



International Boundary and Water Commission United States Section





International Boundary and Water Commission
United States Section

Master Planning International Sub-Basin Initiative



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USIBWC Mission

*The International Boundary and Water Commission,
United States and Mexico,
is responsible for applying
the boundary and water treaties
between the two countries
and settling differences
that arise in their application.*





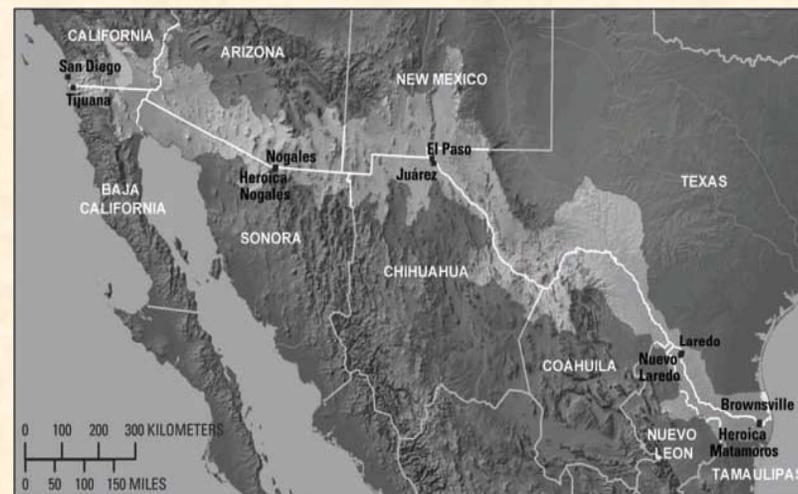
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International Sub-basin Initiative

View of the shared drainage areas along the international boundaries

- Each basin is unique dependent upon local needs and circumstances
- Desirable to try to anticipate or resolve issues at the local or basin level
- Find more effective ways to engage the public
- Involve other partners
- Issues
 - Trash
 - Sediment Transport
 - Planned Construction along the international boundary

United States/
Canada
Watersheds



United States/
Mexico
Watersheds



HISTORY OF THE IBWC

Treaty of February 3, 1944 –

- Distributed the waters in the international segment of the Rio Grande
- Also authorized the two countries to construct operate and maintain dams on the main channel of the Rio Grande
- The 1944 treaty also changed the name of the IBC to the International Boundary And Water Commission (IBWC)
- Entrusted the IBWC to give preferential attention to the solution of all border sanitation problems

1970 BOUNDARY TREATY –

- IBWC to maintain the Rio Grande and Colorado River as the international boundary
- Boundary is middle of the channel occupied by normal flow or middle of the channel which in normal flows has the greatest average width over its length
- IBWC to delineate the boundary on maps
- IBWC may stabilize or rectify the channel (numerous rectifications carried out)
- Prohibits construction of works that would obstruct or deflect normal or flood flows



