



# Upper Rio Grande Flood Control Projects

International Boundary and Water Commission  
United States Section  
Engineering Services Division

October 6, 2011



## International Boundary and Water Commission United States Section

# WHY PERFORM LEVEE IMPROVEMENTS

- FEMA is updating flood insurance maps.
- In September 2005, FEMA sent notice to USIBWC requiring USIBWC to certify all levees in El Paso, Hudspeth, and Dona Aña Counties.
- Given the certification requirements, USIBWC was not able to certify the levees at that time.
- Levees required to be certified and accredited to be shown as providing flood protection from the 1% chance storm (100-year flood).
- Flood protection must include minimum 3 feet of freeboard
- Flood protection must ensure structural integrity of levee



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# AMERICAN RECOVERY & REINVESTMENT ACT

Upper Rio Grande Flood Control Project – \$115.4 million ARRA funds

- \$75.3 Million, New Mexico, Congressional District 2
- \$27.2 million, El Paso County, Congressional District 16
- \$6.1 million, Hudspeth County, Congressional District 23
- \$6.8 million, Presidio County, Congressional District 23

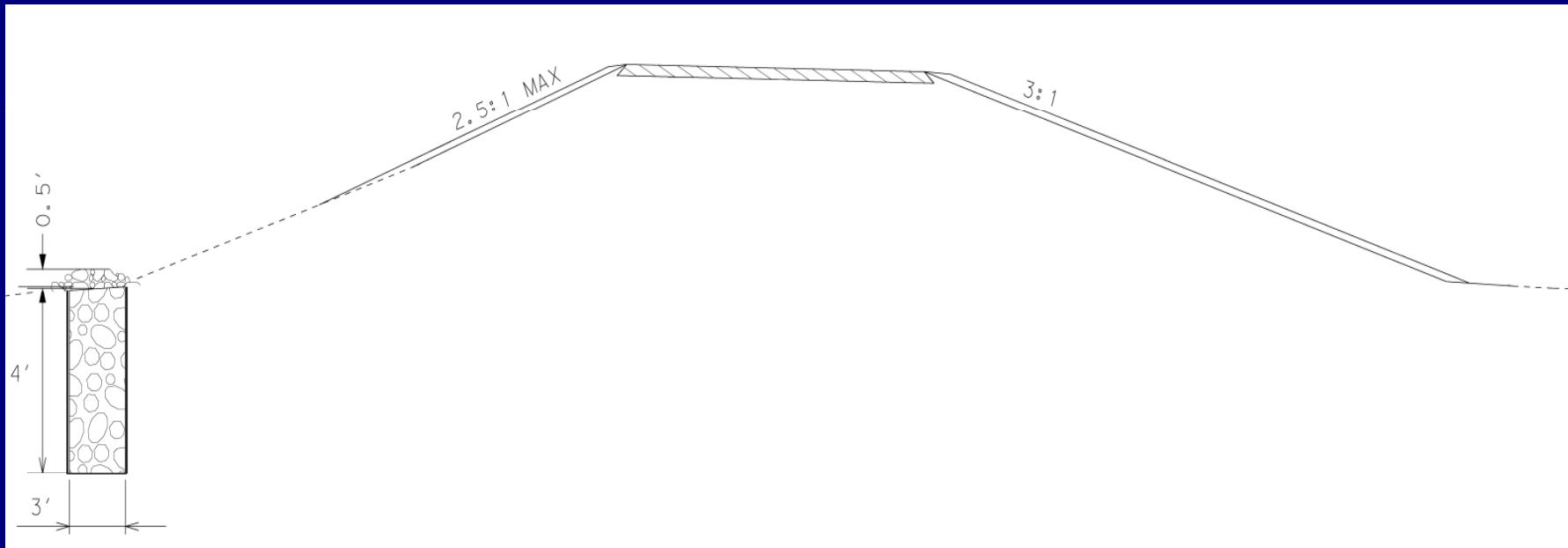
\$220 million of ARRA fund were appropriated to USBIWC on February 17, 2009.



