



LOWER RIO GRANDE FLOOD CONTROL PROJECT

LOWER RIO GRANDE CITIZENS FORUM

JULY 22, 2020

LOWER RIO GRANDE FLOOD CONTROL PROJECT FEATURES

- 2 INTERNATIONAL DAMS
- 270 MILES OF U.S. LEVEES ALONG THE RIVER AND FLOODWAYS
- 30,000 ACRES OF INTERIOR FLOODWAY
- 64 MILES OF PILOT CHANNEL
- U.S. FLOODWAY SYSTEM INCLUDES BANKER FLOODWAY, MAIN FLOODWAY, NORTH FLOODWAY, AND ARROYO COLORADO
- RETAMAL DAM – DIVERTS MEXICO'S SHARE OF FLOODWATERS INTO MEXICO'S INTERIOR FLOODWAY SYSTEM



Retamal Dam



LOWER RIO GRANDE FLOOD CONTROL PROJECT FEATURES

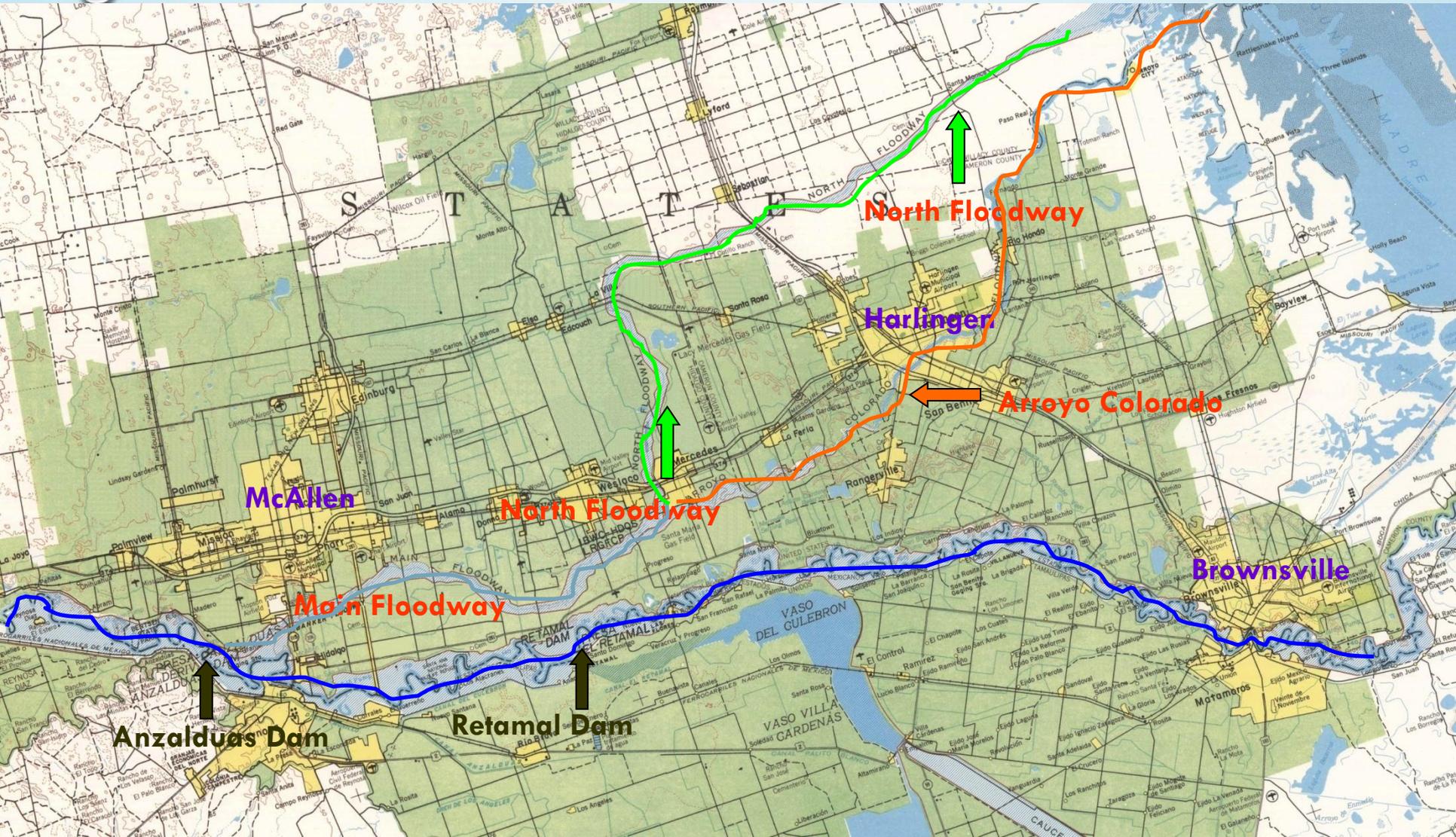


2010 Hurricane North Floodway

- ANZALDUAS DAM – DIVERTS U.S. SHARE OF FLOODWATERS INTO THE U.S. INTERIOR FLOODWAY SYSTEM
- DIVERSION OF FLOODWATERS INTO THE U.S. INTERIOR FLOODWAYS ALLOWS COMMISSION TO CONTROL FLOWS IN THE RIO GRANDE AT BROWNSVILLE-MATAMOROS
- 420 DRAIN STRUCTURES AND 180 IRRIGATION STRUCTURES CROSS THE LEVEES
- GAGING STATIONS TO MEASURE WATER FLOW

