



International Boundary and Water Commission United States Section

For immediate release
Revised January 31, 2025

USIBWC Upper Rio Grande Citizens Forum in El Paso on February 10

(This update provides a Zoom link and other details for online participants. Microsoft Teams will NOT be used for this meeting)

The US Section of the International Boundary and Water Commission (USIBWC) Upper Rio Grande Citizens Forum board will host an in-person and virtual public meeting on
Monday, February 10, 2025, from 6-8 p.m. MST

- **Manuel Herrera, Director of Engineering and Projects, Juarez Municipal Water and Sanitation Board (JMAS)**, will present an overview of JMAS operations, projects, and drinking water and sanitation systems in the Juárez area.
- **Yesenia Castro, Engineer, USIBWC Engineering Services Division**, will provide a program introduction of the USIBWC's new Sediment Management Program.

The public meeting will be held in person at:

USIBWC Headquarters Building
4191 N. Mesa St.
El Paso, TX 79902

The public meeting will also be held virtually via Zoom. [Click here to join the meeting](#). If possible, it may be helpful for you to test connectivity on your own prior to the meeting by clicking on the "Join" link and ensuring your camera and microphone are functioning. **In order to use native Zoom translation services for Mr. Herrera's presentation, you must download the zoom application [here](#).** Or join by phone: Call-in number +16692545252,,1602144481# Meeting ID: 160 214 4481

For those connecting via phone, the presentations will be available before the start of the meeting. Go to the USIBWC Citizens Forum page at <https://www.ibwc.gov/citizens-forums-past-meetings/> and look for the links for the Upper Rio Grande Citizen Forum meeting.

If you would like to speak during the public comment period, please sign up ahead of time by contacting Frankie Pinon at frankie.pinon@ibwc.gov or 915-832-4716 by noon on February 7, 2025.

Media Contact :

Frankie Pinon
Email: frankie.pinon@ibwc.gov
Phone: 915-832-4716

UPPER RIO GRANDE CITIZENS FORUM
Monday, February 10, 2025, from 6-8 p.m. MST

USIBWC Headquarters Building
4191 North Mesa, St.
El Paso, Texas 79902

And Via Zoom

Agenda

- **Welcome and Introductions** – USIBWC Citizen Forum Board
- **Manuel Herrera, Director of Engineering and Projects, Juarez Municipal Water and Sanitation Board (JMAS)**, will present an overview of JMAS operations, projects, and drinking water and sanitation systems in the Juárez area.
- **Yesenia Castro, Civil Engineer, USIBWC Engineering Services Division**, will provide a program introduction and share recent updates to sediment management along the Rio Grande
- **Public Comment**
- **Board Discussion**
- **Suggested Future Agenda Items**

If you have a disability that you wish to self-identify confidentially that requires accommodation, please advise us ahead of time. For more information call 915-832-4716 or email frankie.pinon@ibwc.gov

Zoom meeting

Join on your computer, mobile app or room device: [Click here to join the meeting.](#)

Meeting ID: 160 214 4481
Passcode: 683778

Or call in (audio only)

+1 669 254 5252 US
+1 669 216 1590 US

Meeting ID: 160 214 4481



INTERNATIONAL BOUNDARY AND WATER COMMISSION

UNITED STATES SECTION

USIBWC Sediment Management Program

Yesenia Castro

Engineering Services Division

February 10, 2025



Outline

- Sediment Impacts
- Sediment Management Program (SMP)
- Rio Grande Canalization Project (RGCP)
- Institutional Efforts
 - USIBWC Memorandum of Agreement (MOA) with Elephant Butte Irrigation District (EBID)
 - Stakeholder Coordination
 - Sediment Management Task Force
- Technical Efforts
 - Sediment Disposal
 - Sediment Control Dams
 - Pilot Projects
 - Proposed Studies and Projects
- Continued and Future Actions





Sediment Impacts

- Formation of sediment plugs and islands
- Increase in water surface elevations and loss of levee freeboard, increasing the flooding risk to adjoining communities
- Buried irrigation return flow drains due to raising of riverbeds, preventing landslide waters from being drained into the river, increasing landslide flooding
- Decreased efficiency for water deliveries
- Erosion of bank opposite sediment accumulation
- Adverse impacts to irrigation infrastructure and irrigators