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### TYPICAL NEW LEVEE





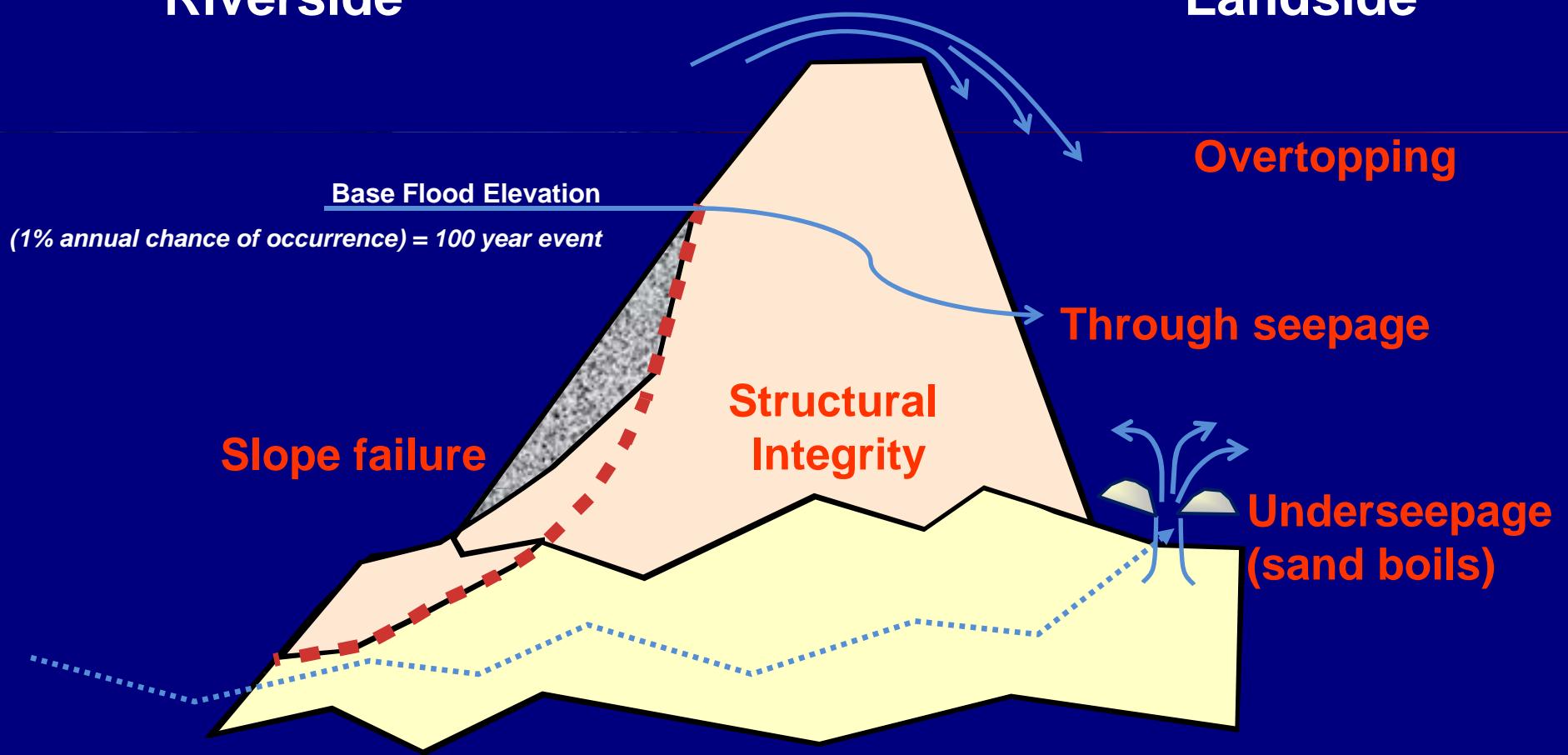
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### TYPES OF LEVEE FAILURES

Riverside

Landside





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### CURRENT AREA LEVEE PROJECTS

