



LOWER RIO GRANDE PRIORITIES - 2008

LOWER RIO GRANDE CITIZENS' FORUM

Carlos Marin, Commissioner

International Boundary and Water Commission,
United States and Mexico, United States Section

January 16, 2008

LOWER RIO GRANDE FLOOD CONTROL PROJECT

- USIBWC studies have detected levee deficiencies; main concern is height, not structural
- FEMA will be updating Flood Insurance Rate Maps
- Property owners where levees are deficient may have to purchase flood insurance
- USIBWC is working to raise and rehabilitate deficient levees
- Recent funding has been \$2-3 million/year
- FY 08 appropriation of \$10 million for Rio Grande Flood Control Project



LOWER RIO GRANDE FLOOD CONTROL PROJECT – HIDALGO CO.

- USIBWC preparing for construction contract for Hidalgo Phase I
- 3.3 miles from Banker Floodway to Hidalgo-Reynosa Bridge
- 180 days estimated for construction
- Phase II design is underway
- Phase II entails floodwall construction at the bridges, a new levee east of the Hidalgo-San Juan pump house, and connection to the western terminus of the Hidalgo Hike & Bike Trail levee raising



HIDALGO PHASE I & II



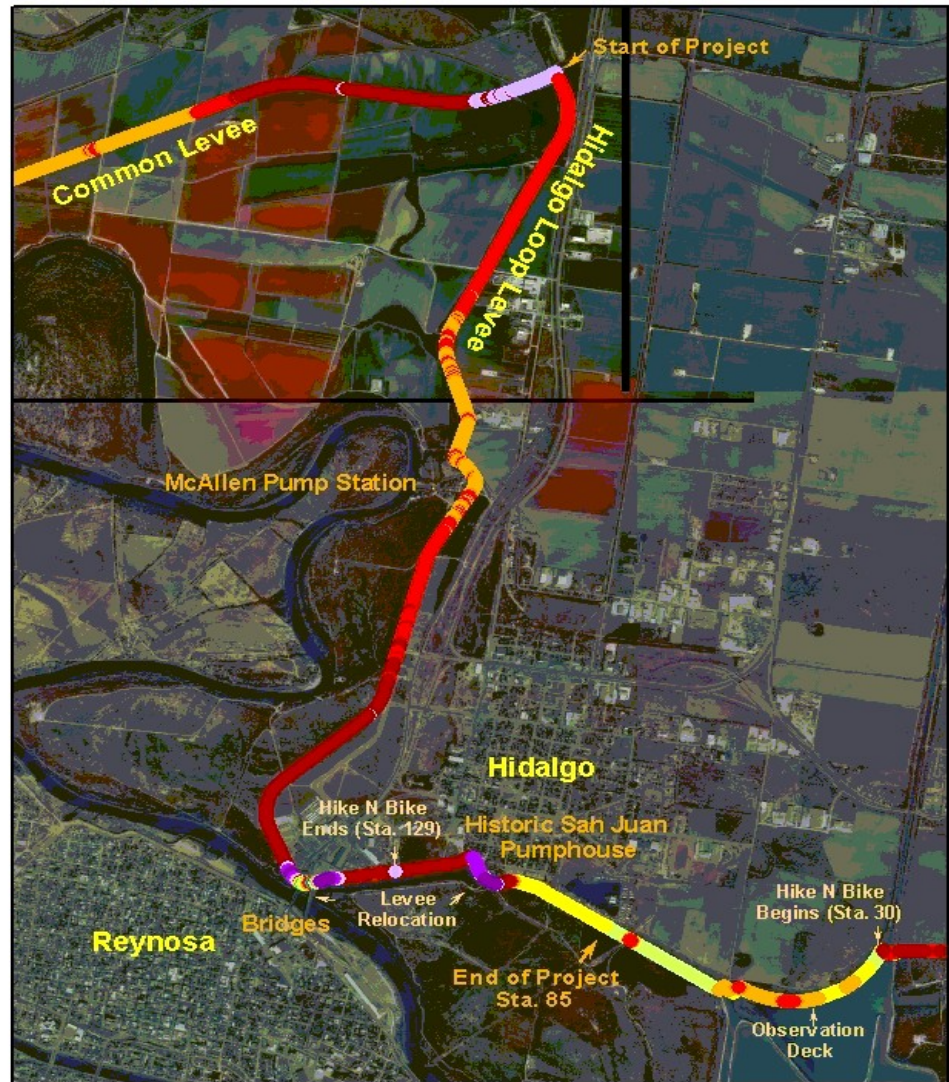
6+ feet overtop

- + 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



LOWER RIO GRANDE FLOOD CONTROL PROJECT – HIDALGO CO.



Levee was raised as part of the Hidalgo Hike & Bike Trail



LOWER RIO GRANDE FLOOD CONTROL PROJECT – HIDALGO CO.