Sediment build up at Mesilla Dam, NM



Sediment Management Program

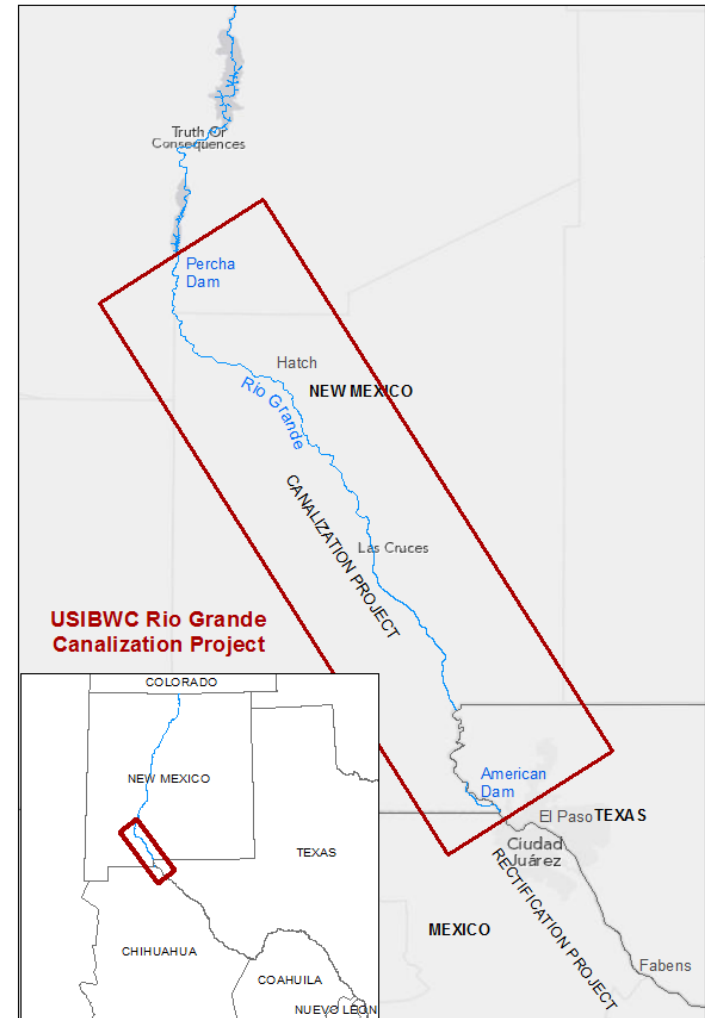
- Identify projects for sediment management in problem areas along the U.S.-Mexico border, Rio Grande Canalization Project (RGCP) and Tijuana River Levee
- Track sediment removal needs, plan and manage projects, and monitor the effectiveness of projects
- Significant component is working with stakeholders to leverage funding and resources such as sharing of data, models, reports, and help with technical reviews to accomplish sediment mitigation and removal projects in a cost-effective and efficient manner. Also to explore reducing sediment yield and sediment interception before it reaches the river.
- Participation in work groups with federal, state, local, private sector and nonprofit stakeholders



Rio Grande Canalization Project

- Constructed in early 1940s to:
 - facilitate deliveries under the 1906 Treaty with Mexico
 - Protect valley lands in the US from floods
 - Stabilize the river channel
 - Improve drainage of adjacent lands
- 105-miles from Percha Dam near Arrey, NM to American Dam in El Paso, TX

Approximately 500,000 cubic yards (cy) is estimated to enter the RGCP annually





Institutional Efforts



USIBWC Memorandum of Agreement (MOA) with EBID

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES SECTION

- Executed November 5, 2024
- No-cost agreement
- Allows the two agencies to work together to address sediment management along the Rio Grande with limited funding and resources
- Focus is in New Mexico between Percha Dam near Arrey to Sunland Park
- USIBWC will provide technical assistance by:
 - Sharing data, models and reports
 - Assisting with scope of work developments, cost estimates and design reviews
- EBID will oversee the award and management of projects
- Will be amended as specific projects develop

This collaboration will allow both agencies to assist in building safer, resilient and more prosperous communities