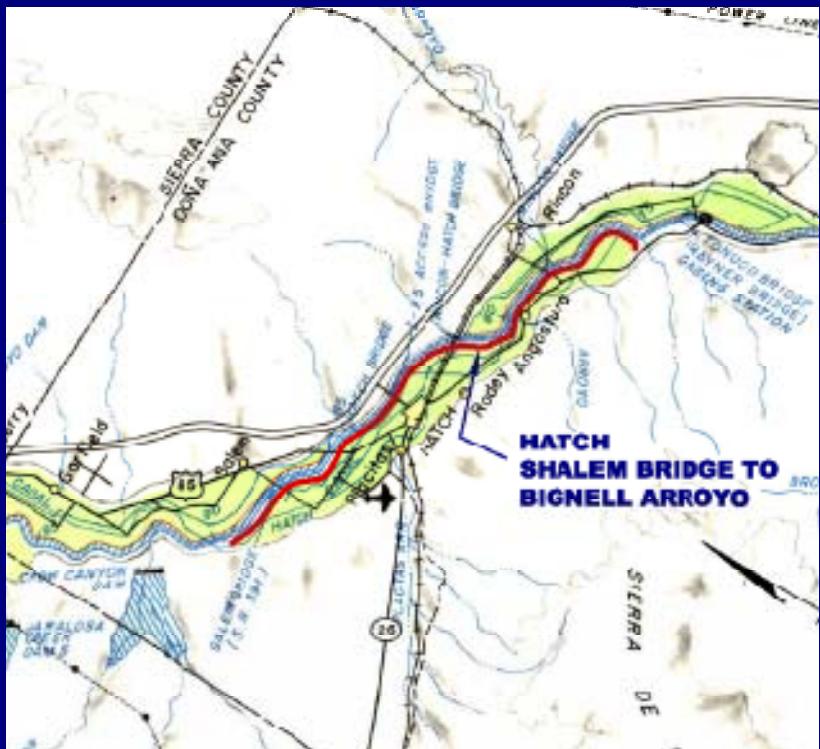
- Hatch Levee Improvements
- Mesilla Levee Improvements, Phase 1
- Mesilla Levee Improvements, Phase 2
- Canutillo Levee Improvements
- Sunland Park Levee Improvements
- Canutillo Levee Design, Phase 2
- Vado Levee Design
- Courchesne & NEMEXAS Levee Design
- Riverside to Fabens Levee Design



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## HATCH LEVEE IMPROVEMENTS



Hatch Siphon to Bignell Arroyo  
(west levee)