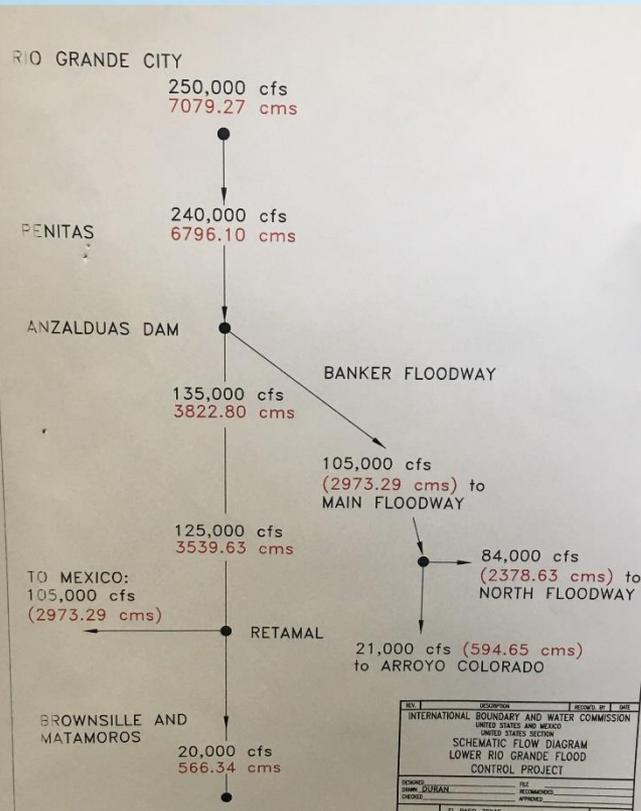


LOWER RIO GRANDE FLOOD CONTROL PROJECT



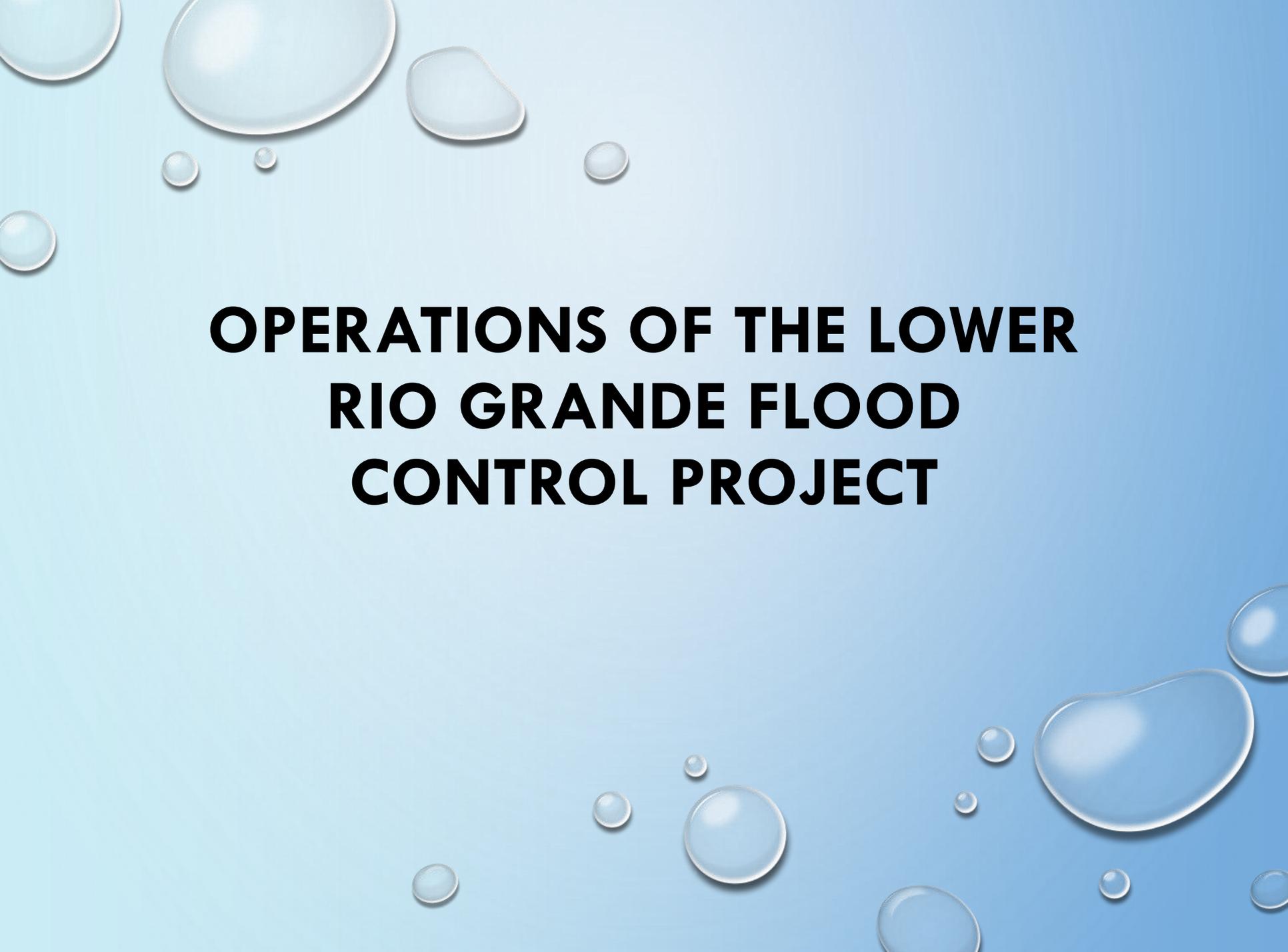
LOWER RIO GRANDE DESIGN CRITERIA

- 250,000 cfs at Rio Grande City
- 105,000 cfs into the U.S. floodway at Anzalduas Dam
 - 21,000 cfs in the Arroyo Colorado
