



RIVER RESTORATION OPPORTUNITIES IN THE MIDDLE RIO GRANDE EVEN IN A WATER UNCERTAIN FUTURE

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Office of the State Engineer/New Mexico Interstate Stream
Commission

In collaboration with

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Middle Rio Grande Conservancy District

NCER National Meeting
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- Introductions
- Law of the Rio Grande
- Endangered Species
- Flow and Habitat
- NM Climate Outlook
- Projects on Horizon

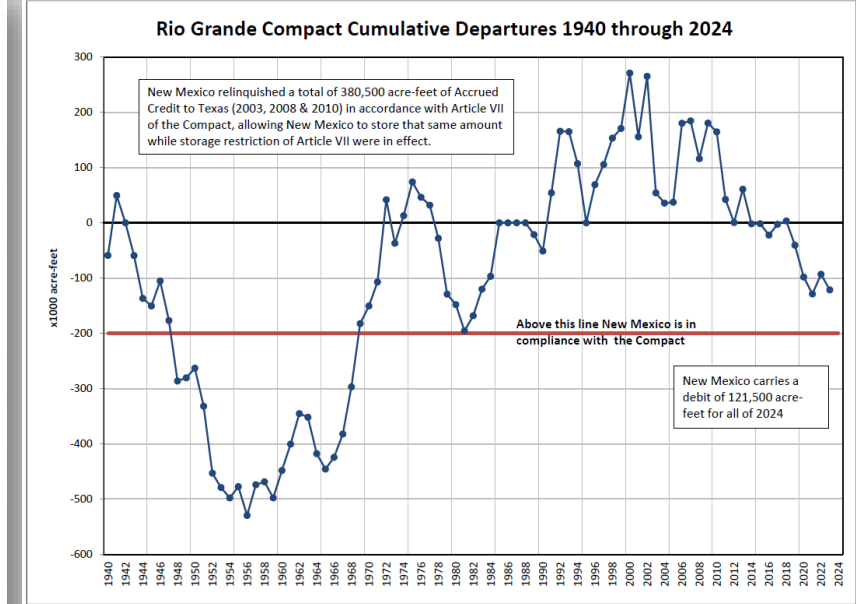
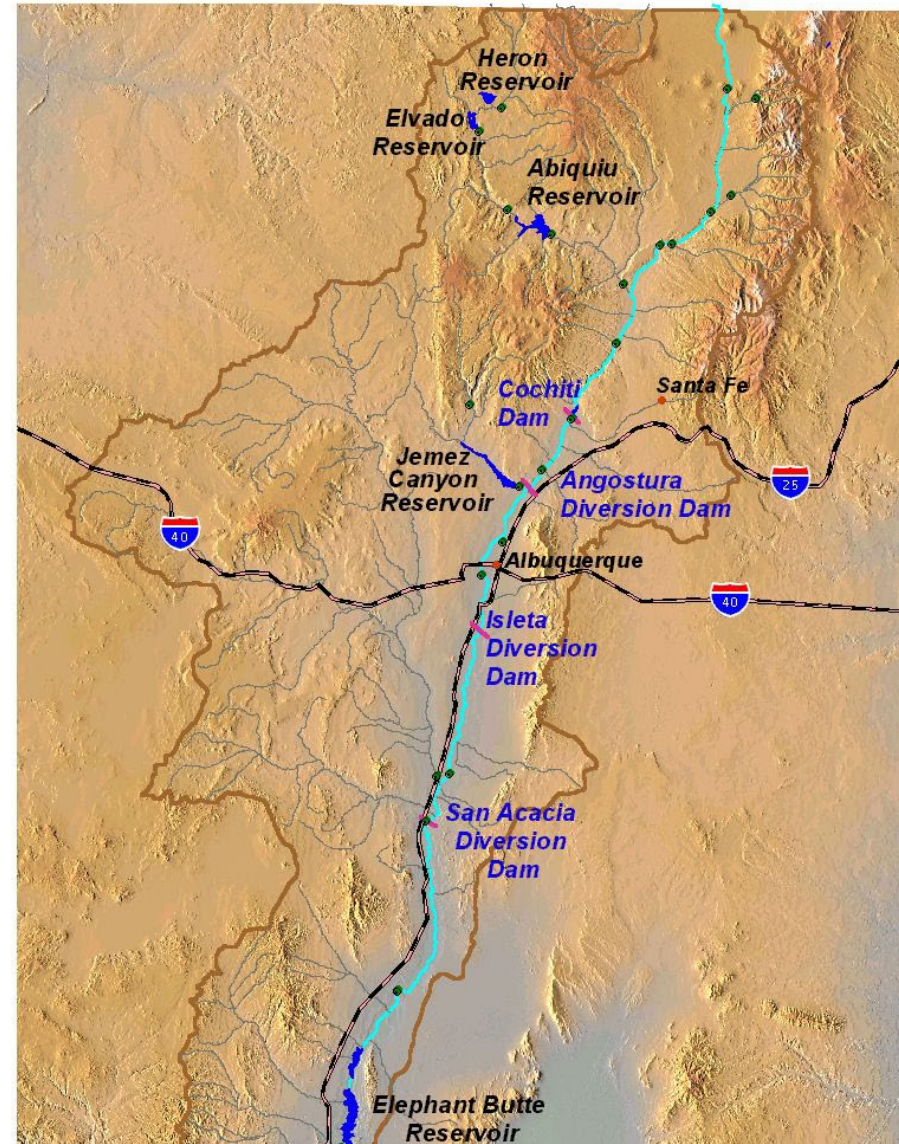