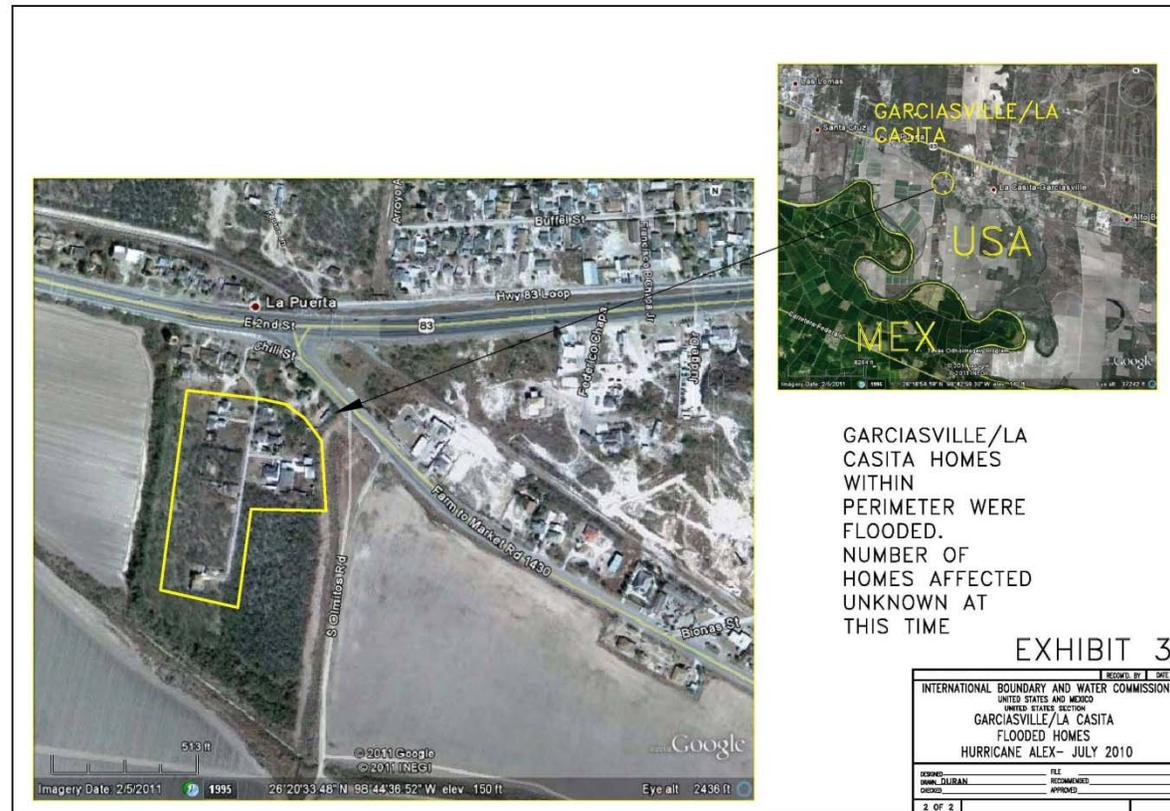
Hurricane Alex Effects Garciasville/La Casita (1)

- Garciasville/La Casita

Generally flooding occurred south of FM 1430

The area's potable water supply pumps kept in service by generators that were fueled by boat

The pump area suffered damage by bank erosion of the Rio Grande





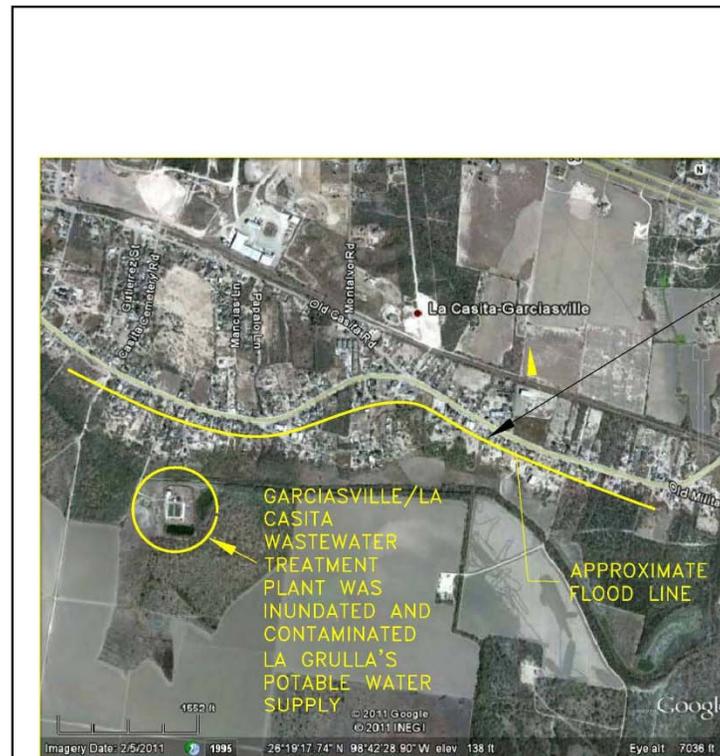
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Garciasville/La Casita (2) Hurricane Alex Effects