Stakeholder Coordination

Participation in Group Works

- Rio Grande Project Area-Drought Resilience Team
 - Stormwater Capture Subgroup
 - Ecosystem Restoration Subgroup
- South Central New Mexico Stormwater Management Coalition
- Regional Flood Planning Group
- Groups consist of federal, state and local agencies, private sector and nonprofit organizations
- Share developments and ideas and work to resolving problems



Sediment Management Task Force

USIBWC to form a task force to explore and implement sediment solutions

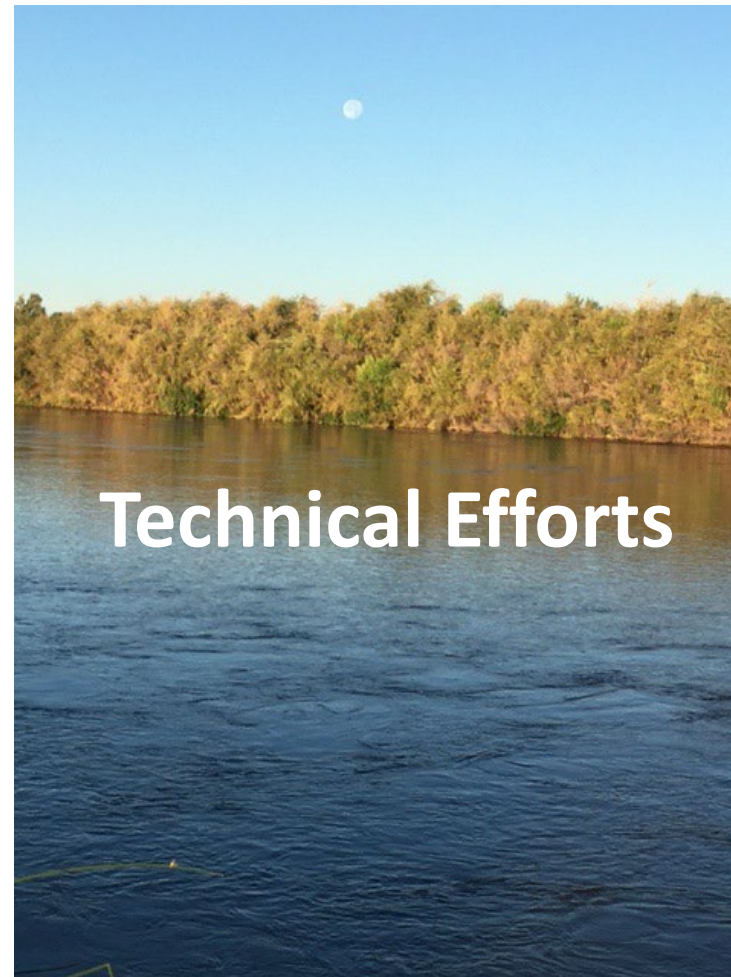
First Step

- Met with various agencies to pitch the idea
 - Received positive feedback from everyone
 - Sediment is a growing problem for communities along the Rio Grande

Next Step

- Coordinating initial meeting amongst major players

This effort will assist stakeholders in protecting their communities and providing opportunities to thrive.