- MOU signed with Hidalgo County Drainage District #1 (HCDD#1) in July 2007
- Cooperative agreement for both agencies to do levee work in Hidalgo County
- HCDD #1 will rehab levees from Peñitas to Banker Inlet south of Mission in 3 phases totaling 17 miles
- HCDD#1 will use funding from local bond issue
- Schedule pending discussion with DHS on wall construction integral with levee; currently three phases planned for completion by August 2009



LOWER RIO GRANDE FLOOD CONTROL PROJECT – CAMERON CO.

- USIBWC has initiated levee-raising in Cameron County using our own personnel
- Will raise all deficient segments from Donna Pump to 26 miles downstream of Gateway Bridge
- Preliminary estimated cost of \$1.5 million
- Levee will be raised by up to 30 inches to ensure adequate freeboard
- Expected completion by summer 2008
- Additional work needed on interior floodways



LOWER RIO GRANDE FLOOD CONTROL PROJECT – CAMERON CO.



Preparatory work on levee near Sabal Palm



LOWER RIO GRANDE FLOOD CONTROL PROJECT

- All Environmental Assessments have been completed for Rio Grande levee work in Hidalgo and Cameron Counties
- Design and construction undertaken as funding becomes available



BORDER FENCING ISSUES

- USIBWC has been coordinating with DHS on proposed border fencing
- Per 1970 Boundary Treaty, IBWC may not permit structures in the floodplain that obstruct or deflect normal or flood flows of the Rio Grande
- USIBWC flood control activities, including levee maintenance, must not be impeded

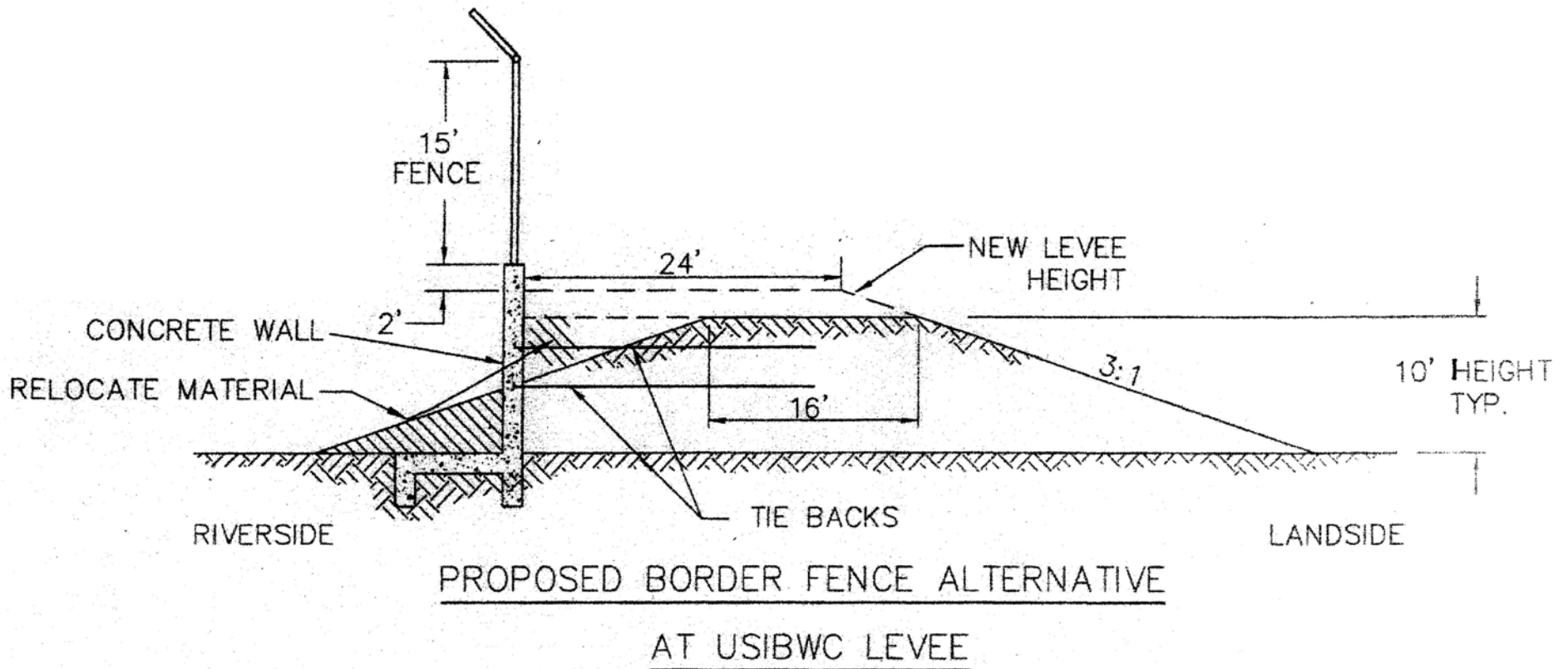


BORDER FENCING ISSUES

- USIBWC goal is to work with U.S. Department of Homeland Security (DHS) on a project compatible with the missions of both agencies
- USIBWC has proposed a fence design to DHS
- Discussions with DHS still underway with regard to fencing on or near USIBWC levee