- The **New Mexico Interstate Stream Commission (NMISC)** works under the State Engineer and has broad powers to investigate, protect, conserve, and develop the waters of New Mexico – including interstate compacts.
- The **Middle Rio Grande Conservancy District (MRGCD)** operates, maintains and manages irrigation, drainage, and river flood control in the Middle Rio Grande valley.
- There are 8 interstate compacts between adjacent states – including the Rio Grande Compact between Colorado, New Mexico, and Texas.
- The MRGCD was created in 1923 to provide flood protection, drain swamp lands and provide water to farmlands. MRGCD built El Vado dam on the Rio Chama, a tributary to the Rio Grande, and 4 diversion dams to serve the Pueblo and nonPueblo irrigators.
- Principal Federal partners are US Bureau of Reclamation and US Army Corps of Engineers. Municipalities engage in Rio Grande water management including using San Juan Chama transboundary water supplies.

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IMPORTANCE OF THE RIO GRANDE COMPACT FOR MRG RESOURCE MANAGEMENT



Rio Grande Compact defines the conditions when water can be stored in upstream reservoirs – typically for later use in the irrigation season. For the past 4 years, MRGCD has not been able to store native Rio Grande water due to the debit and El Vado dam renovation.





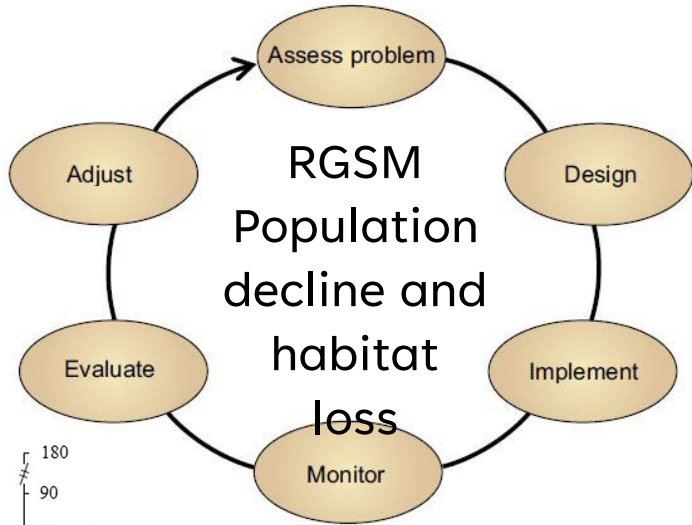
ENDANGERED SPECIES
LISTINGS
IN MIDDLE RIO GRANDE

