Lower Rio Grande Flood Control Project

Arroyo Colorado Post Flood Cleanup

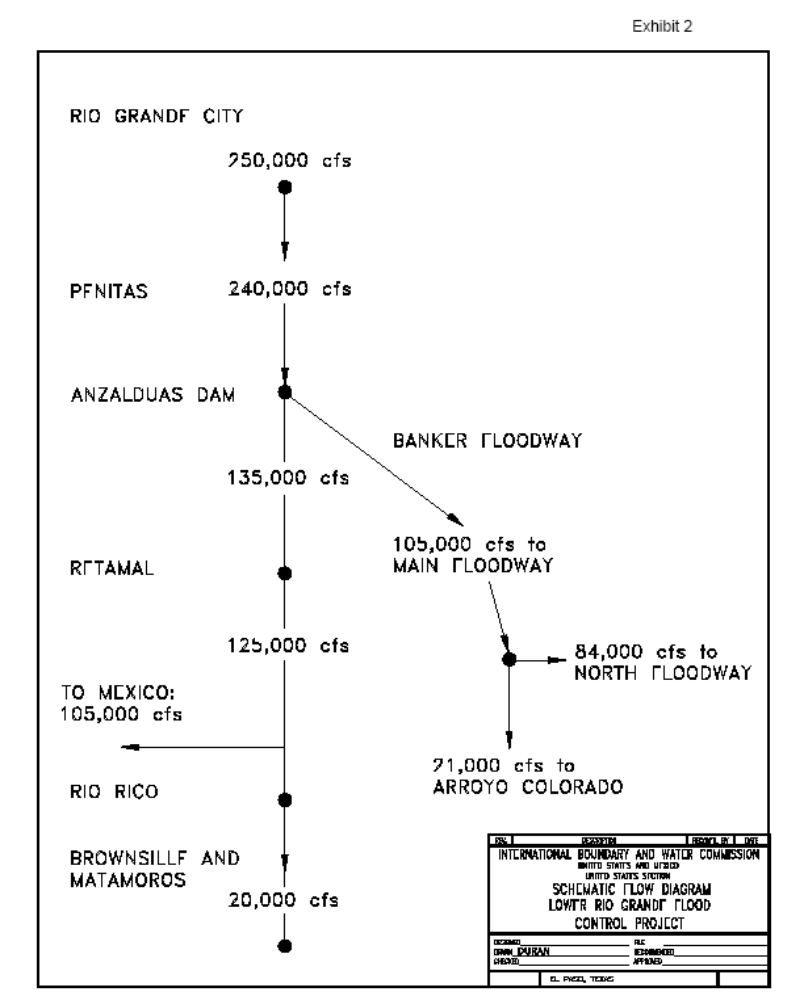
March 23, 2011

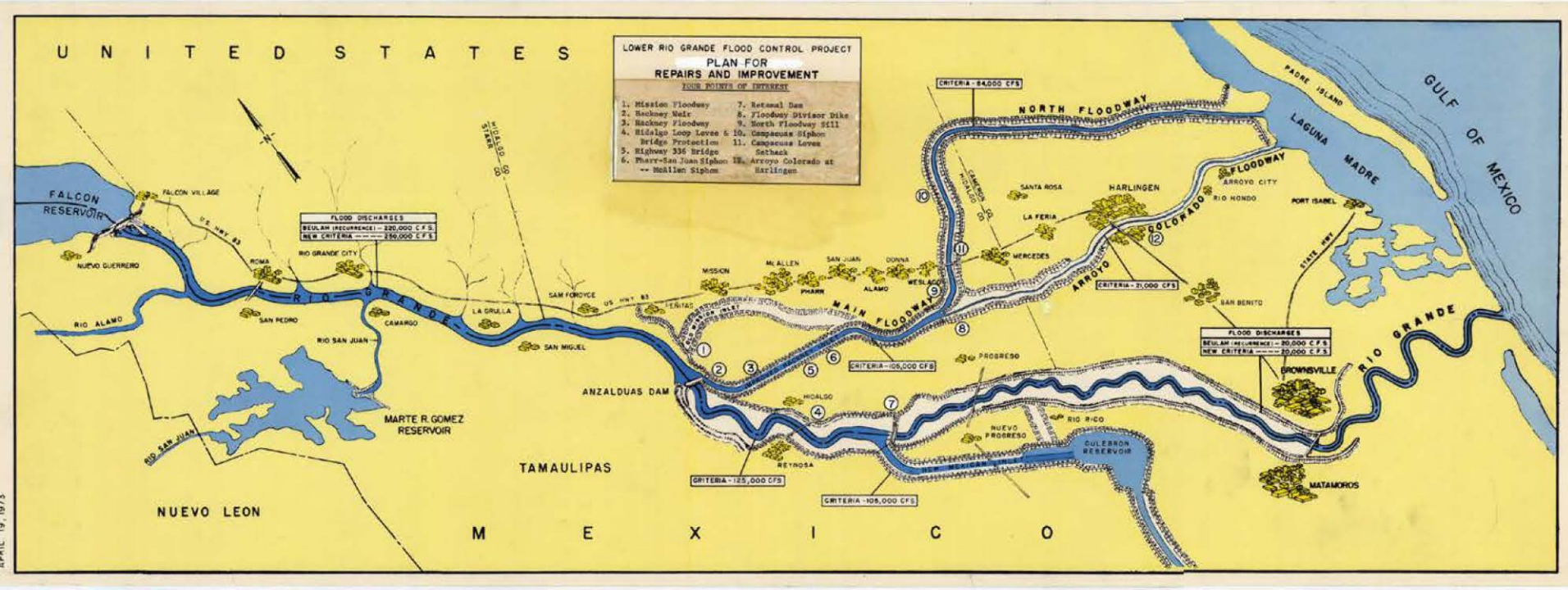
Schematic Flow Diagram
Lower Rio Grande Valley

Mexico and the United States equally divide flood flows

The Arroyo Colorado is required to convey 21,000 cfs

During Hurricane Alex, on July 22, 2010, the Arroyo Colorado flow measured 5,460 cfs, with limited freeboard demonstrating the need to improve its hydraulic efficiency