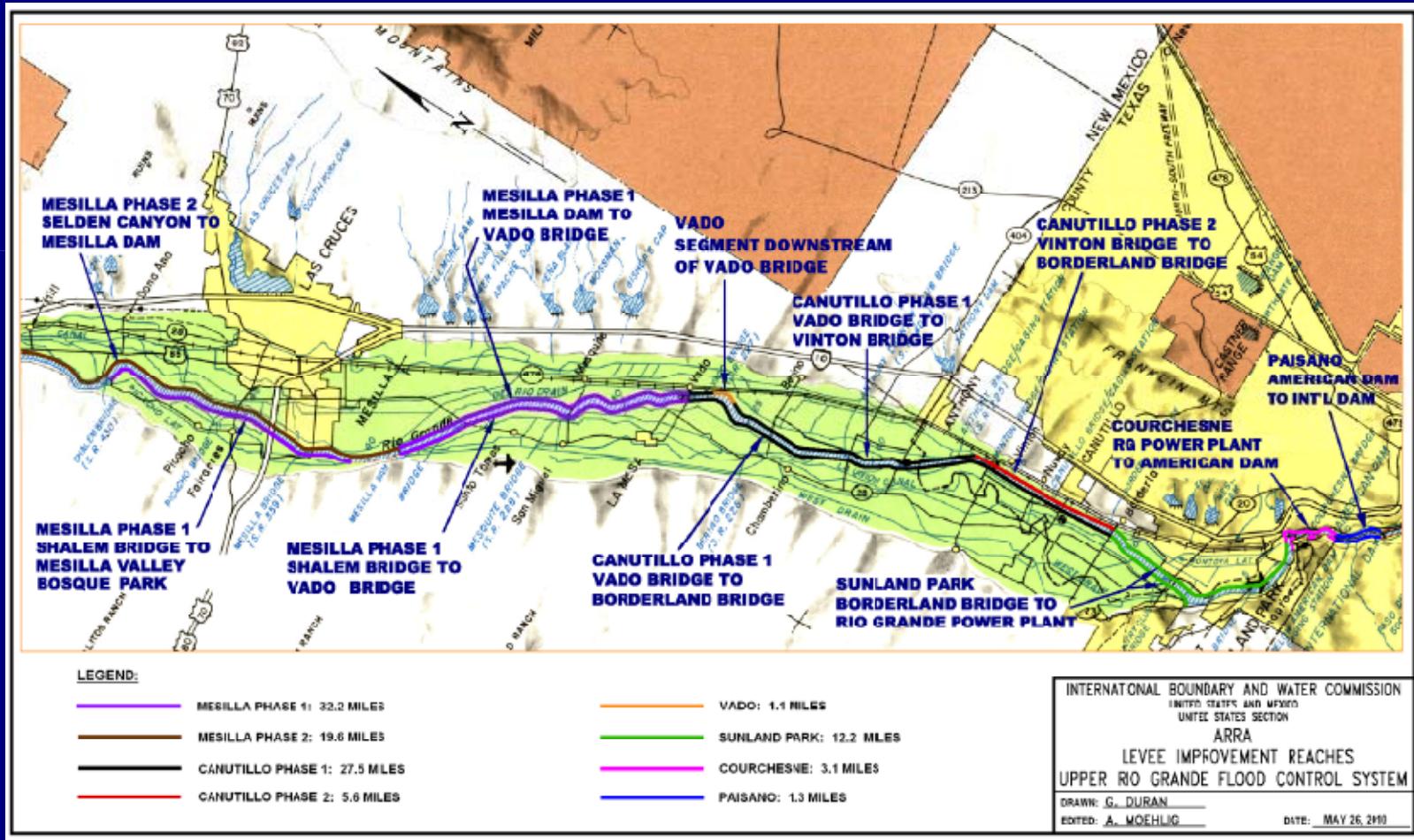
- 13.7 miles of levee
- \$7.9 Million contract to Milestone Excavation, Inc.
- Notice to Proceed issued February 3, 2010
- Anticipated completion November 2011
- All complete except for 3 sluice gates (99)%



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### CANALIZATION PROJECTS

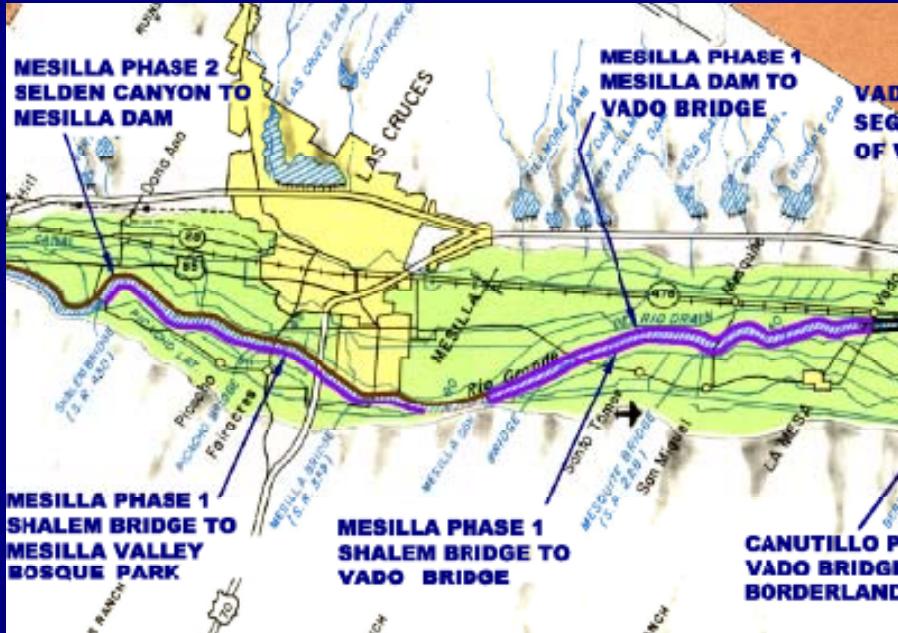




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### MESILLA PHASE 1



Mesilla Phase 1 – Purple Line  
Shalem Colony Bridge to Mesilla Dam  
(west levee)  
Mesilla Dam to Vado Bridge  
(east and west levee)