 - 84,000 cfs in the North Floodway
- 105,000 cfs in the Mexican floodway at Retamal Dam
- Limit flows to 20,000 cfs at Brownsville-Matamoros



Arroyo Colorado - Harlingen, TX
8/18/10



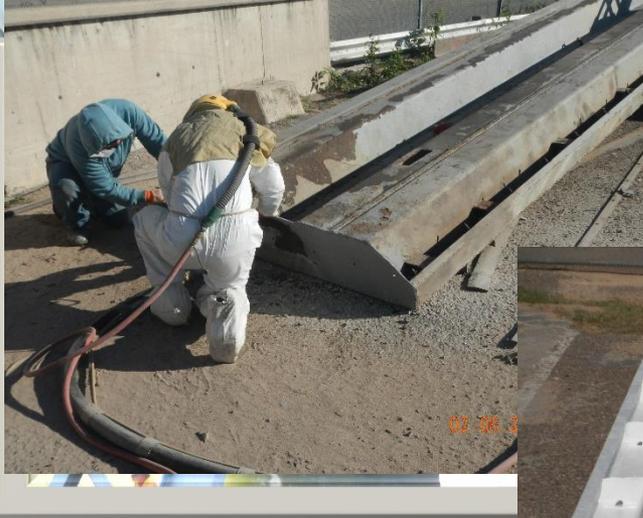
The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

