

INTERNATIONAL BOUNDARY AND WATER COMMISSION UNITED STATES AND MEXICO



Upper Rio Grande Flood Control Project

Levee Improvement

June 22, 2009

Rio Grande Canalization Project

- Constructed 1938-1943
- Water delivery and flood control project
- 106 river miles from Percha Dam, NM to American Dam at El Paso, TX
- 130 miles of flood control levees



Levee Terminology

Riverside

Levee

Landside

Freeboard

Base Flood Elevation

(1% annual chance of occurrence) = 100yr event

Overtopping

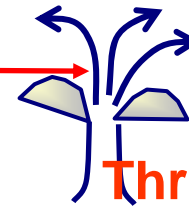
Slope failure


Foundation

Structural Integrity

Through seepage

Underseepage
(sand boils)





Current Levee Status – Doña Ana/El Paso County

- Levee Height is deficient and Plating is required for levees in Doña Ana County
- Levee Height is deficient and Plating is required in El Paso County
- New Levee and Floodwall for Canutillo

Levee Status – Doña Ana County

■ Hatch Area Levees

- Hatch West Levee (Hatch Siphon to Bignell Arroyo)
Levee Enhancement, Structure Improvements
 - Issue Contract Task Order 6/22/09
 - Produce Plans and Specs by 10/28/09
 - Construct Flood Control Improvements 2/11/2010 to 2/5/2011

Levee Status – Doña Ana County

- USIBWC will raise and add plating to:

- Mesilla Levees (Shalem Bridge to Vado Bridge)
 - Mesilla, West Levee (Shalem Bridge/Picacho. Flume to Mesilla Valley Bosque Park) ARRP Funds, design and Construction
 - Issue Contract Task Order 6/22/09
 - Produce Plans and Specs by 10/28/09
 - Construct Flood Control Improvements 2/11/2010 to 2/5/2011

 - Mesilla, East Levee, (Selden Canyon to Mesilla Dam) Levee Enhancement with non ARRA funds, In-house forces, ARRA funds for structure enhancement design
 - Complete 33% anticipated completion date 9/30/10

- Mesilla, East and West Levees (Mesilla Dam to Vado Bridge)
 - East Levee (Mesilla Dam to Vado Bridge)
 - West Levee (Mesilla Dam to Vado Bridge)
 - Issue Contract Task Order 6/22/09
 - Produce Plans and Specs by 10/28/09
 - Construct Flood Control Improvements 2/11/2010 to 2/5/2011