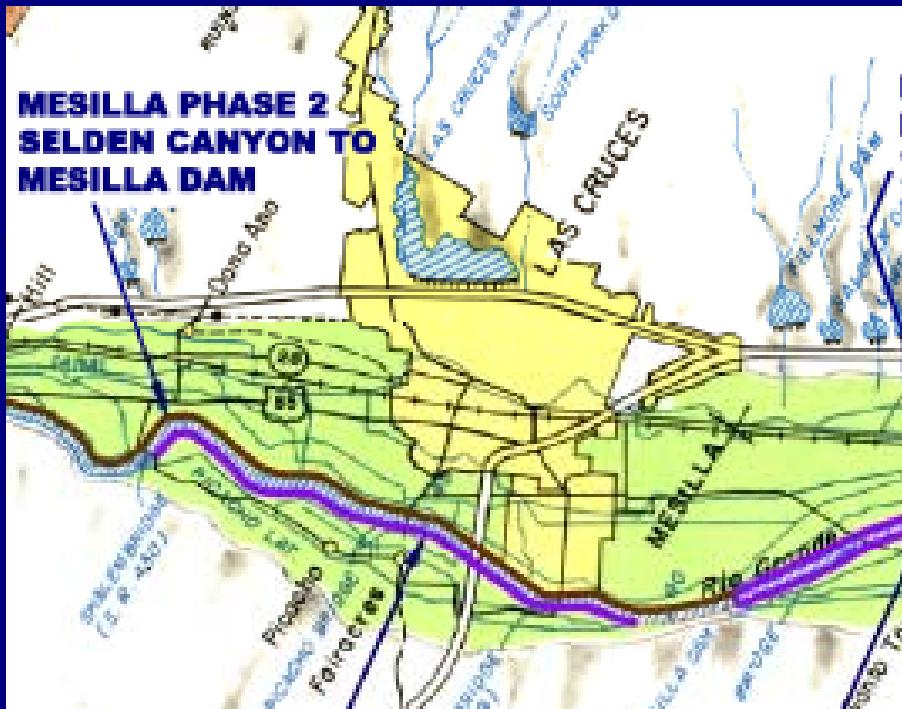
- 33.4 miles of levee
- \$31.1 million contract to Lakeshore Engineering Services, Inc.
- Notice to Proceed issued January 25, 2010
- Anticipated completion September 2011
- 29 miles of embankment complete – 87%



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### MESILLA PHASE 2



Mesilla Phase 2 – Brown Line  
Leasburg to Mesilla Dam  
(east levee)

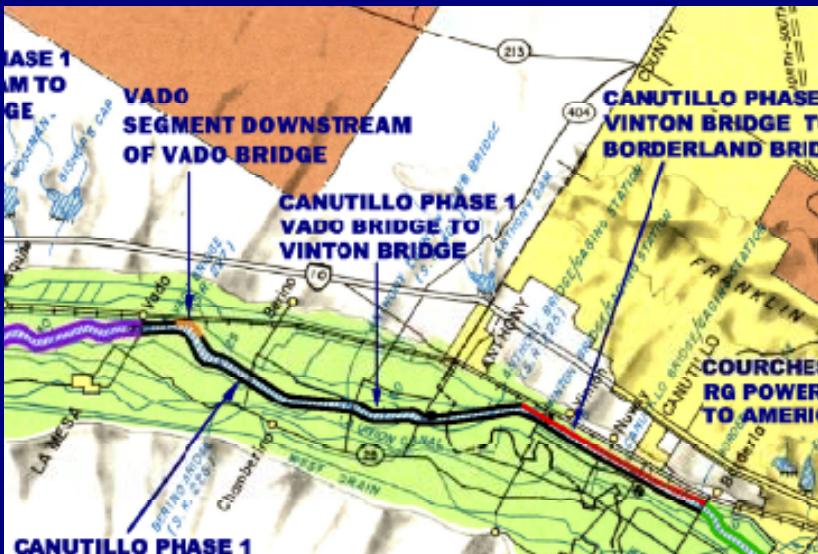
- 19.6 miles of levee
- \$14.8 million contract to Briston Construction LLC
- Notice to Proceed issued September 25, 2010
- Anticipated completion February 2012
- 14.2 miles of embankment complete – 72%



