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

UPPER RIO GRANDE FLOOD CONTROL PROJECT

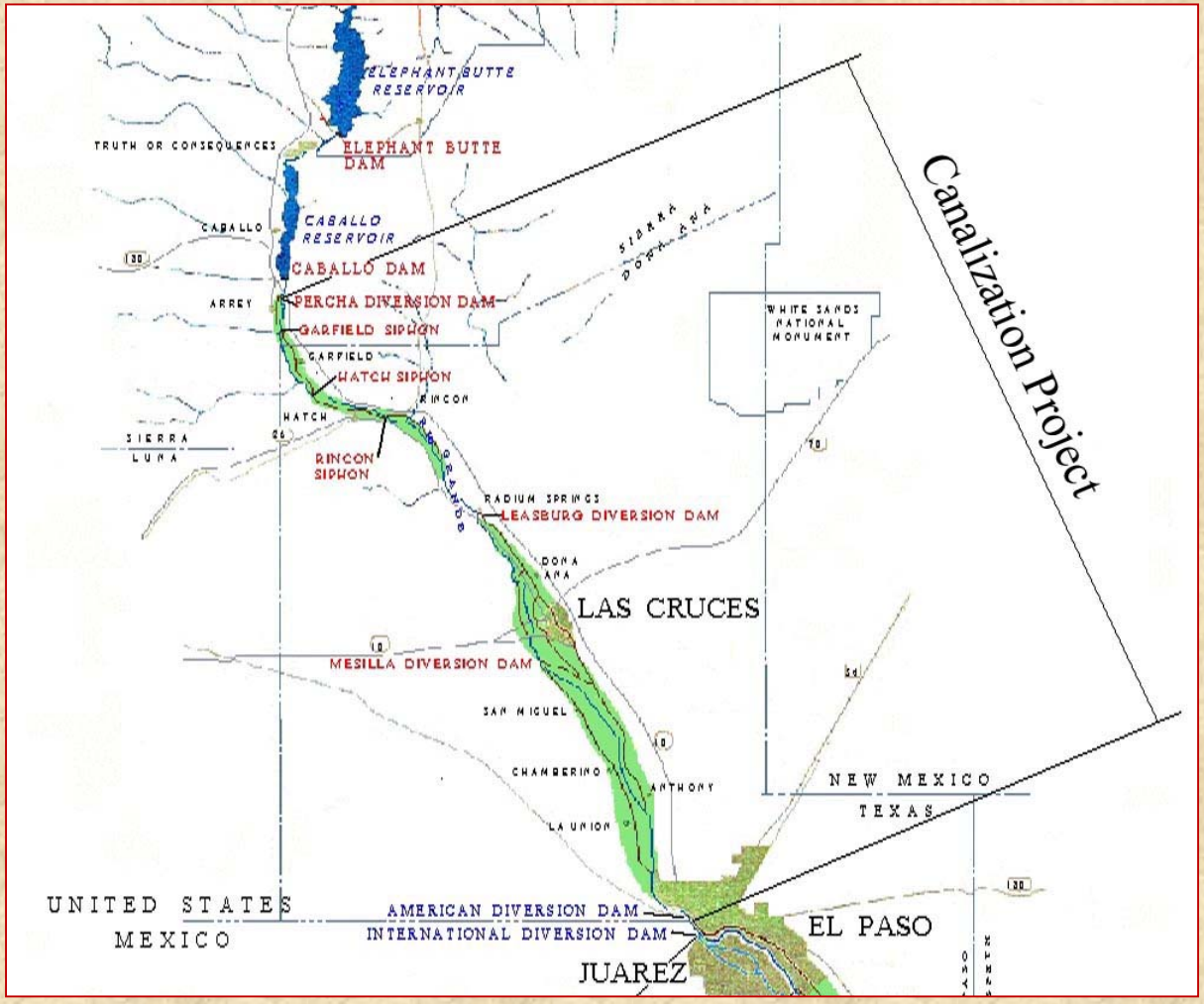
APRIL 2016

FIELD OFFICES

- AMERICAN DAM / CARLOS MARIN FIELD OFFICE
- LAS CRUCES FIELD OFFICE
- ZACARIAS DOMINGUEZ / FT. HANCOCK FIELD OFFICE

Employees 28

RIO GRANDE CANALIZATION PROJECT

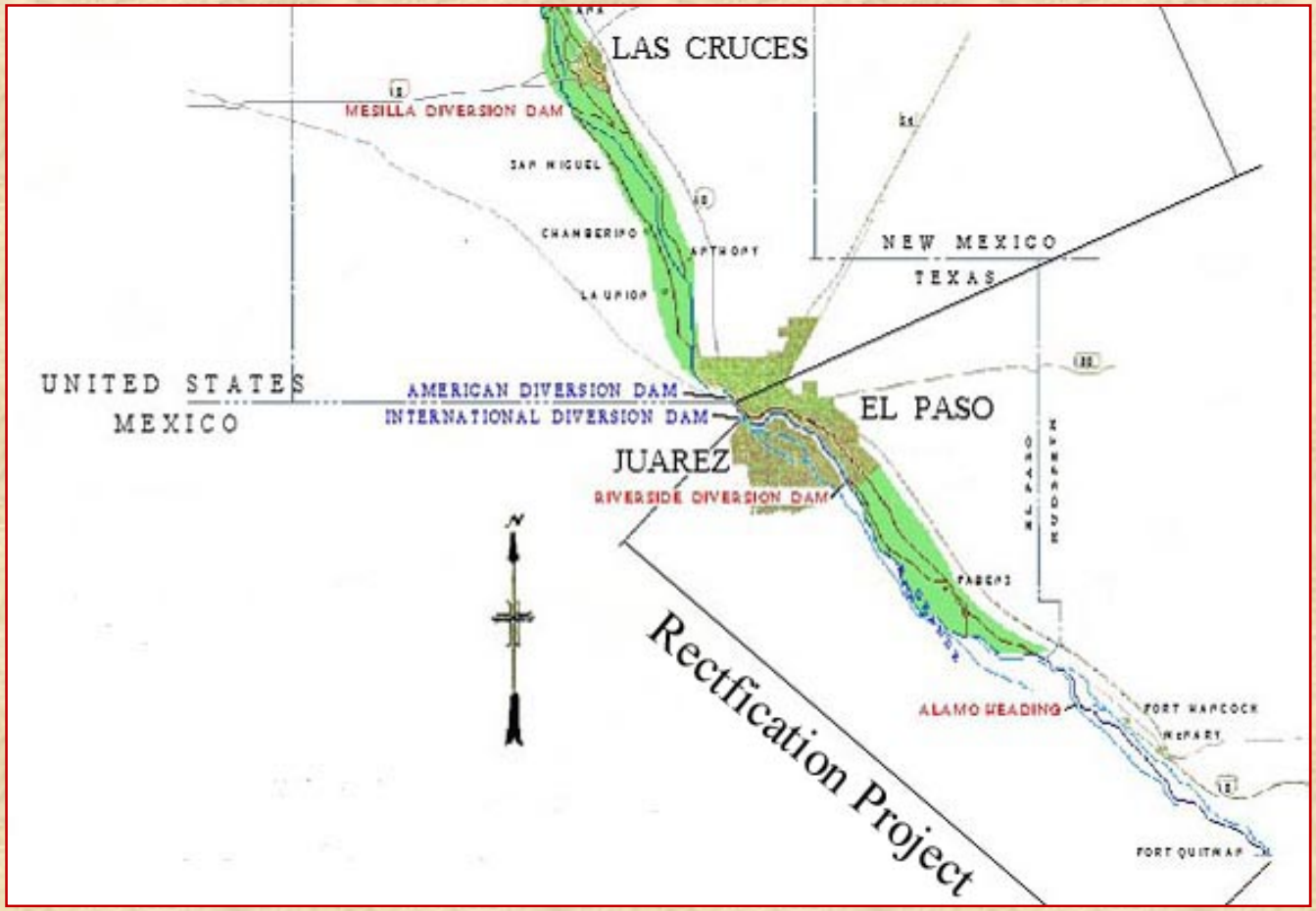


This project extends for 105.6 miles from Percha Dam to American Dam. This project assures that water released from Caballo Dam is delivered to Mexico in accordance with the 1906 Convention.

CHAMIZAL PROJECT

The Chamizal Project extends for 4.35 miles within the city of El Paso. This project was constructed in compliance with the American-Chamizal Convention and the primary purpose is to establish and stabilize the boundary between the United States and Mexico.

