Funding Source:**

No funding is required.

**This Board item impacts what areas of the District, both resource areas and geography:**

The area which is likely to be impacted by the proposed action is located in southern Miami-Dade County. Staff from the Everglades Restoration Resource Design area will oversee the project and agreement.

**What concerns could this Board item raise?**

The costs of designing and constructing a U.S. Highway 1 bridge, if needed, would likely become a CERP project cost.

**Why should the Governing Board approve this item?**

In addition to the savings of \$3.66 million, there is considerable uncertainty to SFWMD and FDOT associated with furthering the design and construction of a long bridge over a yet-to-be finalized spreader canal alignment.

Attachments – Resolution, Map  
KGA/js