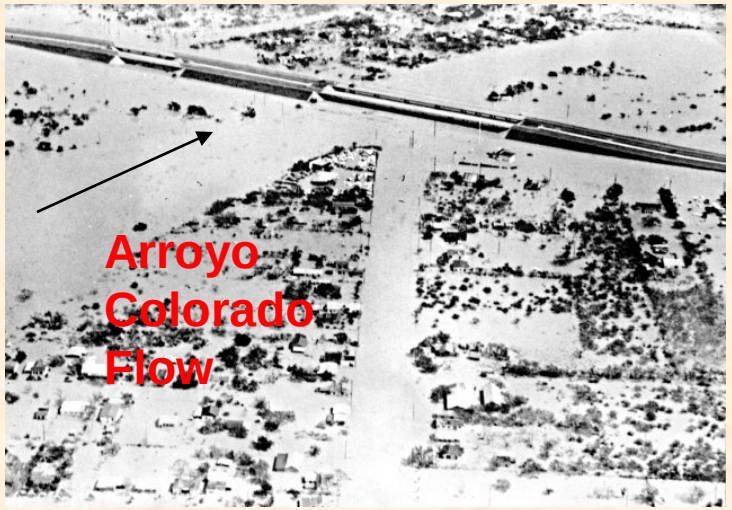


Lower Rio Grande Flood Control Project

Arroyo Colorado - History

- Hurricane Beulah September 1967 flooded Harlingen via the Arroyo Colorado
- A weir failed causing 60,000 cfs to flow into the Arroyo Colorado
- A Divisor Dike was constructed in 1968 to ensure the arroyo will receive its design flow of 21,000 cfs during a major event