- Garciasville/La Casita

Generally flooding occurred south of FM 1430

The area's wastewater treatment plant was inundated and contaminates released into floodwater



GARCIAVILLE/LA CASITA HOMES TO THE SOUTH OF THE LINE WERE FLOODED. NUMBER OF HOMES AFFECTED UNKNOWN AT THIS TIME

EXHIBIT 2

INTERNATIONAL BOUNDARY AND WATER COMMISSION		REVISION BY	DATE
UNITED STATES AND MEXICO			
UNITED STATES SECTION			
GARCIAVILLE/LA CASITA			
FLOODED HOMES			
HURRICANE ALEX - JULY 2010			
DESIGNED	FILE	RECOMMENDED	
DRAWN	SUBMIT	APPROVED	
CHECKED			
1 OF 2			



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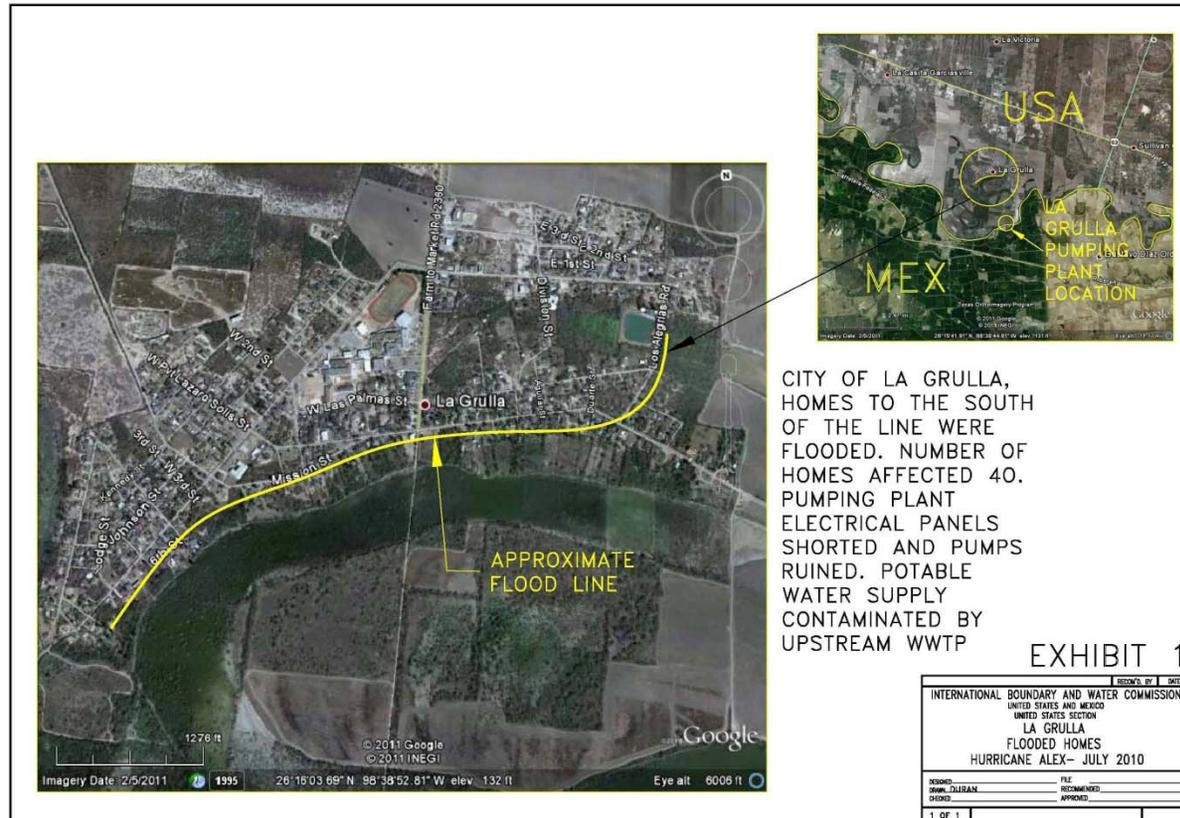
Hurricane Alex Effects La Grulla

