

LOWER RIO GRANDE FLOOD CONTROL PROJECT (LRGFCP) REHABILITATION

Carlos Marin, Commissioner

U.S. Section, International Boundary and Water
Commission

Lower Rio Grande Citizen's Forum - April 4, 2007



Geotechnical Investigations

- Geotechnical investigations are presently being conducted by USIBWC contractor, S&B Infrastructure, on all USIBWC levee reaches in the Lower Rio Grande Flood Control Project
- Borehole information was received in March 2007 for Interior Floodway investigations.
- Work is continuing in the Donna to Brownsville reach.
- Draft and final geotechnical reports are due in June and July of 2007, respectively.

Environmental Assessments

- Final EAs have been completed for Hidalgo Loop Levee and Mission-Penitas to Anzalduas. Lateral A to Donna Final EA will be issued in April 2007.
- Final EAs for Donna to Brownsville and the Interior Floodways reaches will be completed in August of 2007.

LRGFCP Rehabilitation Estimate

Construction of Levee Improvements

▪ Hidalgo Loop & Hike/Bike Trail (4.5 miles)	\$ 11.7 M
▪ Hidalgo Hike and Bike	\$1.8M
▪ Hidalgo Phase 1	\$4.9M
▪ Hidalgo Phase 2	\$5.0M
▪ Mission: Peñitas to Main Floodway (12 miles)	\$ 23.0 M
▪ Anzalduas Dam (incl. Dike) to Hidalgo Loop (6 mi.)	\$ 14.0 M
▪ Lateral A to Donna Pump (11 miles)	\$ 18.3 M
▪ Retamal Dike (3 miles)	\$ 5.4 M
▪ Donna Pump to Brownsville (18 miles)	\$ 19.0 M
▪ <u>Interior Floodways (58 miles)</u>	<u>\$ 21.5 M</u>
Total (Planning, Env., Eng./Design, Construction)	\$125.4M