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### CANUTILLO PHASE 1



Canutillo 1 – Black Line  
Vado Bridge To Vinton Bridge  
(east and west levees)  
Vinton Bridge to Borderland Bridge  
(west levee)

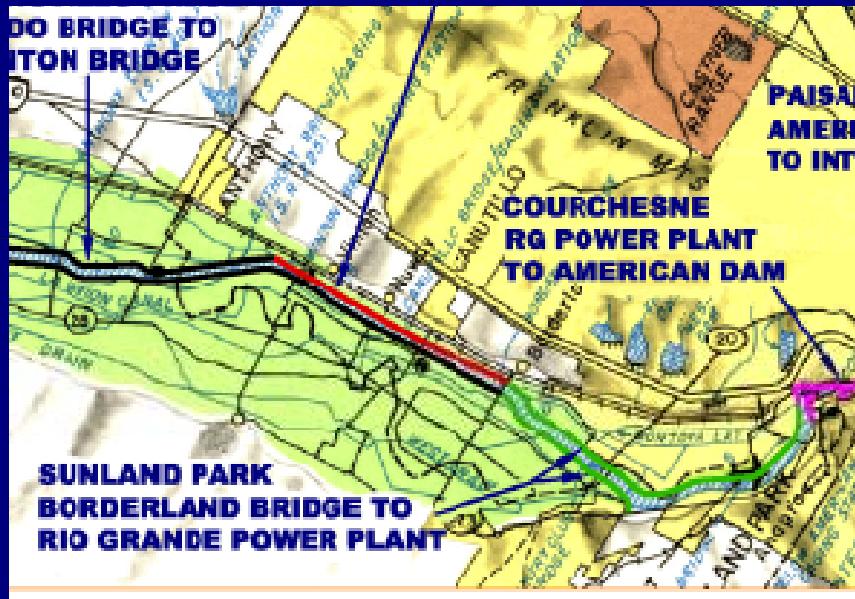
- 28.6 levee miles
- \$19.3 million contract to Milestone Excavation, Inc.
- Notice to Proceed issued February 3, 2010
- Anticipated completion February 2012
- 28.6 miles of embankment complete – 100%
- Floodgates remaining



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### SUNLAND PARK



Sunland Park – Green Line  
Borderland Bridge To Power Plant  
(east and west levees)