RIO GRANDE RECTIFICATION PROJECT



The Rectification project extend for 85.4 miles from the end of the Chamizal to Little Box Canyon. The purpose of this project is to stabilize the boundary between the United States and Mexico and provide flood protection to both countries.

INTERNATIONAL DIVERSION DAM

RIO GRANDE AMERICAN CANALS

American Canal

The American Canal begins at the American Dam and ends in the vicinity of College Arroyo. (3.5 miles)

Rio Grande American Canal Extension

This is an extension to the American Canal and end south of Zaragosa Bridge. (15.36 miles)

MAINTENANCE ACTIVITIES

- Levee Maintenance
  - Mowing
  - Road Grading
  - Re-surfacing
- Floodway Mowing
- Channel Maintenance
  - Sediment removal within river channel
  - Sediment removal within arroyos
- American and International Diversion Dams

MAINTENANCE ACTIVITIES

- American Canal
- Bridge Maintenance
  - Bridge of the Americas
  - Fabens-Guadalupe
  - Fort Hancock – El Porvenir
- Hydrographic Activities

RIO GRANDE CANALIZATION PROJECT

LEVEE ROADS ALONG PROJECT

HYDROGRAPHIC ACTIVITIES

Cableway across Rio Grande
El Paso, Texas

Gaging Station on Rio Grande
El Paso, Texas

CORDOVA INTERNATIONAL BRIDGE

EL PASO, TEXAS, U.S.A. - CD. JUAREZ, CHIHUAHUA, MEXICO

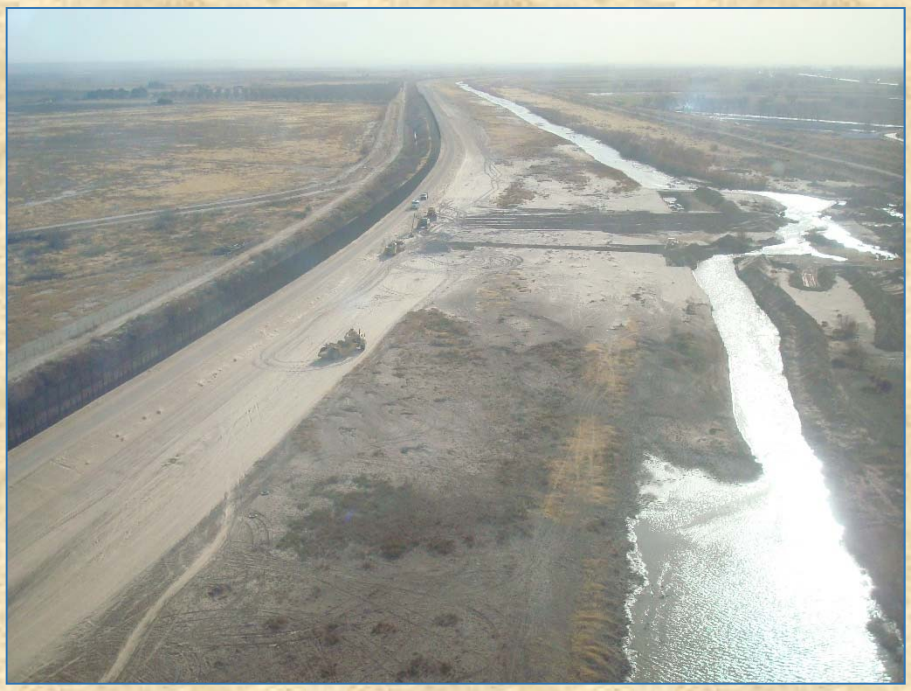
URGFO Missions

- Boundary Demarcation
- Flood Control
- Water Deliveries

BOUNDARY DEMARCATION

The boundary between the U.S. and Mexico in the river portion of the boundary, is defined as the middle of the river channel and as agreed upon by the US/MEX Sections of the IBWC.

NAVARRETE ARROYO



View downstream along Rio Grande at confluence with Navarrete Arroyo to the right.

Total Sediment Removed: 40,000 CY

Dozers pushing sediment into Mexican floodway.