- La Grulla

Flooding occurred on the south side of the city at a location adjacent to an ox bow

The City's potable water supply pumps on the Rio Grande were damaged, 40 homes were effected by flooding

There were contamination issues associated with the potable water supply





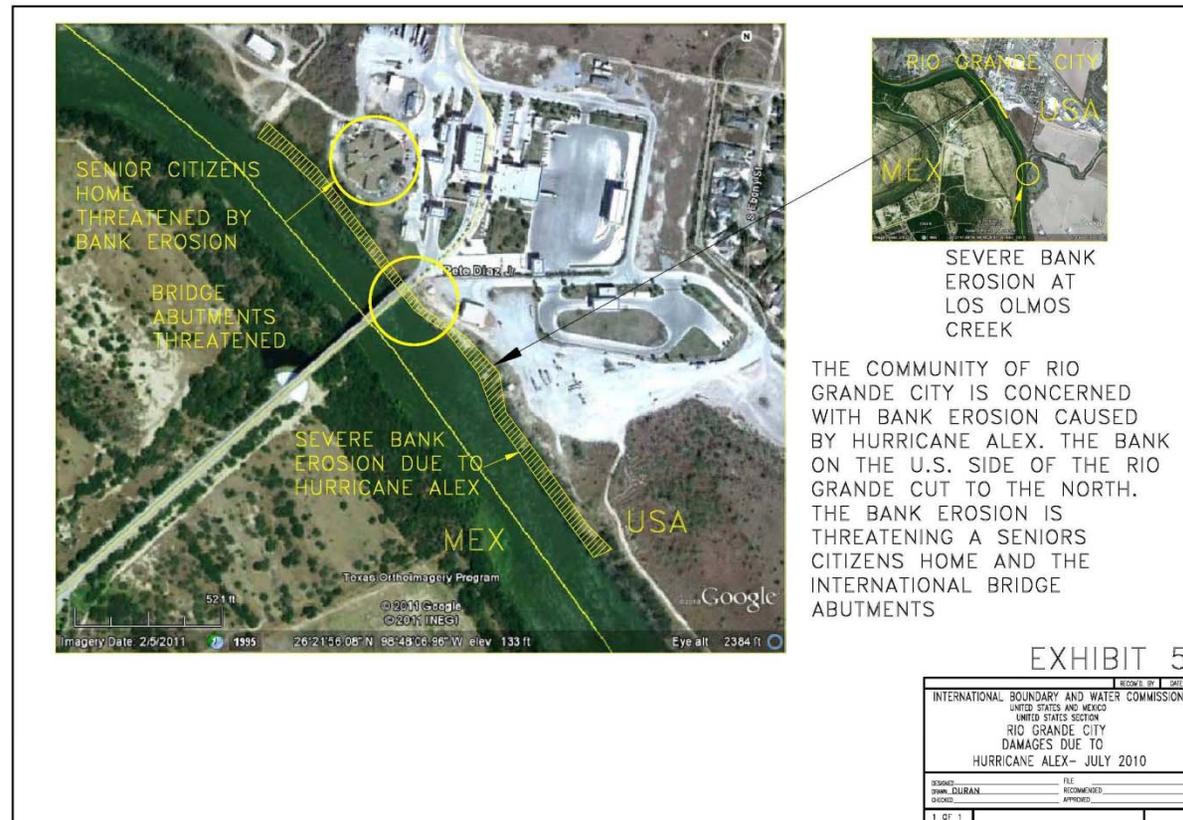
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Hurricane Alex Effects Rio Grande City

- Rio Grande City**

Erosion on the north bank, the community is concerned about a seniors citizens center and erosion under the Starr/Camargo International Bridge