Levee Status – El Paso, Doña Ana Counties

Anthony/El Paso

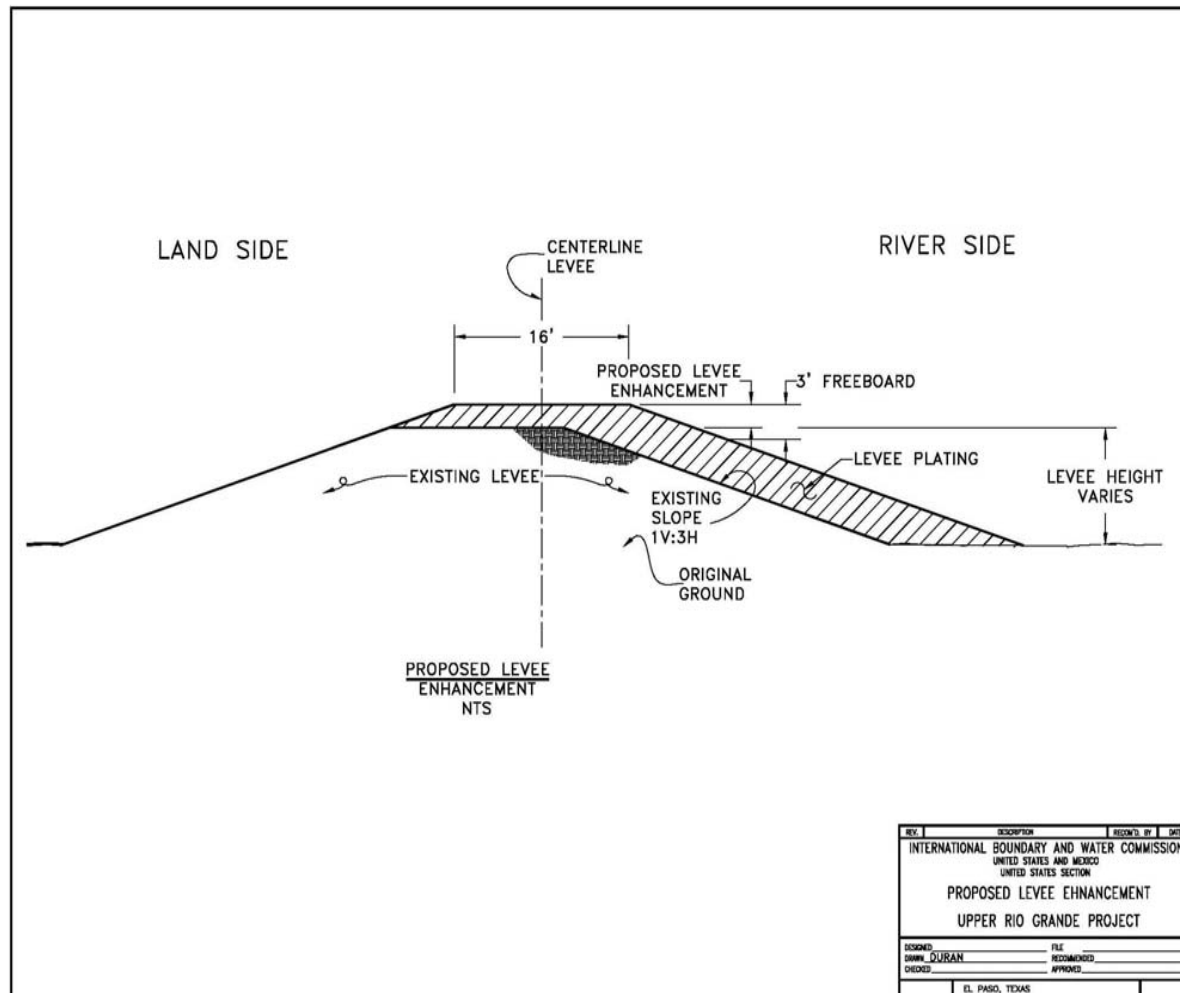
- East Levee (Vado Bridge to Vinton Bridge)
- West Levee (Vado Bridge to Country Club Bridge)
- Anapra Levee
 - Issue Contract Task Order 6/22/09
 - Produce Plans and Specs by 10/28/09
 - Construct Flood Control Improvements 2/11/2010 to 2/5/2011

Levee Status – Doña Ana/El Paso County

East Levee

- Canutillo, Vinton Bridge to Borderland Bridge
 - NEW LEVEE/FLOODWALL
 - ARRA Funds For Design
 - Out Year Funding
- Borderland Bridge to Electric Plant
 - Levee Enhancement with non ARRA funds, In-house forces, ARRA funds for structure enhancement design
 - Complete 33% anticipated completion date 9/30/10