OPERATIONS OF THE LOWER RIO GRANDE FLOOD CONTROL PROJECT

OPERATION AND MAINTENANCE OF DAMS

- YEARLY MAINTENANCE
 1. MAINTENANCE OF GATES #1 AND #6 AT ANZALDUAS DAM
 2. STOPLOGS MAINTENANCE
 3. MAINTENANCE OF GATES AT RETAMAL DAM

ANZALDUAS YEARLY MAINTENANCE



ANZALDUAS YEARLY MAINTENANCE



RETAMAL YEARLY MAINTENANCE

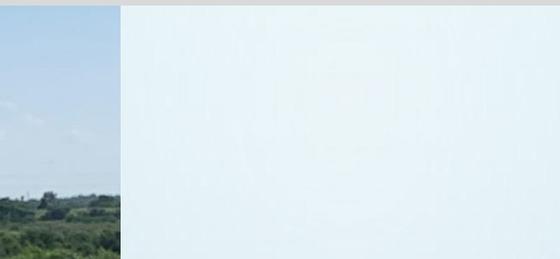


O&M OF PROJECT FACILITIES, LEVEES AND STRUCTURES

STRUCTURES AND FLOODGATE

1. ALL STRUCTURES WITHIN IBWC FLOODWAYS AND LEVEES ARE INSPECTED ON A YEARLY BASIS.
2. 10 FLOODGATES ARE REHAB AND INSPECTED ON A YEARLY BASIS
3. STATUS OF EACH GATE AND FLOODGATE ARE LOGGED AND SUBMITTED TO SUPERVISOR.
4. CRITICAL ISSUES ON ANY OF THESE STRUCTURES ARE ADDRESSED IMMEDIATELY.
5. 4IN TO 6IN FLEX BASE MATERIAL IS PLACED IN A YEARLY BASIS