Erosion on the north bank at the confluence of Los Olmos Arroyo and the Rio Grande



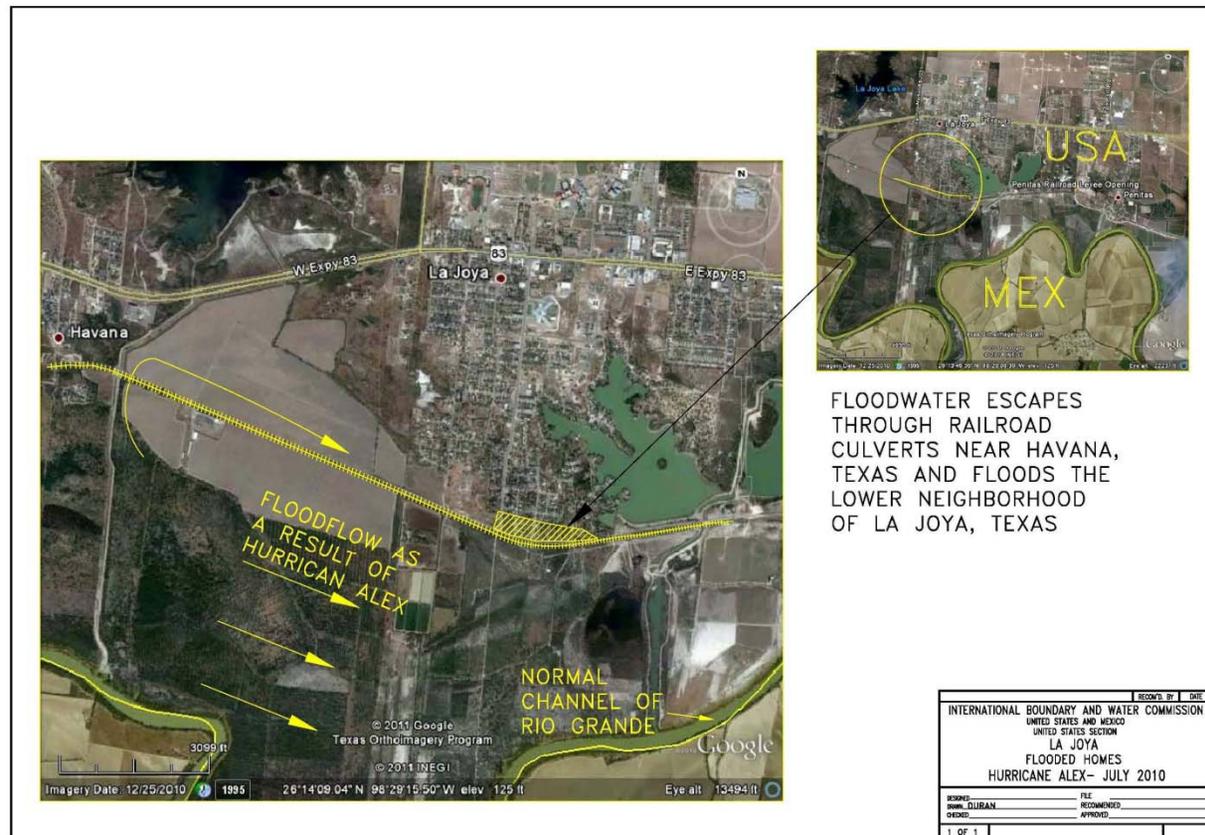


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Hurricane Alex Effects City of La Joya

- La Joya, Texas

Floodwater escapes to the north side of a railroad embankment passing through culverts and floods a neighborhood