Technical Efforts

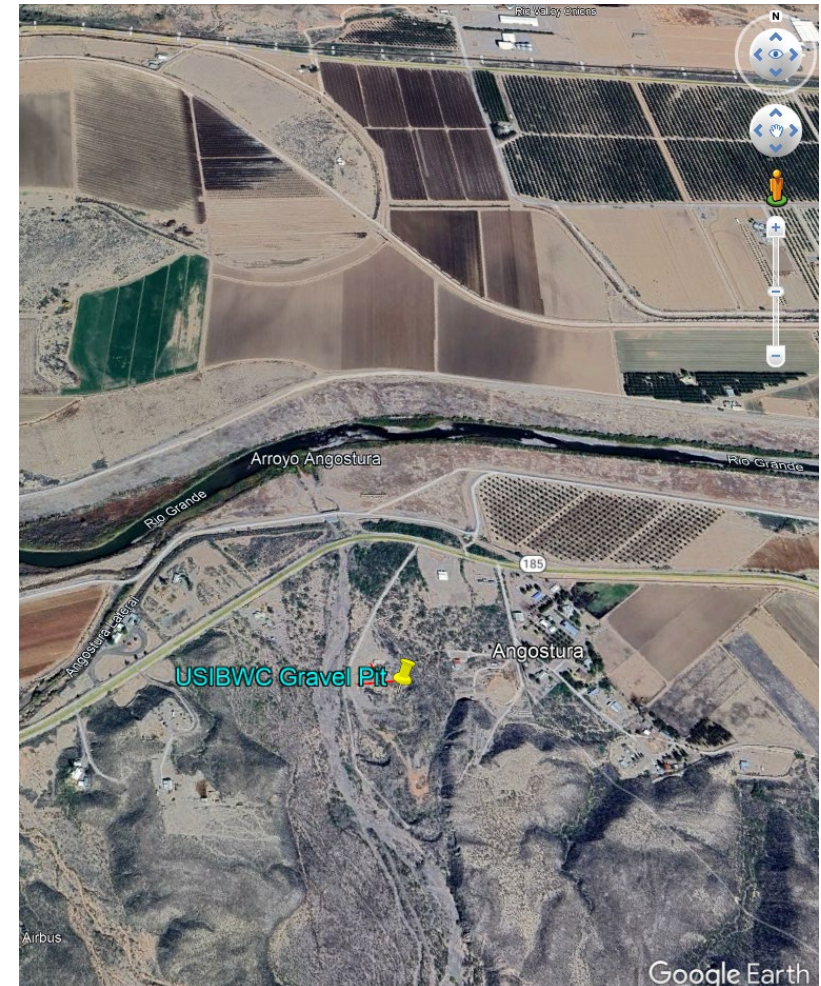


Sediment Disposal

One of our major problems in sediment management is locating where to dispose of sediment once removed from the riverbed

USIBWC gravel pit

- Located southeast of Hatch, NM within the Angostura Arroyo
- Estimated capacity is around 200,000-300,000 cy
 - Project to transfer 100,000-120,000 cy of sediment from the floodplain into the gravel pit





Sediment Disposal

USIBWC does not have sufficient land to dispose of sediment, thus coordination with various agencies is crucial

Have begun conversations with the following agencies:

- Bureau of Land Management
- US Bureau of Reclamation
- New Mexico Environmental Department
- Elephant Butte Irrigation District (EBID)
- Doña Ana County Flood Commission
- US Army Corps of Engineers

Potential agencies/companies:

- City of Sunland Park
- Doña Ana County Roads Division
- New Mexico Department of Transportation
- Texas Department of Transportation
- Village of Vinton
- Jobe
- GCC



Sediment Control Dams

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES SECTION



USIBWC maintains five (5) dams in NM between Arrey and Radium Springs

- Green Canyon
- Jaralosa
- Berenda
- Crow
- Broad Canyon

Designed to reduce flood peaks and contain an estimated 100 years of sediment inflow into the RGCP

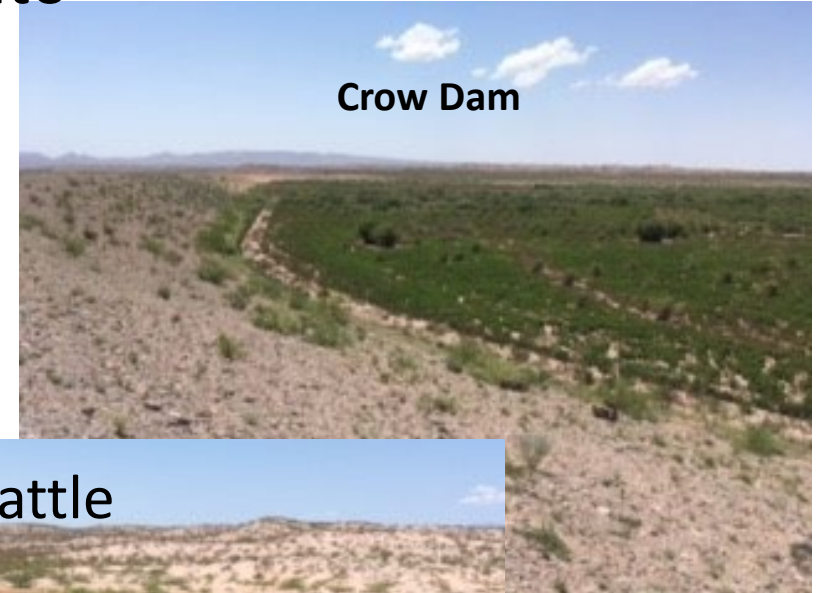


Sediment Control Dams

Effective in controlling flood and sediment runoff into the RGCP

They require maintenance for:

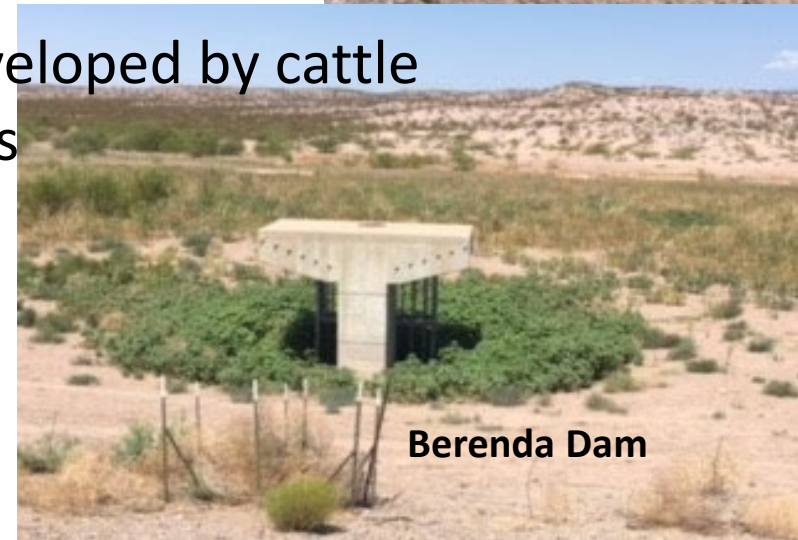
- Vegetation growth
- Fencing repair due to adjacent landowners entering with cattle for grazing
- Erosion control along slopes due to paths developed by cattle
- Embankment protection from animal burrows