DEMARCATION AT PORTS OF ENTRIES

Fabens Guadalupe Port of Entry

FLOOD CONTROL

2006 Flood

Chihuahuita Area

Below American Dam

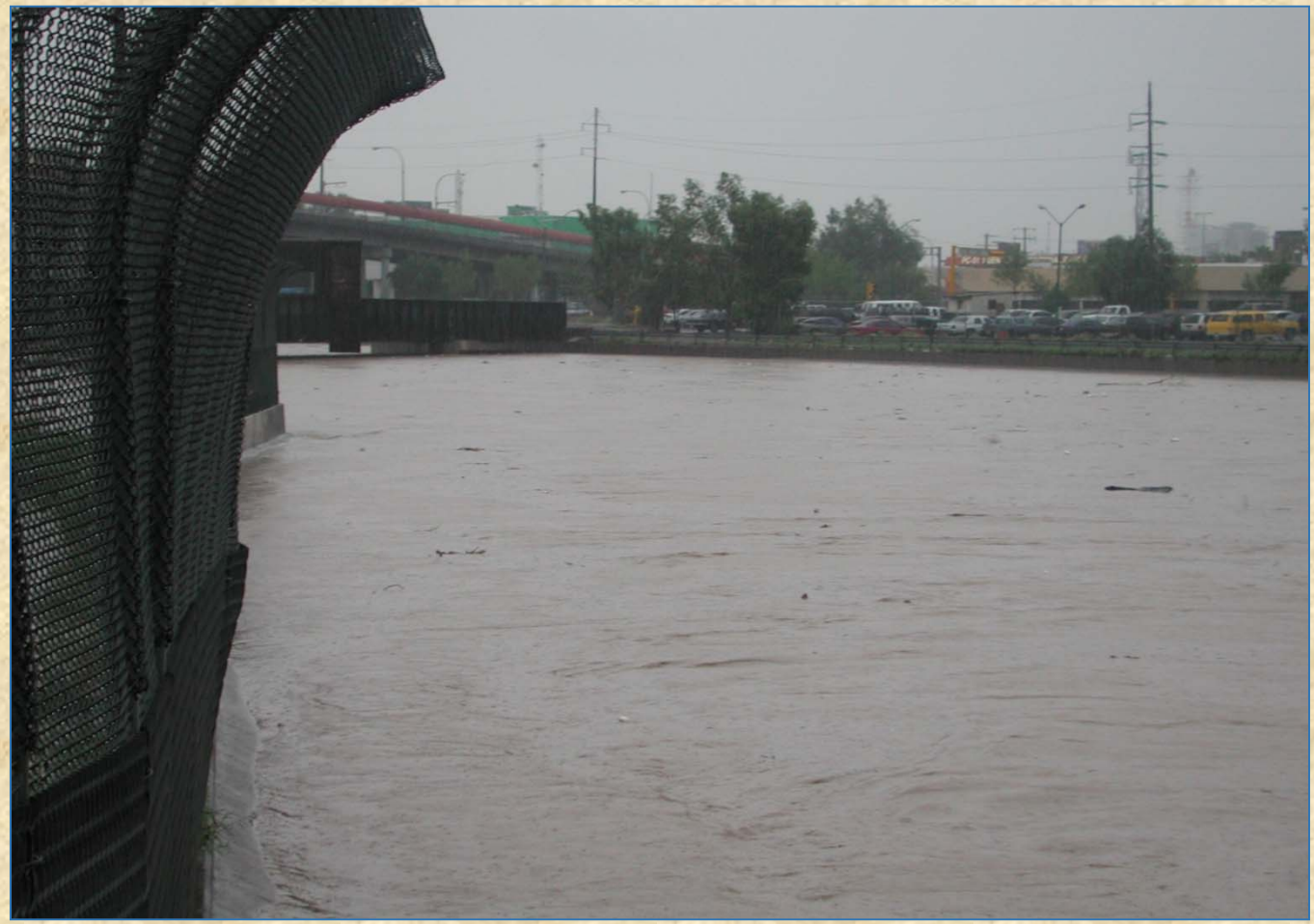
Rio Grande at El Paso

FLOOD CONTROL

INTERNATIONAL DIVERSION DAM - 2006 Flood

CHAMIZAL PROJECT

2006 FLOOD

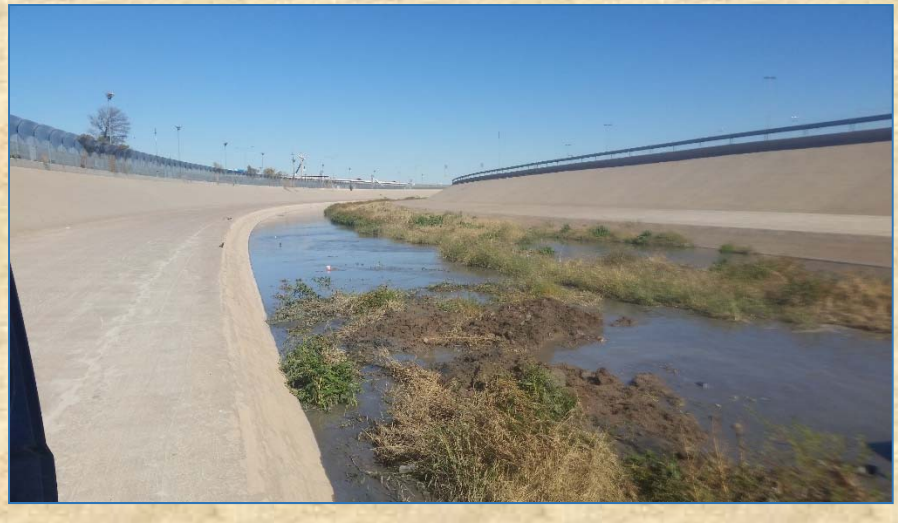