FLOODWATER ESCAPES THROUGH RAILROAD CULVERTS NEAR HAVANA, TEXAS AND FLOODS THE LOWER NEIGHBORHOOD OF LA JOYA, TEXAS

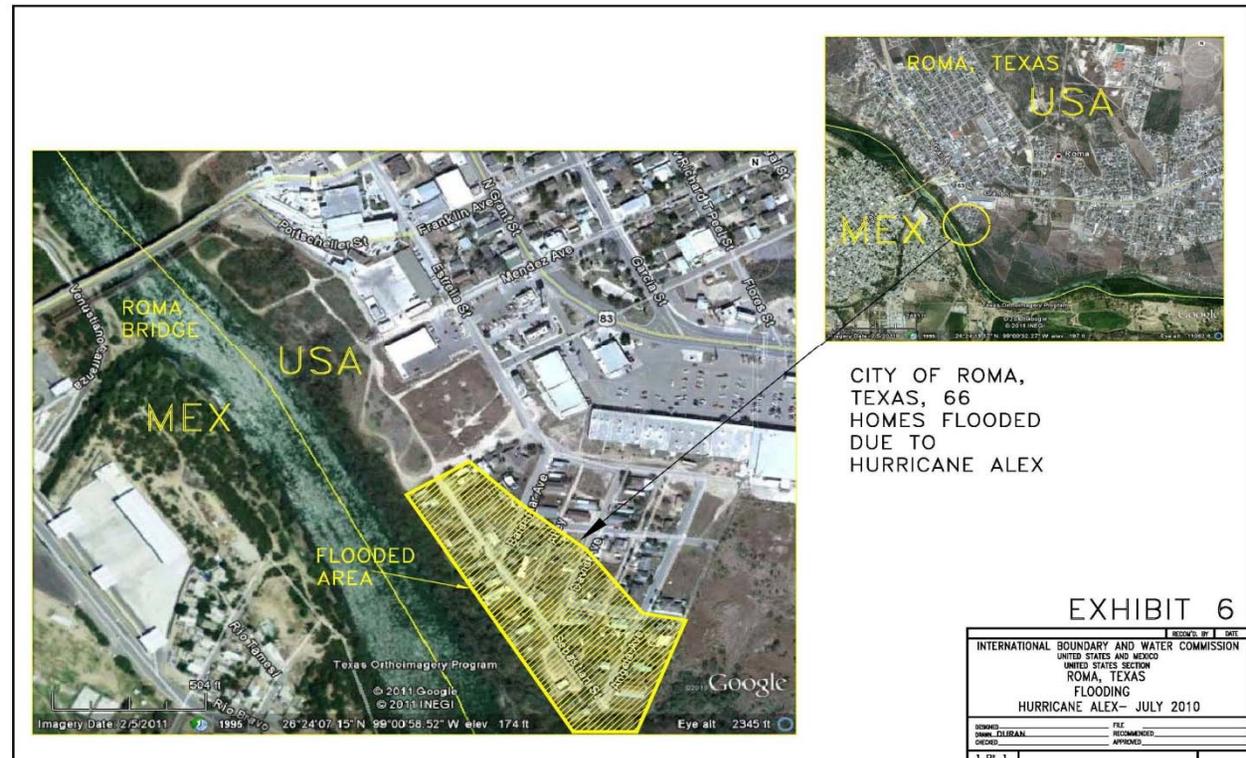
INTERNATIONAL BOUNDARY AND WATER COMMISSION		RECORDS BY: DHE
UNITED STATES AND MEXICO		
UNITED STATES SECTION		
LA JOYA		
FLOODED HOMES		
HURRICANE ALEX- JULY 2010		
ISSUED:	FILE	
DRAWN: DURAN	RECOMMENDED:	
CHECKED:	APPROVED:	
1 OF 1		



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Hurricane Alex Effects City of Roma

- City of Roma, Texas – 66 homes flooded due to Hurricane Alex
- Floodwater began flowing into the De La Cruz neighborhood via a drainage channel





IBWC Minutes

- Formalize IBWC agreements
- Legally binding
- Take effect upon signature and approval by both Governments
- Over 300 Minutes