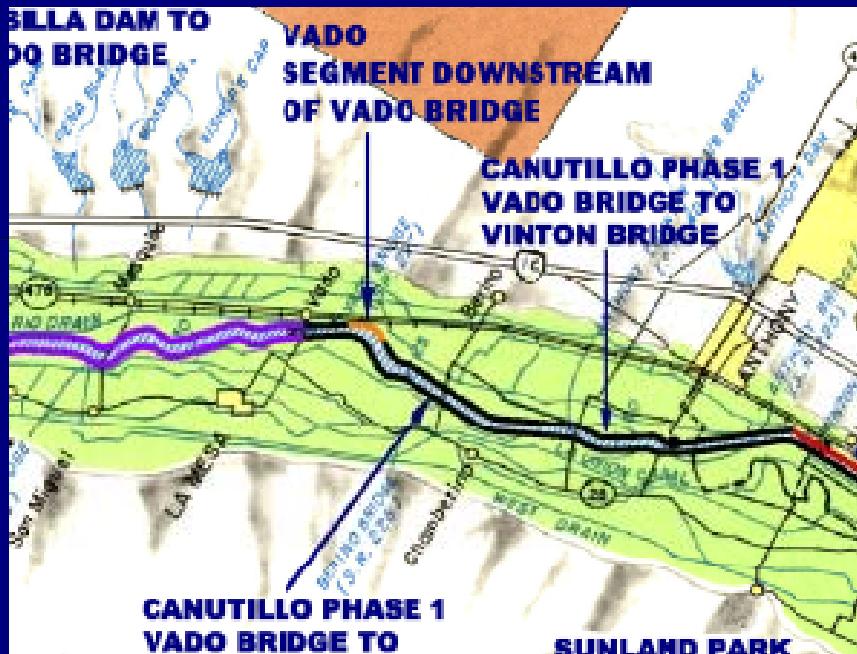
- 12.8 miles of levee
- \$9.2 million awarded to Ultimate Concrete LLC
- Notice to Proceed issued September 28, 2010
- Anticipated completion February 2012
- 1.6 miles of embankment complete – 35%



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### VADO LEVEE DESIGN



Vado – Orange Line  
(east levee)

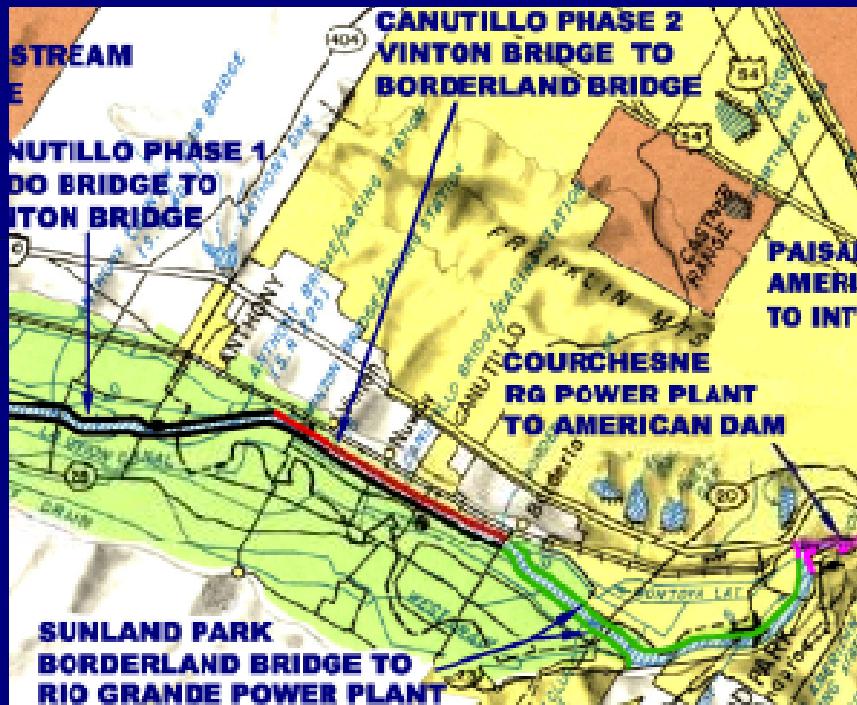
- Design - 1.1 miles of levee
- \$0.61 million awarded to Tetra Tech, Inc.
- Design complete
- Construction estimated in 2013



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### CANUTILLO PHASE 2 DESIGN



Canutillo Phase 2 – Red Line  
Vinton Bridge to Borderland Bridge  
(east levee)