Crow Dam



Jaralosa Dam



Berenda Dam



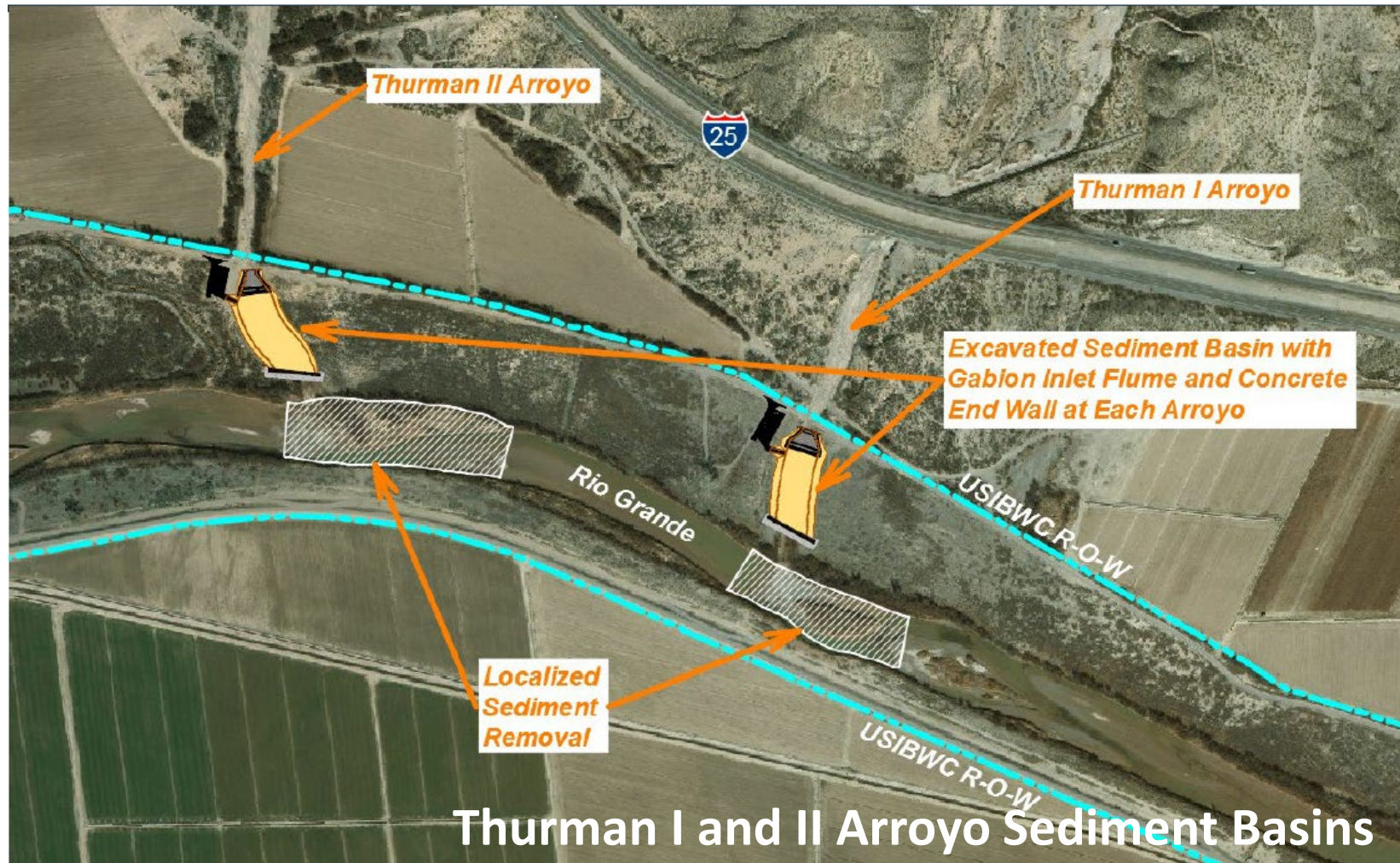
Pilot Projects

Sediment projects are being identified through studies and field observations

- A 2015 study by Tetra Tech, developed with stakeholder input, evaluated channel maintenance alternatives
- USIBWC selected sediment basins at Thurman I and II Arroyos to develop as pilot projects
 - Designed in 2017
 - Construction completed in 2019
 - Total cost of \$6M



Pilot Projects



Thurman I Arroyo Sediment
Basin volume: 5.31 acre-feet

Thurman II Arroyo Sediment
Basin volume: 5.43 acre-feet



Pilot Projects



Thurman I and II Arroyo
Sediment Basins





Pilot Projects



Thurman I Arroyo Sediment Basin

- Have been functioning well
- Collect approx. 45,000 cy of sediment yearly, combined, fluctuates with monsoon season
- Clean out about 1-2 years



Proposed Studies and Projects

- Drone pilot project to determine sediment disposal volume at the Angostura Arroyo gravel pit
- LiDAR mapping and survey for volumes at potential sediment disposal sites
- LiDAR mapping and survey of RGCP every five (5) years
- LiDAR mapping and survey of sediment control dams for current capacities
- Explore locations to intercept sediment upstream in contributing arroyos
- Sediment basins at mouth of Rincon Arroyo



Thurman 1 Arroyo Sediment Basin



Continued and Future Actions

- Technical Efforts
 - Developing the Sediment Management Program to track sediment removal needs, plan and manage projects and monitor effectiveness of projects
 - Removal of in-channel and floodplain sediment along the RGCP
 - Locating potential sediment disposal sites
 - Conduct LiDAR mapping and surveys to estimate volumes at sediment disposal sites
 - Conduct periodic LiDAR mapping along the Rio Grande to estimate the volumes of accumulated sediment and the rates of sediment accumulation
 - Focus sediment management efforts on the problem areas
 - Compiling existing studies and reports
 - Developing studies and projects



Continued and Future Actions

- Technical Efforts (Cont'd)
- Provide technical support to other organizations by:
 - Sharing data, models and reports
 - Assisting with scope of work development, cost estimate and design reviews
- Develop USIBWC projects alongside work of other organizations to leverage limited funding and resources and maximize benefits for sediment control
- Update the USIBWC RGCP River Management Plan with any new projects
- Institutional Efforts
 - Developing partnerships with stakeholders and communities
 - Participating in stakeholder groups
 - Developing Sediment Management Task Force



INTERNATIONAL BOUNDARY AND WATER COMMISSION UNITED STATES SECTION



Thank you

O. Yesenia Castro
International Boundary & Water Commission, U.S. Section
(915) 832-4724
olga.castro@ibwc.gov