Hidalgo Loop Levee to Lateral A



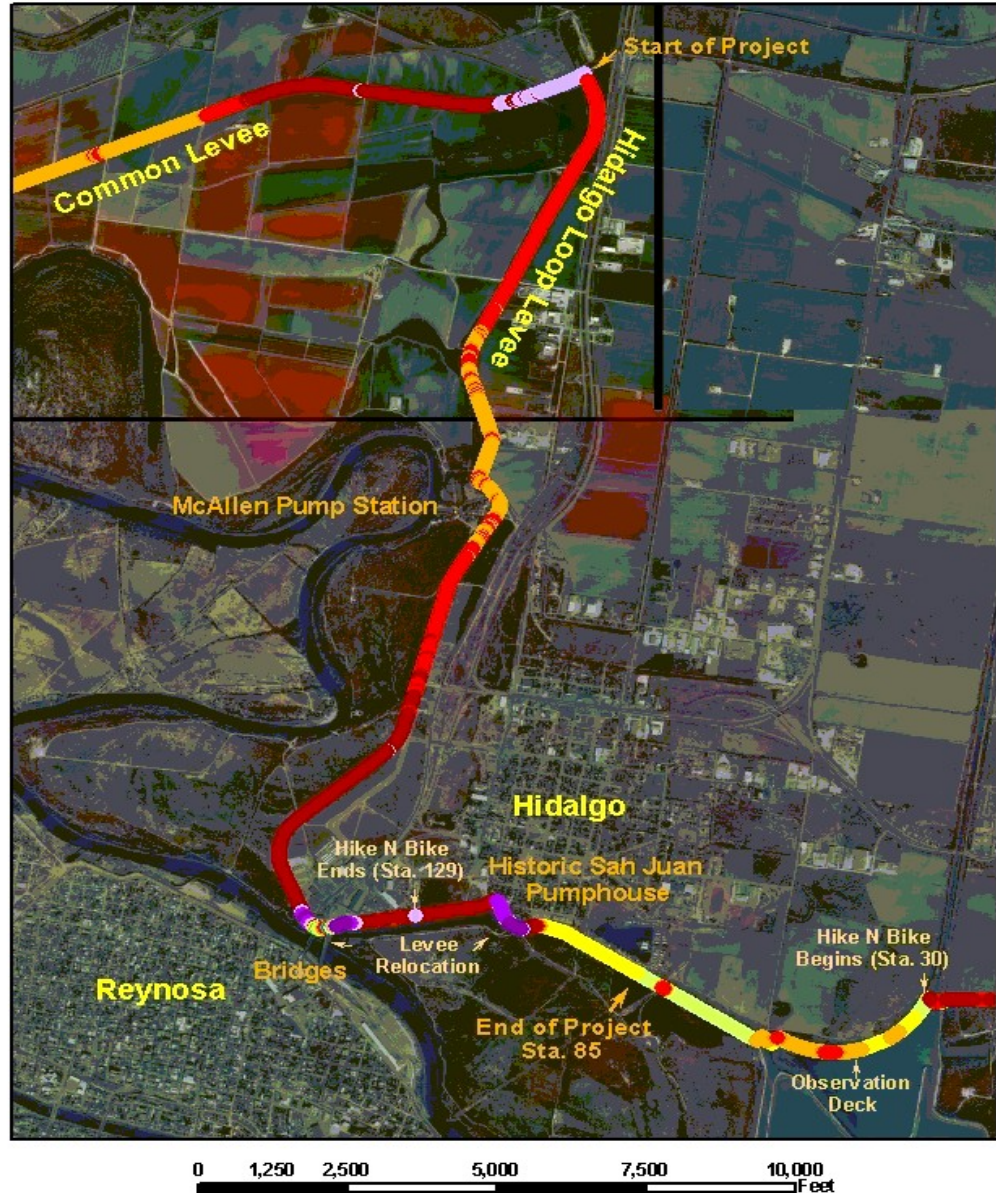
6+ feet overtop

- + 6ft overtop
- 5 to 6 ft overtop
- 4 to 5 ft overtop
- 3 to 4 ft overtop
- 2 to 3 ft overtop
- 1 to 2 ft overtop
- 0 to 1 ft overtop
- 0 to 1 ft freeboard
- 1 to 2 ft freeboard
- 2 to 3 ft freeboard
- 3 to 4 ft freeboard
- 4 to 5 ft freeboard

2-4 ft.
overtop

0-2 ft.
freeboard

4-5 ft. freeboard



Hidalgo Phase 1 and 2

- USIBWC will issue a contract solicitation this fiscal year (July 2007) for Hidalgo Phase 1 - raising 3.3 miles of the USIBWC levee from the Banker Floodway to the Hidalgo Reynosa Bridge.
- Design of Hidalgo Phase 2 will begin in June 07. Phase 2 entails floodwall construction at the bridges, a new levee east of the Hidalgo - San Juan pumphouse, and connection to the western terminus of the levee raising done in conjunction with the Hidalgo Hike and Bike Trail.

Mission: Peñitas to Anzalduas Dam

6+ feet overtop

2-4 ft.
overtop

0-2 ft.
freeboard

4-5 ft. freeboard

Freeboard/Overtop

- +6ft overtop
- 5 to 6 ft overtop
- 4 to 5 ft overtop
- 3 to 4 ft overtop
- 2 to 3 ft overtop
- 1 to 2 ft overtop
- 0 to 1 ft overtop
- 0 to 1 ft freeboard
- 1 to 2 ft freeboard
- 2 to 3 ft freeboard
- 3 to 4 ft freeboard
- 4 to 5 ft freeboard



Mission - Penitas to Anzalduas

- Development of a draft MOU with HCDD No.1 for cost sharing of this reach and was completed in February; discussions are ongoing.
- Design for raising of the Old Mission Inlet Closure levee is expected to commence in early 2008, contingent on funding.

FEMA Certification

- USIBWC informed FEMA November 2, 2006 that levee reaches in Hidalgo and Cameron Counties were not certifiable.
- FEMA re-mapping of floodplains expected to be completed by end of FY 07.
- FEMA remapping will assume a water surface from USIBWC hydraulic model will exist in a “no-levee” scenario.
- USIBWC will continue to work with FEMA towards certification - 12-24 months is expected between draft map release and map finalization.

Model Validation and FLO2D Modeling

- USIBWC HEC-RAS hydraulic model will be validated by USIBWC consultant, S&B Infrastructure.
- Additional data will be incorporated into the model, with results completed by June 2007.
- 2-dimensional modeling (FLO2D) underway using topographic LiDAR data from Willacy, Cameron, and Hidalgo counties and Mexico
- FLO2D model will indicate potential areas of inundation, with completion of work expected by August 2007.

Contact Information

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Levee Workplan:

www.ibwc.state.gov/FinalWP111504.pdf