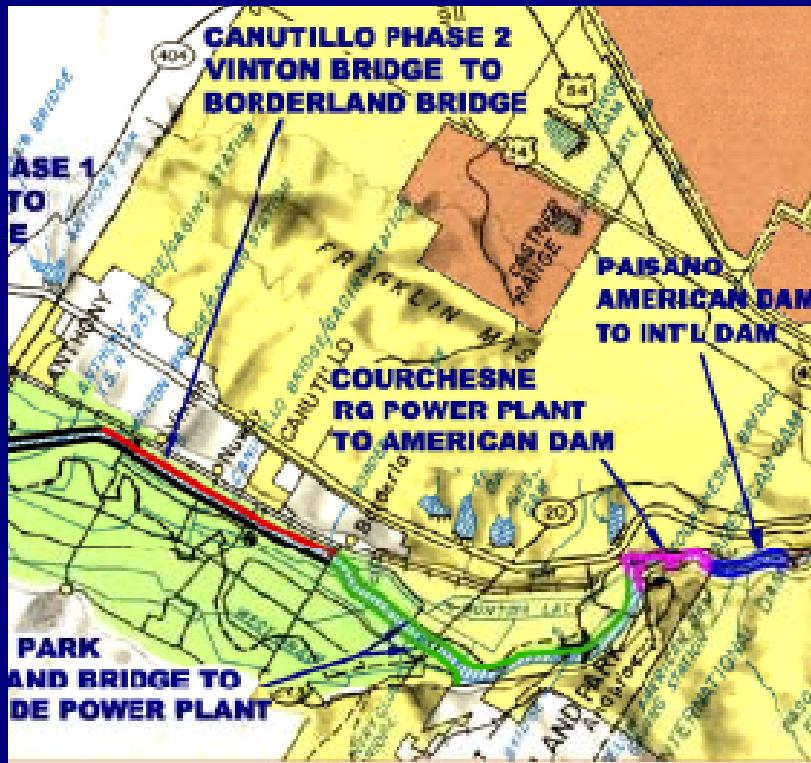
- Design - 5.7 miles of levee
- \$1.8 million design contract awarded to URS Group, Inc.
- Notice to Proceed issued on June 17, 2010
- Anticipated completion December 2011
- 90% design complete
- Construction estimated in 2014 through 2016



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## COURCHESNE & NEMEXAS REACH DESIGNS



Courchesne – Pink Line  
(east levee)

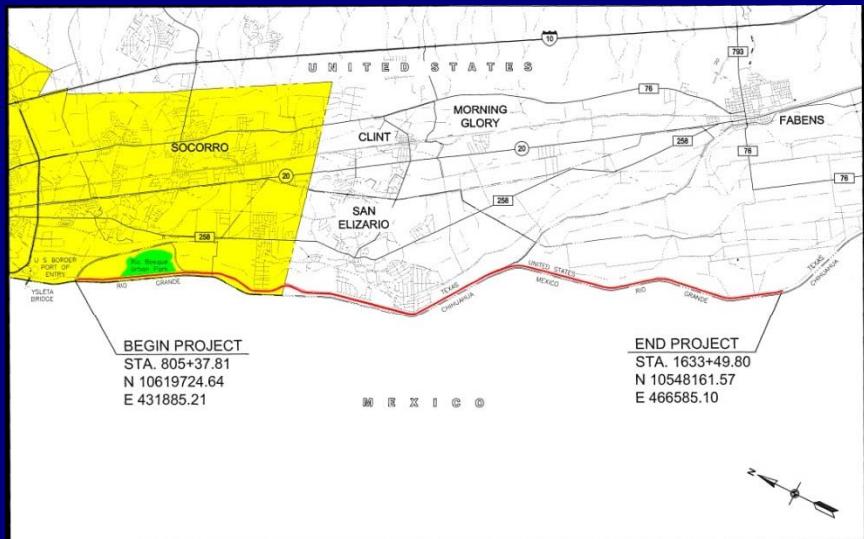
- Design - 3.8 miles of levee
- \$1.2 million design contract awarded to URS Group, Inc.
- Notice to Proceed issued September 17, 2010
- Anticipated completion October 2011
- 90% design complete
- Construction estimated in 2017



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### SOCORRO TO FABENS



Socorro, TX to Fabens, TX – Red Line  
Ysleta Bridge to Fabens

- Design - 15.7 miles of levee
- \$1.8 million design contract awarded to URS Group, Inc.
- Notice to Proceed issued September 24, 2010
- Anticipated completion October 2011
- 90% design complete
- Construction estimated in 2014 or later



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