LEVEE ENHANCEMENT TYPICAL SECTION



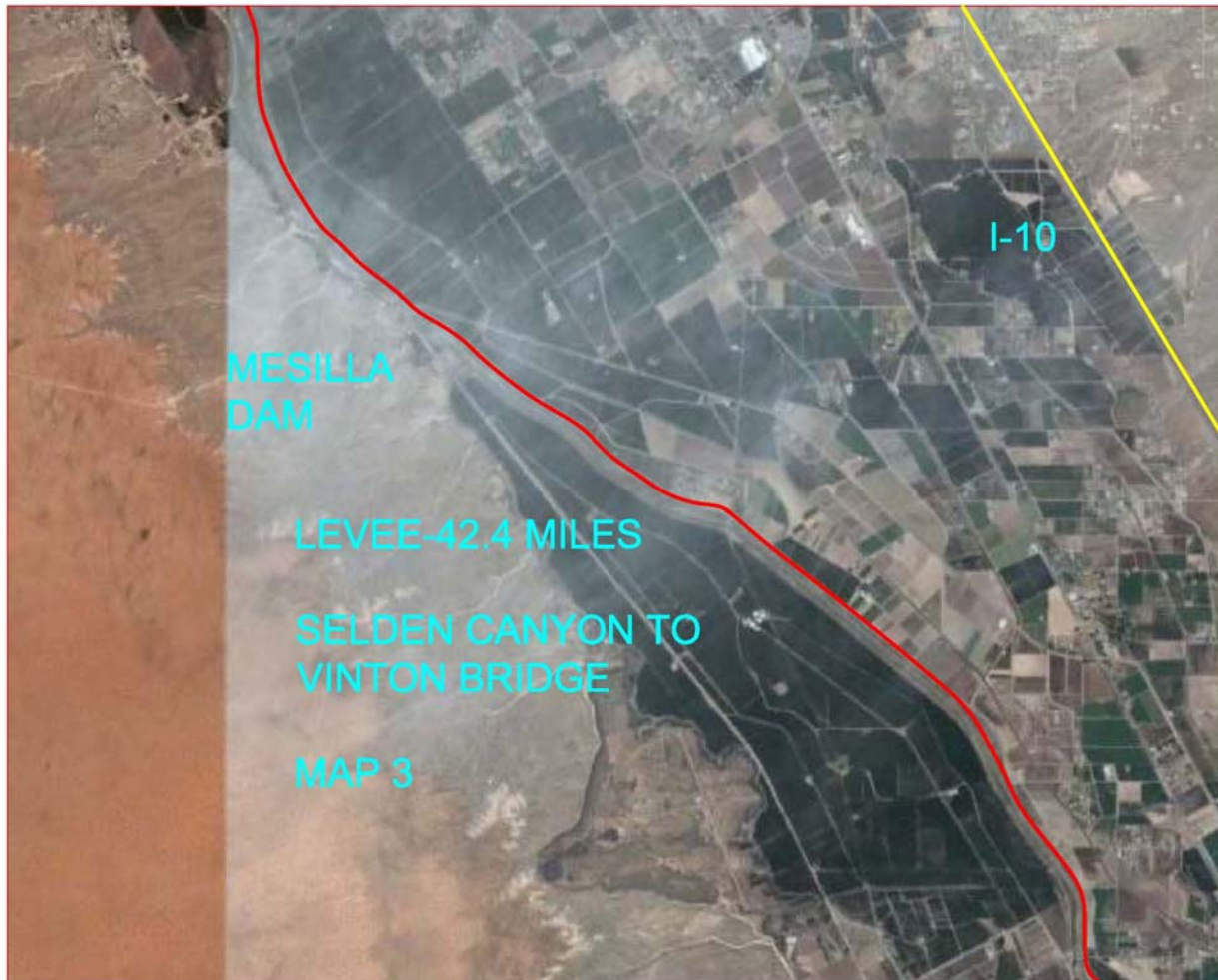
EAST LEVEE SELDEN CANYON TO VINTON BRIDGE MAP 1 of 5