STRUCTURE INSPECTION AND REHABILITATION AND LEVEE RESURFACING



STRUCTURE & FLOODGATE YEARLY MAINTENANCE



Jackson Road – South Side

Worked Performed on
February 21, 2020



O&M OF PROJECT FACILITIES, LEVEES AND STRUCTURES

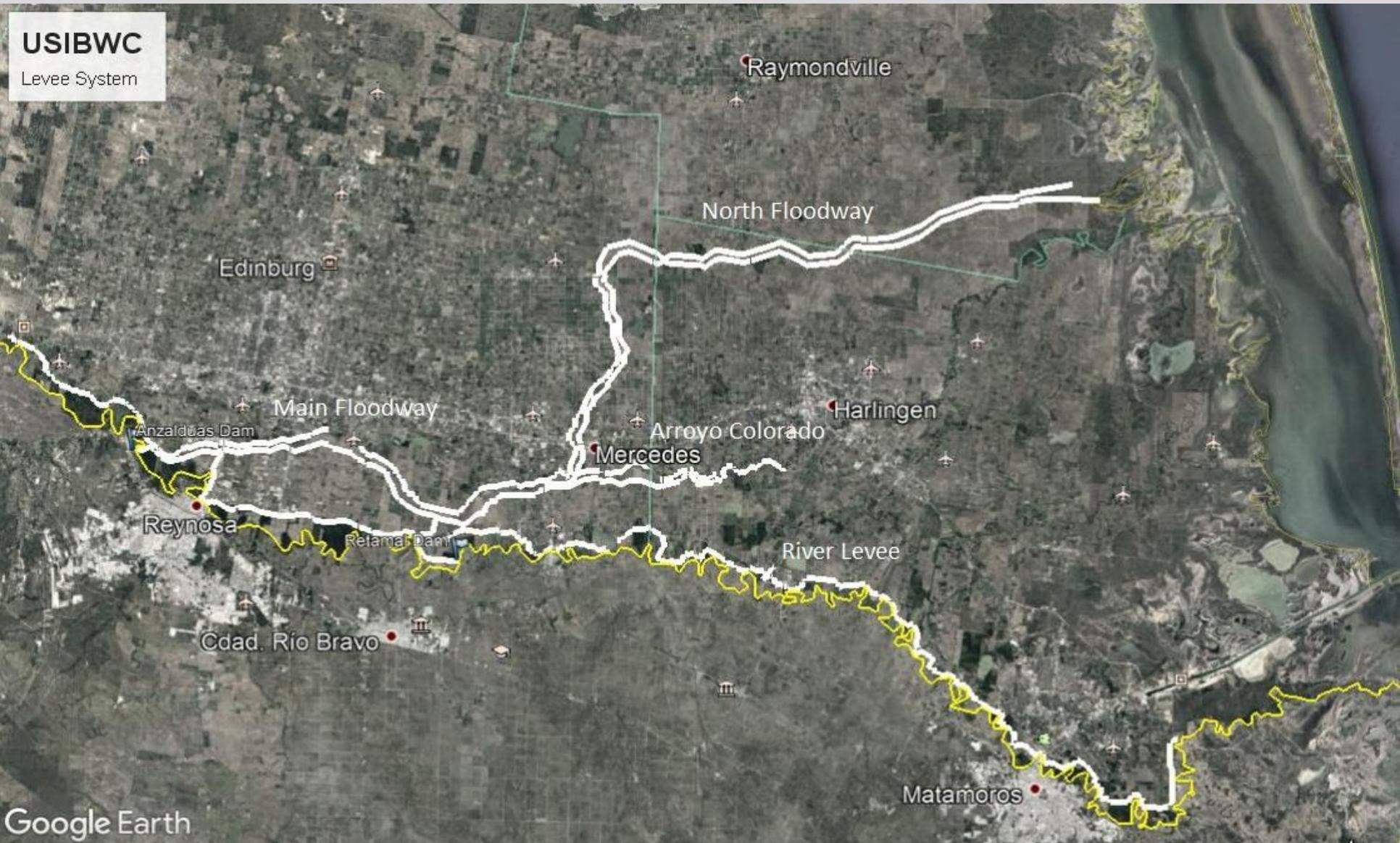
LEVEE AND FLOODWAY MOWING

1. A TOTAL OF 8,500 ACRES ARE SCHEDULED TO BE MOWED EVERY YEAR.
2. CREWS HAVE BEEN TRAINED TO PERFORM BIRD SURVEYS DURING MIGRATORY AND NESTING SEASON.
3. THE IMPLEMENTATION OF BIRD SURVEYS HAVE LIMITED THE AREA THAT IS MOWED DURING SUCH SEASON. PRODUCTIVITY IS DOWN TO 70%.

FLOODWAY MOWING

USIBWC

Levee System



Google Earth

© 2020 INEGI
© 2020 Google
Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO



FLOODWAY MOWING



O&M CHANNEL & DESILTING PROJECT

CHANNEL AND DRAIN DESILTING

1. LATERAL DRAINS ARE CURRENTLY BEING CLEARED OF BRUSH AND DESILTED. THESE LATERAL DRAINS ALLOW FOR PROPER DRAINING OF WATER FLOWS FROM THE LANDSIDE OF THE LEVEES AND INTO THE PILOT CHANNEL.
2. BRIDGES INSIDE THE PILOT CHANNEL ARE ALSO CURRENTLY BEING CLEARD AND DESILTED.

O&M CHANNEL & DESILTING PROJECT



BOUNDARY PRESERVATION

1. LRGFCP PERSONNEL ARE REQUIRED TO PERFORM 36 HISTORICAL CROSS SECTIONS OF THE RIO GRANDE IN ACCORDANCE WITH THE 1970 TREATY BETWEEN THE UNITED STATES AND MEXICO. IT IS CRITICAL THAT THESE CROSS SECTIONS BE PERFORMED IN ORDER TO CHECK FOR ANY POSSIBLE BOUNDARY CHANGES THAT MIGHT OCCUR DUE TO CHANGES IN THE COURSE OF THE RIVER. APPROXIMATELY 12 CROSS SECTIONS ARE PERFORMED A YEAR OF A THREE-YEAR CYCLE.

