

M E M O R A N D U M

TO: Governing Board Members
FROM: Tommy Strowd, Deputy Executive Director, Operations and Maintenance
DATE: February 1, 2011
SUBJECT: 4600002333 – Removal of vegetation along the East Coast Protective Levees and other selected District levees per USACE inspections

Background:

Under the auspices of the National Levee Safety Act, which was contained in the 2007 Water Resources Development Act, each US Army Corps Engineers (USACE) district performed an inventory of levees. As the largest sponsor of flood control works in the Jacksonville district, approximately 900 miles of USACE constructed levees are under the maintenance responsibility of the SFWMD. A majority of the levees are over 50 year old and proper de-vegetation of the slopes will allow for inspections and repairs when needed. During the current year, additional funds were appropriated through the 2009 Stimulus act for USACE districts to perform periodic inspections of the levees under the Inspection of Completed Works program. The Jacksonville district hired contractors to perform three periodic inspections of Central & South Florida levees: STA 1E and L63N; the East Coast Protective Levee; the Davie Levees (west side of the WCA's), and the Tamiami Trail levees. In addition, two routine inspections were performed: the levees NW of Lake Okeechobee and the Everglades Agricultural Area.

While the reports have yet to be received, comments and observations in the field by the inspection teams have emphasized vegetation control as a deficiency. The preliminary periodic inspection performed on L40 report stated, "...Individual items rated unacceptable are unwanted vegetation growth...Excessive vegetation concentrated along the landside toe of the levee is considered a serious deficiency. Trees and other woody vegetation can create structural and seepage instabilities, prevent adequate inspection, and create obstacles to maintenance..."

O&M has been working to identify and prioritize levee vegetation clearing needs. This project will bring the East Coast protective levees and other selected District levees in alignment with USACE vegetation standards.

- Vegetation removal work on the following levees will be completed in FY11:

L-36 (11 miles), L-35 (5 miles), L-35a (6 miles), L-33 (8.5 miles), L-37 (6 miles) = 36.5 miles X 2 (both sides of the levee) = 73 total miles

- Vegetation removal work on the following levees is scheduled for FY12:

L-38w (11 miles), L-38e (9 miles), L-39 (13 miles) = 33 miles X 2 (both sides of the levee) = 66 total miles
- Vegetation removal work on the following levees is scheduled for FY12:

L-67 (5.4 miles), L-68a (6.2 miles), L-6 (11 miles), L-5 (15.5 miles), L-35b (10.7 miles) = 48.8 miles X 2 (both sides of the levee) = 97.6 total miles

Levee vegetation removal for FY 12 and FY13 may be adjusted based on the results of USACE inspections

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

This Board item will provide Operations & Maintenance with a cost-effective means to remove vegetation along selected District levees. These levees are critical components in ensuring the District can continue to provide flood protection throughout South Florida.

Funding Source:

Funding for this 3 year work order contract will be in an amount not-to-exceed \$1,500,000, of which \$785,200 is budgeted for FY11 using ad valorem funds and the remainder is subject to Governing Board approval of the FY12-FY14 budgets. This contract is being awarded using Palm Beach County contract 10046, which was quoted on a competitive basis.

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

The subject project areas include selected East Coast protective levees that have been identified through USACE and SFWMD inspections of supporting vegetation that is restricting visual inspections of the levee toe and slopes. Note that the USACE levee inspection criteria for vegetation-free zone are in accordance with ETL 1110-2-571. For a typical levee section this is 15 feet from the toe, and 8 feet overhang. The contract will be administered by the Vegetation Management Division.

What concerns could this Board item raise?

The contract provides a vegetation removal service contract procured by a county municipality to support and augment the vegetation removal activities conducted by the Vegetation Management Division.

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Why should the Governing Board approve this item?

Approval of this item will provide the District cost-effective means of managing the repairing the levees that provide important flood control role. Deficiencies in vegetation removal will automatically designate the system as “unacceptable” leading to a denial of federal funds in the event of a disaster.

TS/sc