The flow capacity of the Chamizal Project is 24,000 CFS.

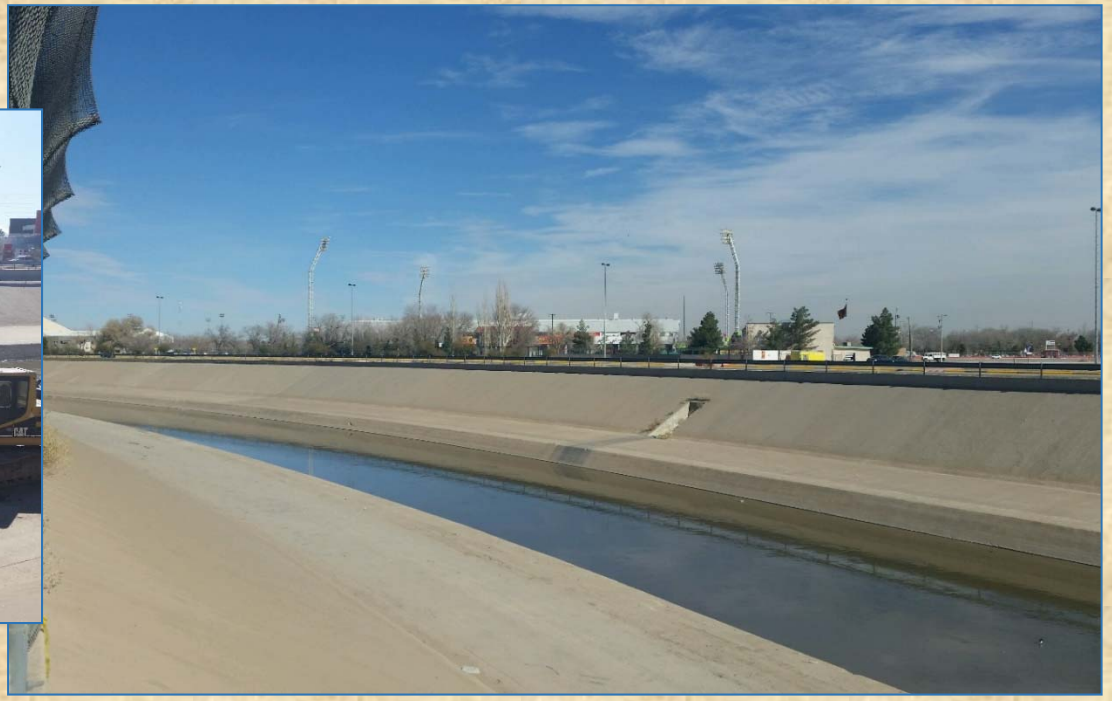
LEVEE CONSTRUCTION

Raising levees to meet FEMA standards which would reduce flood insurance cost to the local communities. Aproximately123 miles of levees were raised at a construction cost of $112,000,000.