IBWC Minute



International Projects

Nuevo Laredo International Wastewater Treatment Plant

Minute 279

Joint Measures to Improve the Quality of the Waters of the Rio Grande at Laredo, Texas/Nuevo Laredo, Tamaulipas

The Commission referred to the 1944 Water Treaty

The Commission referred to the spirit of cooperation between the two Governments on Cooperation for the Protection and Improvement of the Environment

Nuevo Laredo International Wastewater Treatment Plant



Pollution Source Location and Monitoring



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Conveyance Issues Rio Grande



**Roma Residential Flooding,
Hurricane Alex 2010**



**La Grulla Residential Flooding,
Hurricane Alex 2010**

**Hurricane
Alex Flooding
in Laredo,
2010**



**Hurricane
Alex Flooding
La Joya 2010**

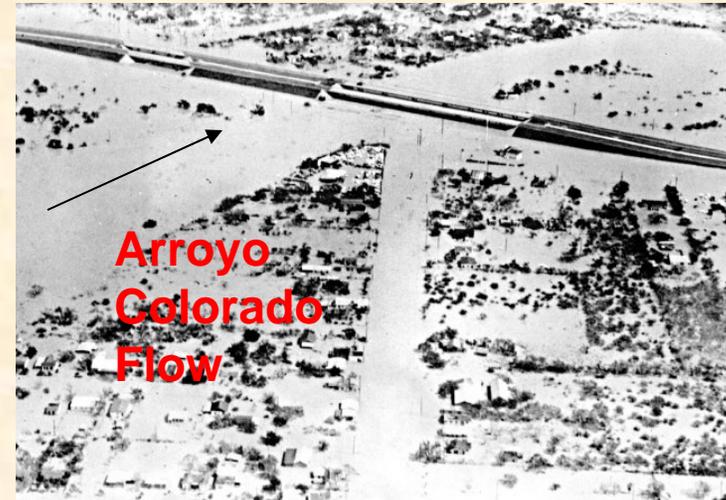




Arroyo Colorado - History

- 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 insure 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



Arroyo Colorado – Immediate and Long Term Project Schedule

Immediate Project

**Remove Trash
Dead Trees** **Oct. 1, 2012
through
Feb. 28, 2012**

Long Term Project

**Conduct Hydraulic
Analysis** **April 2012-
Dec. 2012**

Research Alternatives **Dec. 2012-
Dec. 2014**

**Begin Environmental
Documentation – Coordination
with Stakeholders' and agencies
Maintenance Plan** **July 2012**

Construct Improvements **2014**



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Rio Grande Fence Segments O-1, O-2, O-3