BORDER FENCING ISSUES



BORDER FENCING ISSUES



DHS fence along a canal in Arizona



BORDER FENCING ISSUES

- USIBWC submitted comment letter to DHS on border fence Draft EIS
 - Urges coordination with USIBWC on planned levee-raising
 - Notes that DHS references fencing on USIBWC right-of-way but does not indicate specific locations
 - Mentions USIBWC permitting requirements
 - Urges consideration of fence impact on USIBWC wildlife corridor



DAM SAFETY

- Routine dam safety inspection done in 2007
- Conducted by IBWC and technical advisors from U.S. Army Corps of Engineers and Mexico
- Dams are ranked per Corps of Engineers Dam Safety Action Classes:
 - DSAC I – Urgent and Compelling (unsafe)
 - DSAC II – Urgent (potentially unsafe)
 - DSAC III – High Priority (conditionally unsafe)
 - DSAC IV – Priority (marginally safe)
 - DSAC V – Normal (safe)



INTERNATIONAL STORAGE DAMS

- Amistad Dam, Del Rio, TX – Cd. Acuña, Coah.
 - Flood control, water storage, recreation, hydro power
 - Total capacity 4.9 maf (including flood storage)
- Falcon Dam, Falcon Heights, TX – Nueva Cd. Guerrero, Tamps.
 - Flood control, water storage, recreation, hydro power
 - Total capacity 3.16 maf (including flood storage)
 - Provides water and flood control for Lower Rio Grande



AMISTAD DAM



FALCON DAM



ANZALDUAS DAM

- Located near McAllen, TX – Reynosa, Tamps.
- Diverts U.S. share of floodwaters to U.S. interior floodway
- Diverts irrigation water for Mexico



RETAMAL DAM

- Built to limit flood flows at Brownsville, TX-Matamoros, Tamps.
- Diversion of Mexico's share of floodwaters to its interior floodway



DAM SAFETY

- Report found all dams to be generally well-maintained and able to operate under normal conditions
- Amistad Dam
 - DSAC II – Urgent (potentially unsafe)
 - Concerns about impact of naturally-occurring sinkholes
 - Report recommends that a panel of geotechnical consultants be convened starting in the next funding request cycle



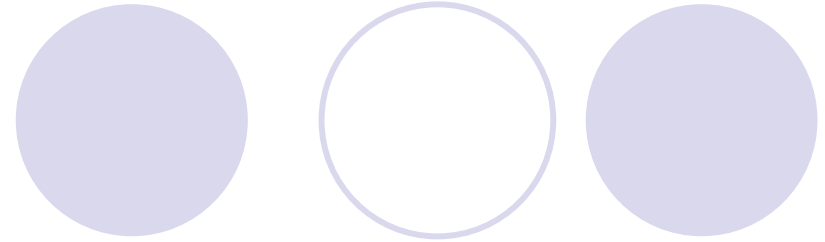
DAM SAFETY

- Falcon Dam

- DSAC III – High Priority (conditionally unsafe)
- Concern about foundation seepage
- Report recommends a comprehensive seepage analysis and evaluation of dam stability using current analytical methods to confirm or change the DSAC



DAM SAFETY



- Anzalduas Dam

- DSAC IV – Priority (marginally safe)
- Report recommends that IBWC continue to update electrical and mechanical systems, remove sediment near the dam

- Retamal Dam

- DSAC III – High Priority (conditionally unsafe)
- Concern about central gate oscillation during floods
- Recommends modifying flood operations to reduce use of central gate and replacing the gate lifting system



DAM SAFETY

- IBWC conducts weekly monitoring as part of an early warning system
- USIBWC has \$225,000 in FY 08 for dam safety
- Will convene technical experts to initiate needed studies this year
- Additional investigations and possible repairs in subsequent fiscal years, subject to funding
- Dam safety reports available on USIBWC web page:
 - <http://www.ibwc.state.gov/PAO/CURPRESS/2005/Dams>.



MEXICO'S RIO GRANDE DELIVERIES

- Per 1944 Water Treaty, Mexico delivers water to U.S. from 6 Mexican tributaries
- USIBWC will continue to track Mexico's Rio Grande water deliveries to the U.S.
- 2002-2007 five-year water delivery cycle ended without a deficit
- Mexico has delivered 31,000 acre-feet so far during the 2007-2012 cycle



MORILLO DRAIN

- Project to encase a portion of the drain was completed last summer
- The section was subject to erosion and other maintenance problems
- No plans for additional improvements in the near future
- Interest in piping additional sections as a long-term project



INTERNATIONAL BOUNDARY AND WATER COMMISSION,
UNITED STATES AND MEXICO
UNITED STATES SECTION



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