CHAMIZAL



NOVEMBER 2015-FEBRUARY 2016



WATER DELIVERIES

CHANNEL MAINTENANCE ACTIVITIES

- Bank Stabilization
  - Using rock riprap and woody vegetation
- Arroyo Sediment Removal
- Arroyo Realignment
- River Channel Sediment Removal

GOALS & OBJECTIVES

- Maintain efficient water deliveries to:
  - U.S. Irrigation Districts
  - Municipalities
  - Mexico
- Improve Operations at Diversion Dams

Montoya Drain

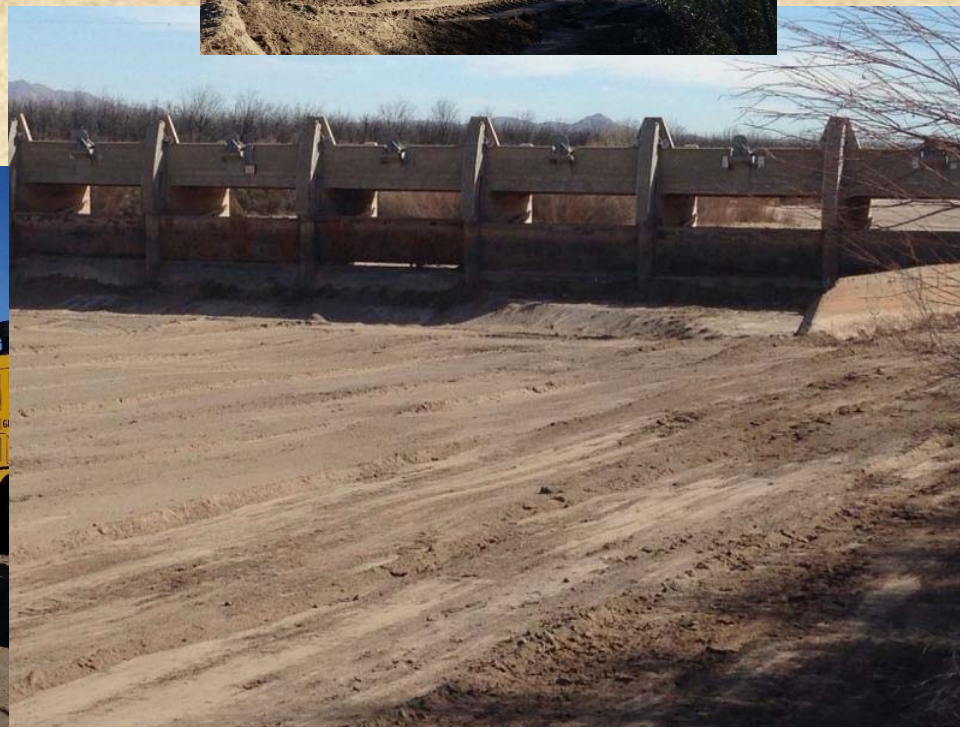
View East, Downstream

NO ACTION IMPACTS

- Reduction in Channel Carrying Capacity
  - Reduce water delivery efficiency
  - Create backwater conditions = drainage problems
- River bank instability
  - Bank failure/Lateral migration
    - May impact maintenance roads
    - May impact flood protection levees
- Diversion Dams – Reduction in carrying capacity of irrigation canals with increase sediment loads

DECEMBER 2015 - JANUARY 2016

MESILLA DAM



RECORD OF DECISION

Record of Decision (ROD) signed by Commissioner Ruth, June 4, 2009

- This document defines our new way of maintaining the River Corridor while retaining multiple operations/maintenance measures currently conducted for water delivery, flood control, and channel maintenance
- Allows for increased flood containment capacity (FEMA levee accreditation)
- Implements several environmental restoration measures.

Restoration Implementation: Accomplishments 2009 - 2016

- 11 restoration sites underway (346 acres)
- 27,432 total trees planted
- 1,062 long stem shrubs planted
- 366 estimated acres of salt cedar treated
- 55 groundwater monitoring wells installed
- Acquired 5.6 acres of water rights in 2013 and 2014
- Irrigated 4 times at Leasburg Ext. Lateral WW8 Site in Las Cruces


Leasburg Extension Lateral WW 8 February 2013

Leasburg Ext Lateral WW 8 June 2014

Leasburg Ext Lat WW 8 September 2014


Leasburg Ext Lat WW 8
October 2015

QUESTIONS?

International Boundary and Water Commission

United States Section

Operations & Maintenance Division

2616 W. Paisano Dr.

El Paso, TX 79922

(915) 351-1030

Antonio R. Solo
Area Operations Manager