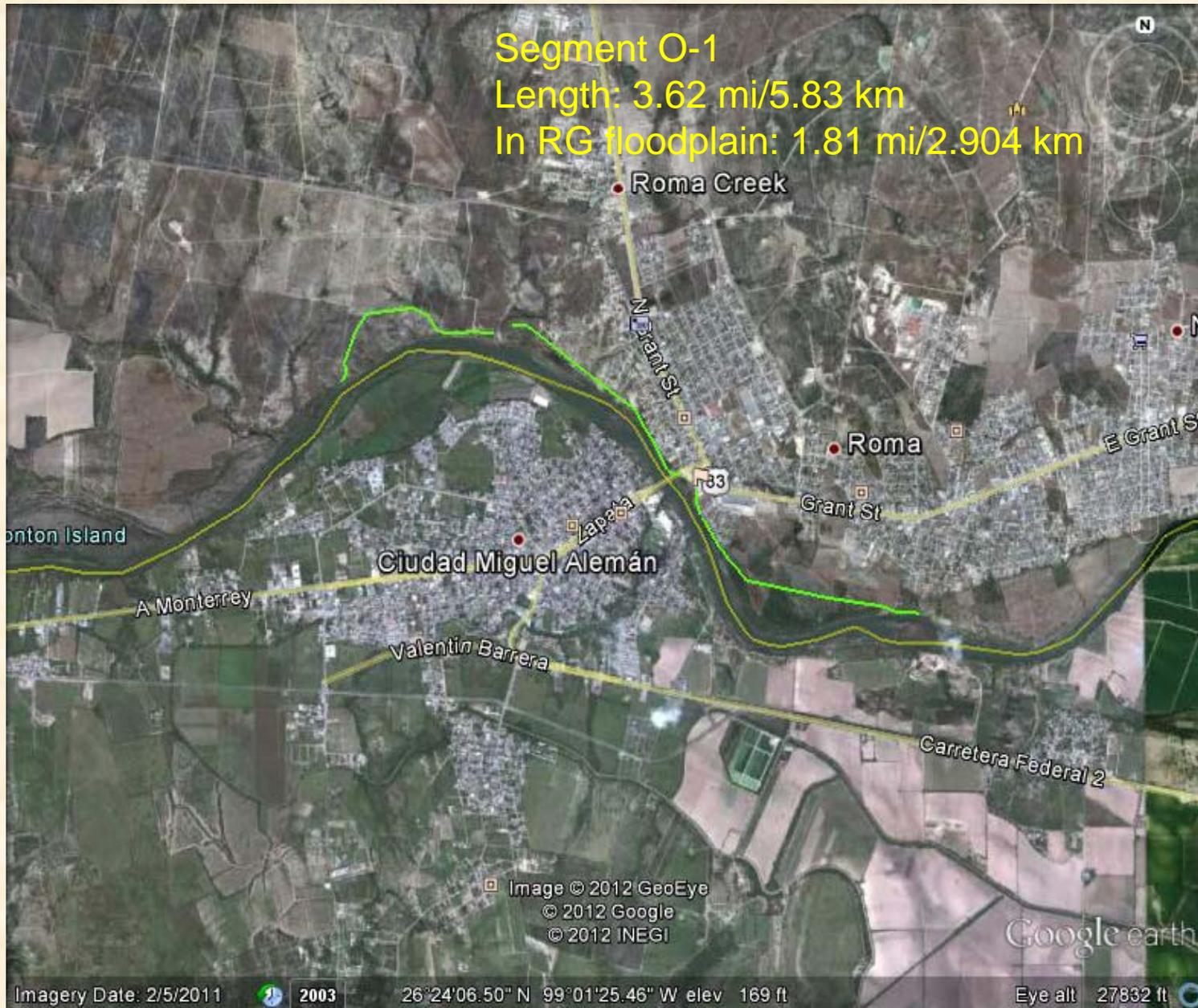
Figure 1. Vicinity Map





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Segment O-1
Length: 3.62 mi/5.83 km
In RG floodplain: 1.81 mi/2.904 km





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Segment O-2

Length: 7.2 mi/11.587 km

In RG floodplain: 3.43 mi/5.439 km





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Timeline of Analysis

- March, 2008: DHS submitted post in floodplain based HEC-RAS report to US Section.
- May, 2008: DHS investigated removable bollard and found this to be impractical.
- Dec, 2009: DHS submitted split-flow modeling based HEC-RAS report to US Section.
- Jan, 2010: DHS presented results of the HEC-RAS model to US Section.



Timeline of Analysis

- Jan, 2010: Former Commissioner Ruth met with Commissioner Salomon and unofficially shared the results. MX Section did not agree that the fence would not be an obstruction.
- May 2010: Commissioner Drusina requested DHS to model the fence with a two-dimensional model.
- Feb, 2011: US Section met with DHS and USACE to discuss and finalize FLO-2D modeling methodology.



Timeline of Analysis

- June, 2011: DHS submitted Draft FLO-2D Report to the US Section.
- June, 2011: US Section provided technical review comments to DHS.
- Aug, 2011: DHS submitted FLO-2D Report to US Section.



Timeline of Analysis

- Sept, 2011: US Section forwarded Drainage Report and FLO-2D models to MX Section for review and concurrence.
- Dec, 2011: MX Section provided results of their review.



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