EAST LEVEE SELDEN CANYON TO VINTON BRIDGE MAP 2 of 5



EAST LEVEE SELDEN CANYON TO VINTON BRIDGE MAP 3 of 5



EAST LEVEE SELDEN CANYON TO VINTON BRIDGE MAP 4 of 5



EAST LEVEE SELDEN CANYON TO VINTON BRIDGE MAP 5 of 5

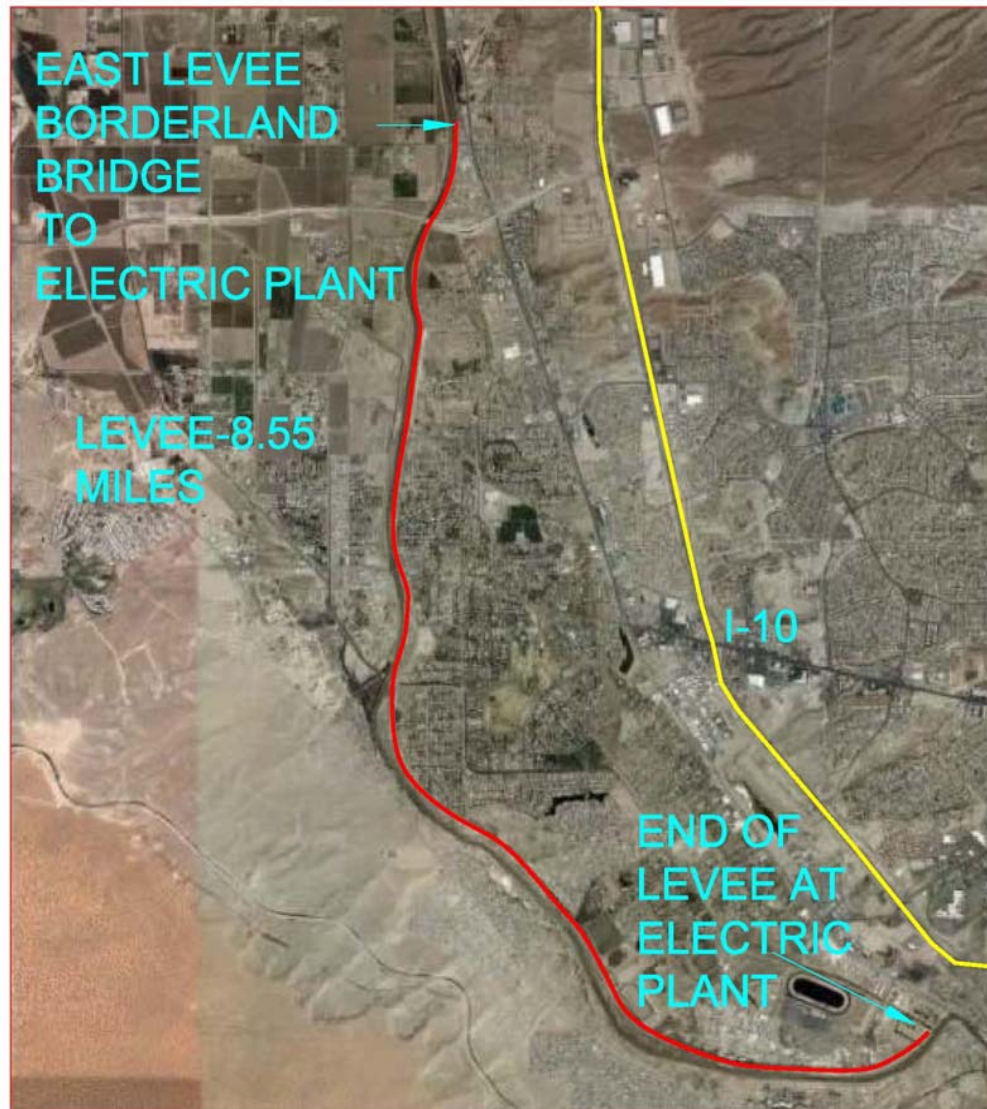


EAST LEVEE CANUTILLO AREA

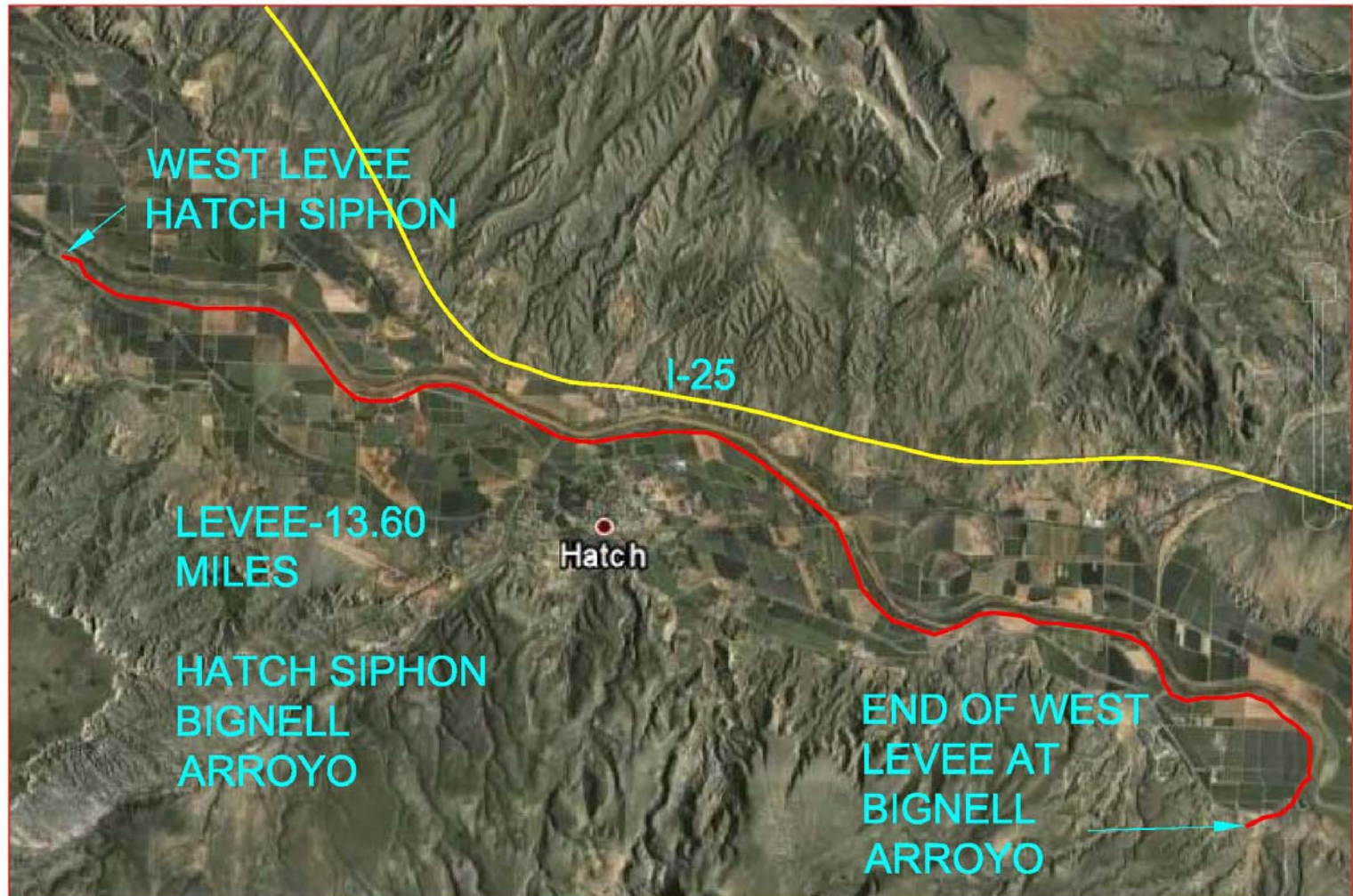


EAST LEVEE

Borderland Bridge to Electric Plant



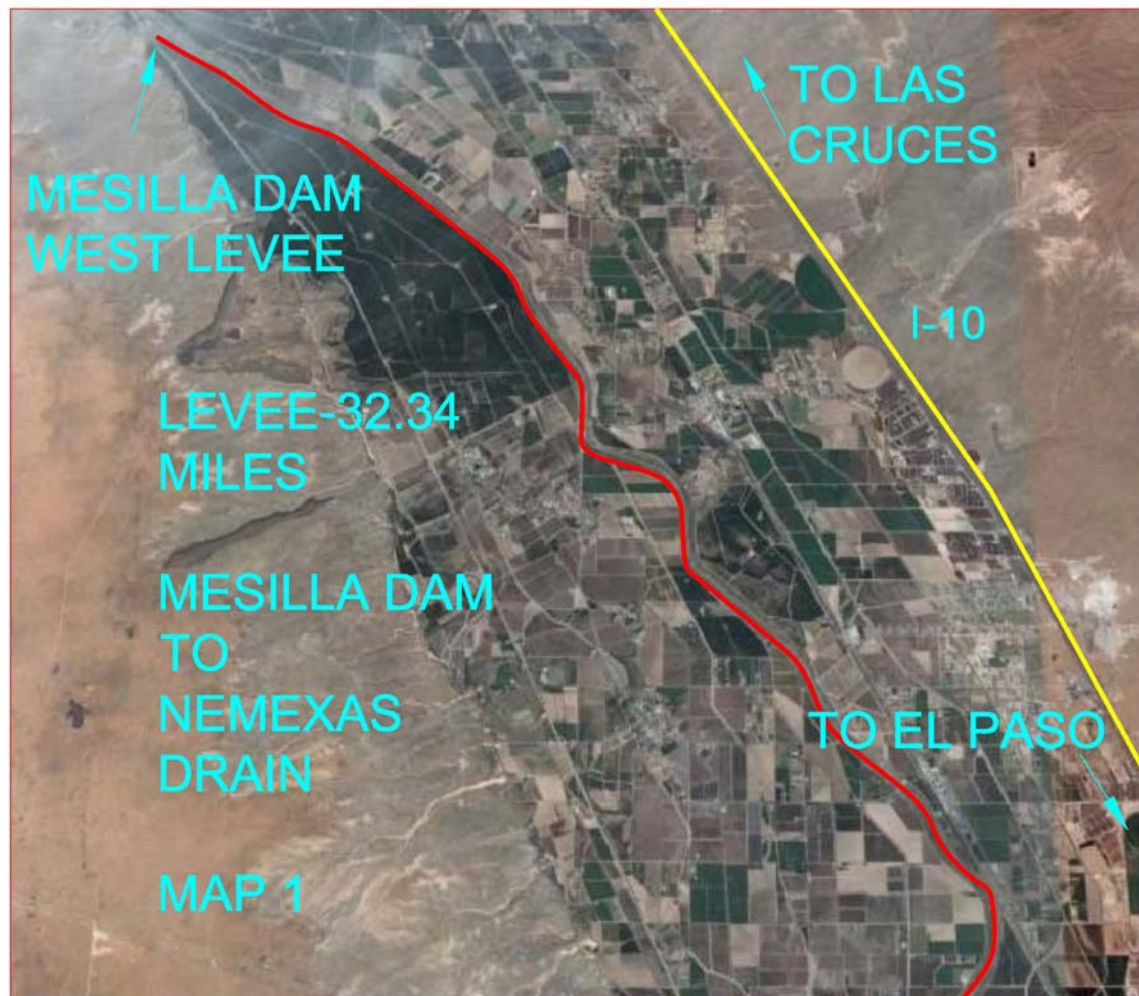
WEST LEVEE HATCH SIPHON TO BIGNELL ARROYO



WEST LEVEE PICACHO FLUME TO NEW MEXICO STATE PARK



WEST LEVEE MESILLA DAM TO NEMEXAS DRAIN MAP 1 OF 3



WEST LEVEE MESILLA DAM TO NEMEXAS DRAIN MAP 2 OF 3



WEST LEVEE MESILLA DAM TO NEMEXAS DRAIN MAP 3 OF 3



LEVEE ENHANCEMENT EQUIPMENT



LEVEE ENHANCMENT EQUIPMENT ON LEVEE





Why Perform Levee Improvements?

- FEMA is updating flood insurance rate maps
- FEMA requires levees to contain the 100-year flood with 3 ft. freeboard
- USIBWC notified FEMA in 2006 that it could not certify all levees as meeting this requirement



FEMA Contact Information

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Denton, Texas 76209

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WORK EXPECTATIONS

- Working Hours:
 - Monday – Friday 7:00 Am to 5:00 PM (Some Saturdays Possible) subject to change
- Noise: Construction Equipment
- Dirt and Dust:
 - USIBWC will manage dust
- Levee Traffic:
 - Construction Equipment/Pickups

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