

East Coast Protective Levee FEMA Certification

Palm Beach County
Water Resources Task Force
January 21, 2015

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Project Background

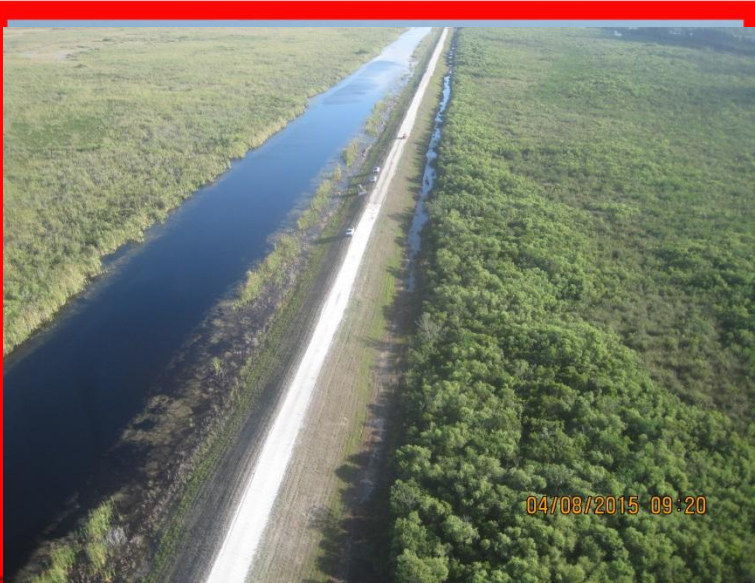
- **FEMA is modernizing Flood Insurance Rate Maps in Palm Beach County.**
- **FEMA Procedure Memorandum 34 dated August 22, 2005 requires levees used for flood protection to be certified by the levee owner.**
- **SFWMD hired AMEC Environment & Infrastructure, Inc. to certify the levee system as an Accredited Levee for flood protection.**

East Coast Protective Levee Background



- L-40 Levee
 Constructed in December 1952 by USACE
 Total Length: 20.5 miles
- L-85 Levee
 Constructed in June 2004 by USACE
 Total Length: 9.1 miles
- Ownership transferred to SFWMD

Project Elements - Completed



- **Levee Study and Analysis**
- Freeboard**
- Closures**
- Embankment Protection**
- Embankment and**
- Foundation Stability**
- Settlement**
- Interior Drainage**

Project Elements – Completed (cont.)



- **G-94s O&M Capital Project**
 - Removals - FWS Pump Station**
 - VOW Structure**
 - G94B Structure**
 - Gated structure replacements -**
 - G94A**
 - G94C**
 - G94D**

L-40 Levee Regrading Purpose and Objective

- Comply with requirements for levee certification set forth by FEMA
- Provide 1-foot freeboard under the 100-year flood event
- Overcome long term settlement of the levee



L-40 Levee Regrading Construction



West Palm Beach Field Station Staff performed the work

L-40 Levee Regrading



Length of Work = 9.5 Miles

Volume of Material = 62,810 tons

Duration = March 2015 – November 2015

Levee Certification Project Cost

- **Levee Study and Analysis**

\$1,202,620

- **G-94 Project**

\$5,302,849

- **L-40 Levee Regrading**

Engineering Estimate – by Contractor

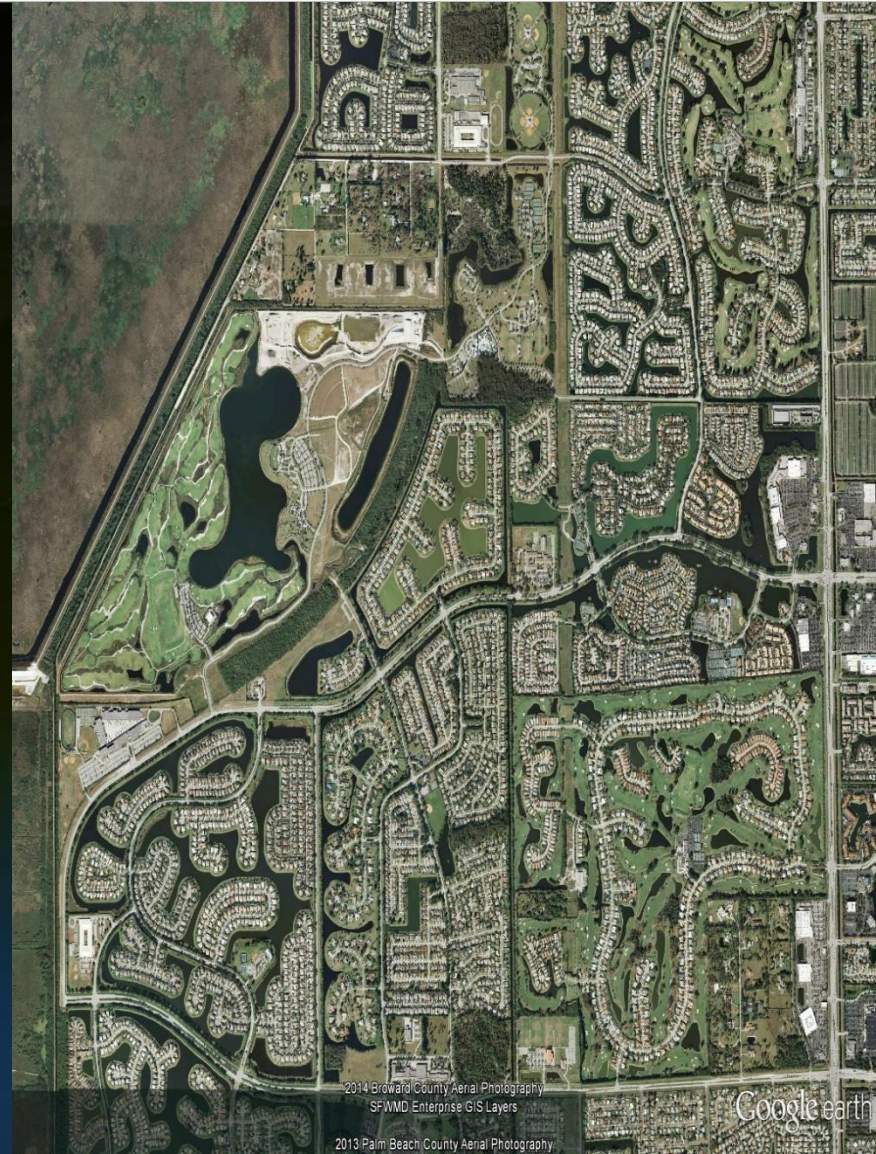
\$2,197,000

Actual Cost – by the Field Station

\$1,378,547

Certification to FEMA

- **Levee Certification – December 2015**
- **Without Certification:**
 - FEMA remaps areas landward of levee as High Risk, Special Flood Hazard Areas (SFHA).
 - High Risk, SFHA requires purchase of additional flood insurance.
 - Due to the high density of buildings adjacent to the levee, thousands of building owners would be affected.



East Coast Protective Levee Palm Beach County

Questions?