Hurricane Beulah 1967 Hwy 77 At Arroyo Colorado

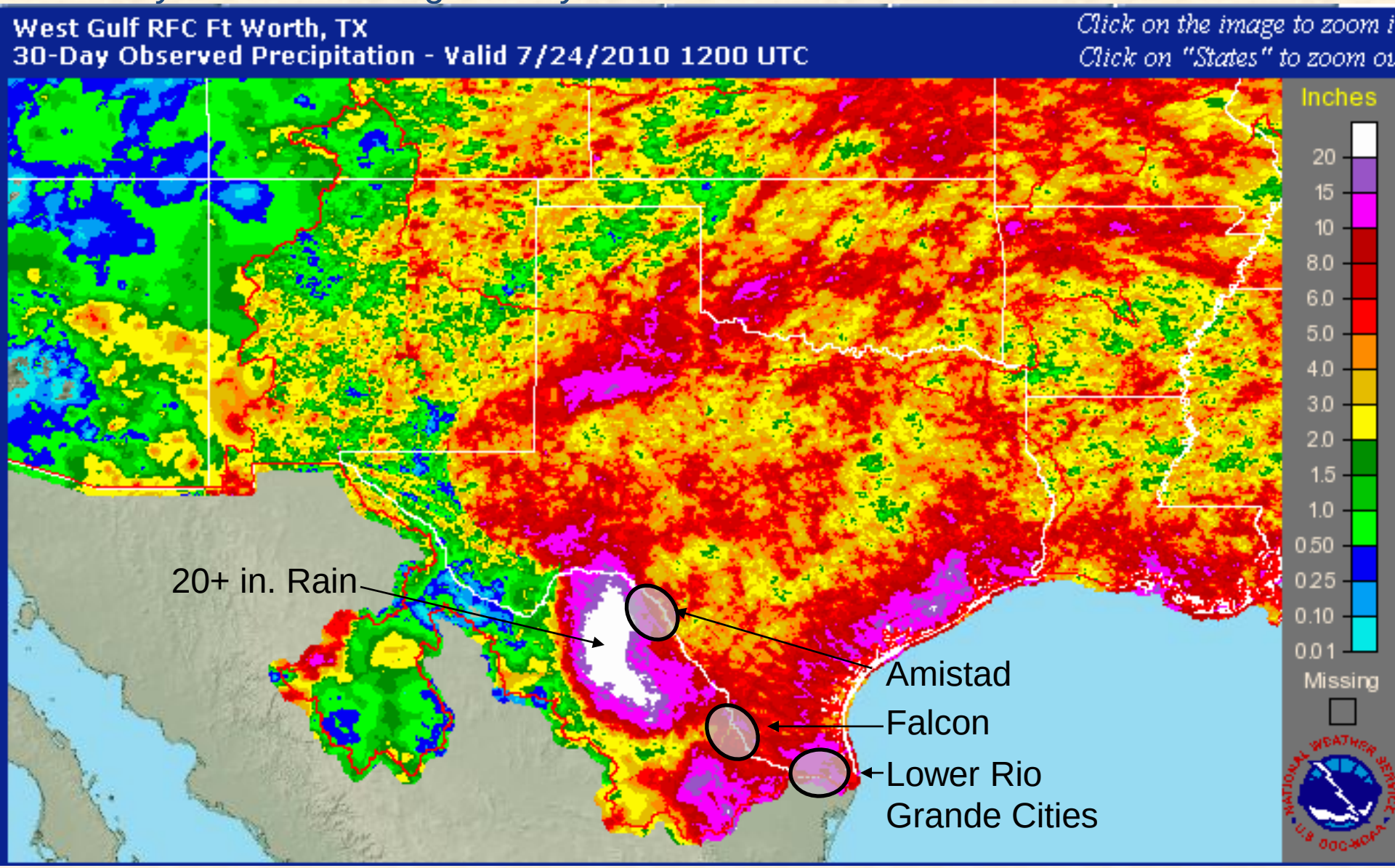


Flooding Harlingen, Texas 1967

Divisor Dike, Hurricane Alex, Arroyo Colorado, Mercedes, Texas

Hurricane Alex / Tropical Depression #2 Impacts

30-Day Rainfall Ending 24 July 2010



Arroyo Colorado circa early 1960's

Arroyo Colorado @ Business 77

Arroyo Colorado

- SHORT TERM ACTIONS
- LONG TERM ACTIONS

Arroyo Colorado - Post Flood Cleanup

Short Term and Long Term Projects

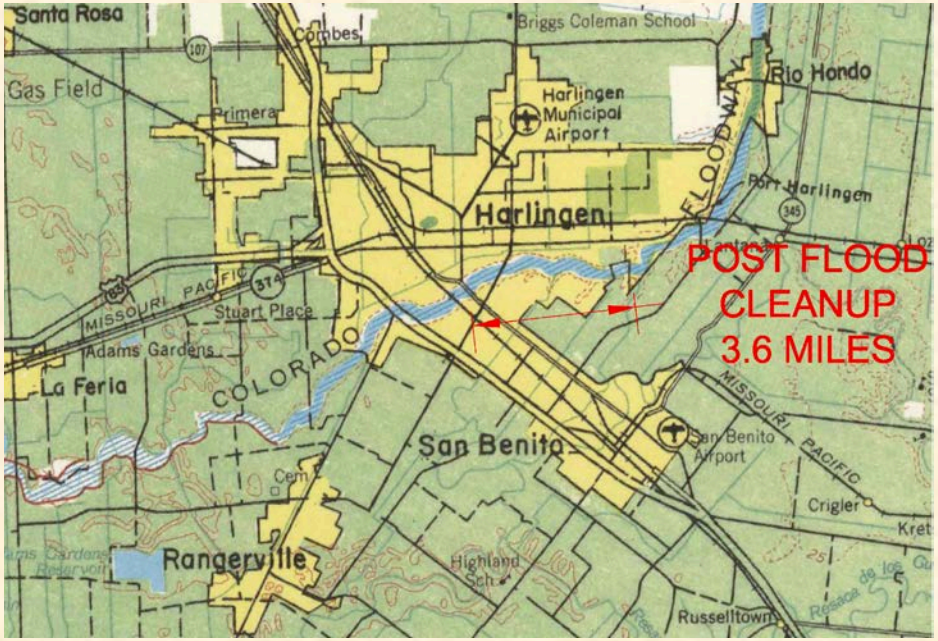
Short Term Project:

Remove

- Trash
- Dead Trees

Long Term Project:

- Conduct Hydraulic Analysis
- Research Alternatives
- Complete Environmental Documentation
- Restore 21,000 cfs carrying capacity



Arroyo Colorado Hwy 77 to FM 509
3.64 miles

Arroyo Colorado - Post Flood Cleanup

- USIBWC will remove trash and dead trees below the 21,000 cfs flow line
- USIBWC will notify land owners of the cleanup
- During the cleanup USIBWC will have an environmental monitor

Arroyo Colorado Photo taken 3-9-11

Dead Trees to be removed Photo taken 3-9-11

Arroyo Colorado - 2011

Arroyo Colorado - Post Flood Cleanup

Arroyo Colorado Hwy 77 to FM 509

- Flows one month after Hurricane Alex
- Note trees within the flow
- Note brown fringe of dead trees within the arroyo

Arroyo Colorado Flow - August 15, 2010

Arroyo Colorado – Immediate and Long Term Project Schedule

Immediate Project

Remove Trash Dead Trees Trimming	April 4, 2011 through June 10, 2011

Long Term Project

Conduct Hydraulic Analysis	April 2011- Dec. 2011
Research Alternatives • Redirect Flow • Restore Hydraulic efficiency • Coordinate with Resource Agencies	Dec. 2011- June 2012
Complete Environmental Documentation	April 2011 – June 2012
Construct Improvements	2013

INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO

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