HYDROLOGY & WATER ACCOUNTING

1. IT IS THE RESPONSIBILITY OF PROJECT PERSONNEL TO ASSIST THE WATER ACCOUNTING DIVISION IN THE ACCOUNTING OF RIVER FLOW DATA USED TO DETERMINE WATER OWNERSHIPS OF BOTH COUNTRIES.
2. HYDROLOGIC PERSONNEL ARE TASKED WITH THE OPERATION AND MAINTENANCE OF RIVER AND OFF-RIVER GAGING STATIONS. THESE STATIONS ARE NECESSARY TO HOUSE EQUIPMENT THAT IS USED TO ACCURATELY MEASURE FLOW IN THE RIVER AND INTERIOR FLOODWAYS.



MORILLO DRAIN O&M

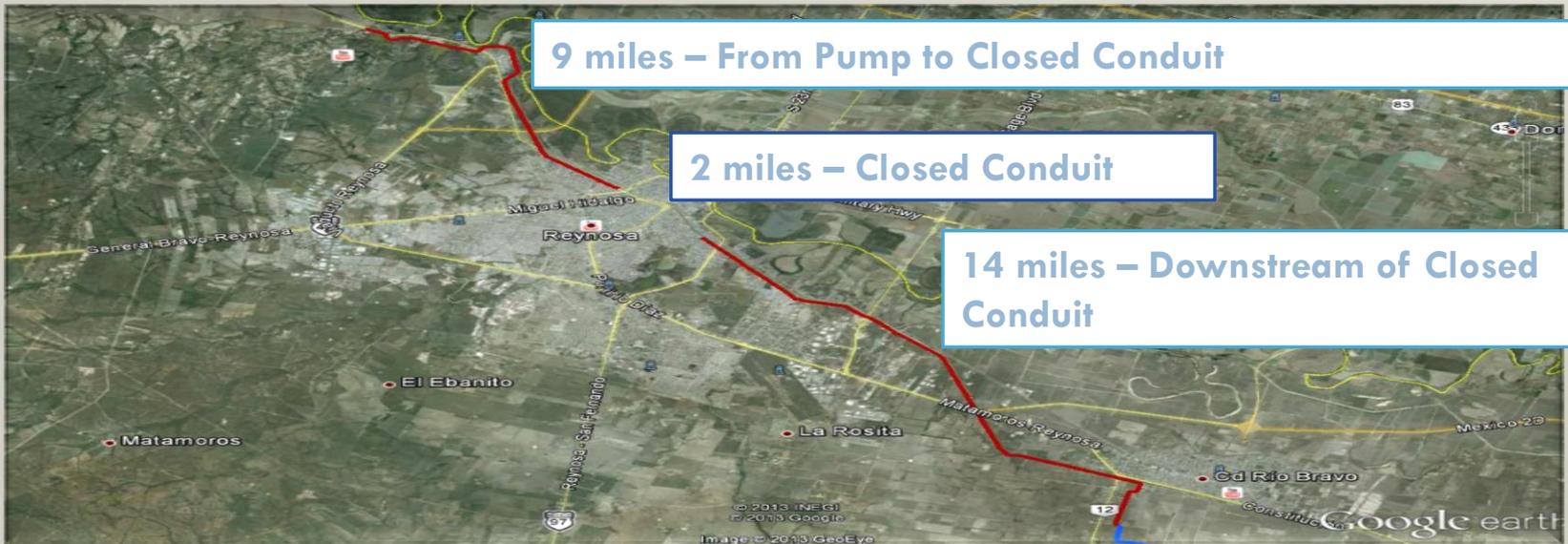
1. UNDER IBWC MINUTES NO. 223 AND 303, THE LRGFCP IS CHARGED WITH OVERSEEING THE OPERATION AND MAINTENANCE OF THE MORILLO DRAIN PROJECT.

MORILLO DRAIN

- EL MORILLO DRAIN DIVERSION CANAL WAS BUILT TO RESOLVE THE SALINITY PROBLEM THAT OCCURRED IN THE RIO GRANDE.
- CONSTRUCTION OF EL MORILLO DRAIN CANAL BEGAN IN 1967, CONCLUDED ON JUNE 30, 1969, AND ON JULY 15, 1969 EL MORILLO BEGAN DIVERTING WATER.



MORILLO DRAIN



QUESTIONS???



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