SECTION 7 BIOLOGICAL OPINION(S)
2000 – PRESENT

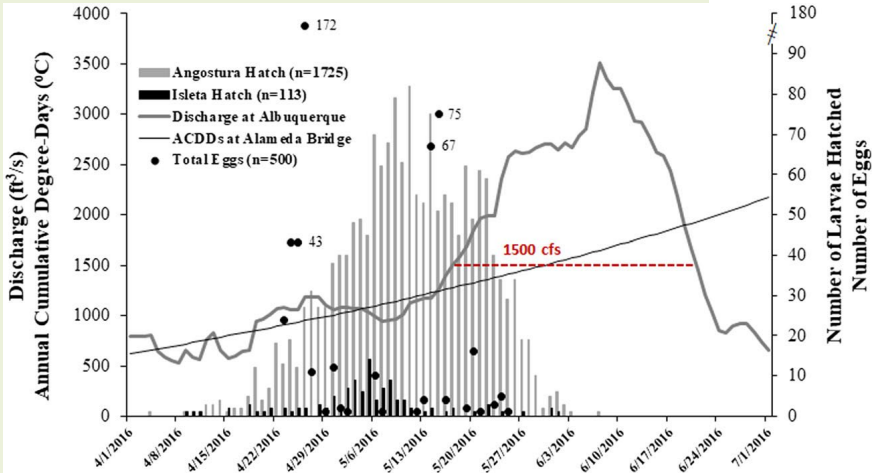
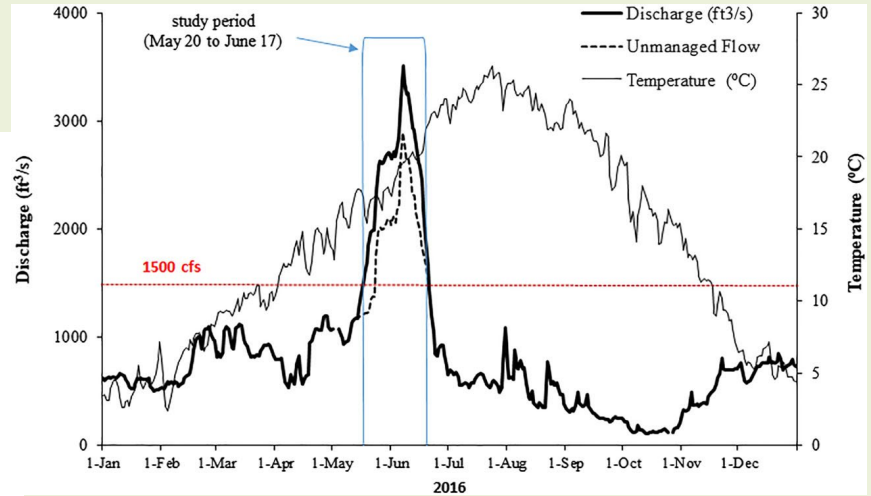
MIDDLE RIO GRANDE ENDANGERED
SPECIES COLLABORATIVE PROGRAM

Floodplain Restoration and Flow Modification

1- Store and release water to provide spawning flows when needed



2- Spring Runoff inundates Restored Floodplains



3- Sample adult and larval fish on restored floodplains



From: Managed spring runoff to improve nursery floodplain habitat for endangered Rio Grande silvery minnow
 Richard A. Valdez | Grace M. Haggerty | Kenneth Richard | Deanna Klobucar

CLIMATE CHANGE AND WATER



- ***BULLETIN 164 — CLIMATE CHANGE IN NEW MEXICO OVER THE NEXT 50 YEARS: IMPACTS ON WATER RESOURCES***
- ***50 Year Water Plan released by Governor Michelle Lujan Grisham in January 2024***
- Average temperature increase across New Mexico of 5° to 7° F over the next 50 years.
- Flow in the state's major rivers is projected to decline by 16% to 28%, and the frequency of extreme precipitation events, coupled with fire-driven disruption of vegetation in watersheds, is projected to at least double river sediment.



REGIONAL RIVER RESTORATION PROJECTS

- Environmental Use of Drain Outfalls – MRGCD
- Isleta Reach River Management Program – MRGCD/ISC
- Bosque del Apache River Realignment – Reclamation/FWS
- Lower Reach Realignment – Reclamation and others
- Albuquerque Reach Habitat Restoration – ISC

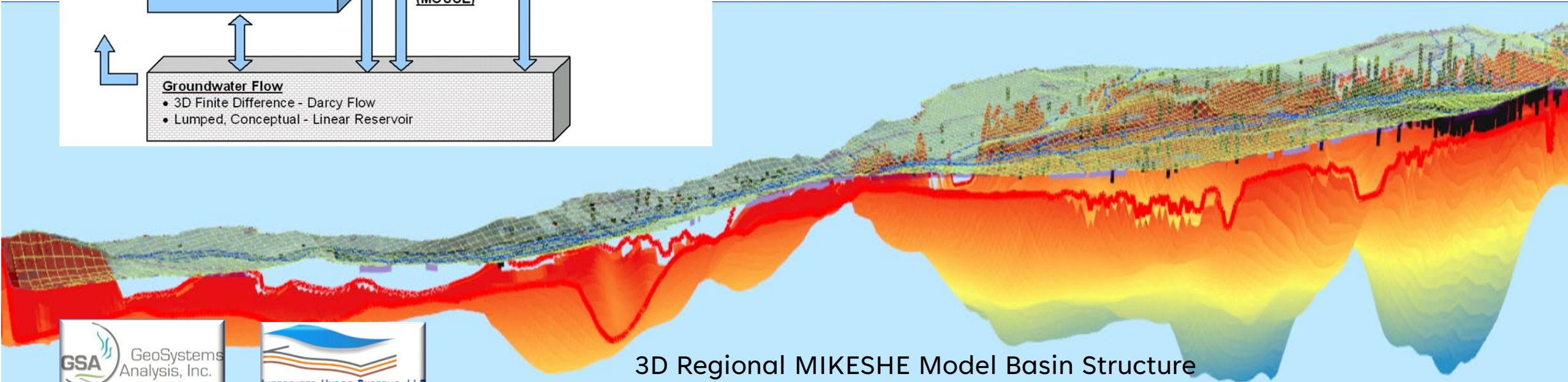
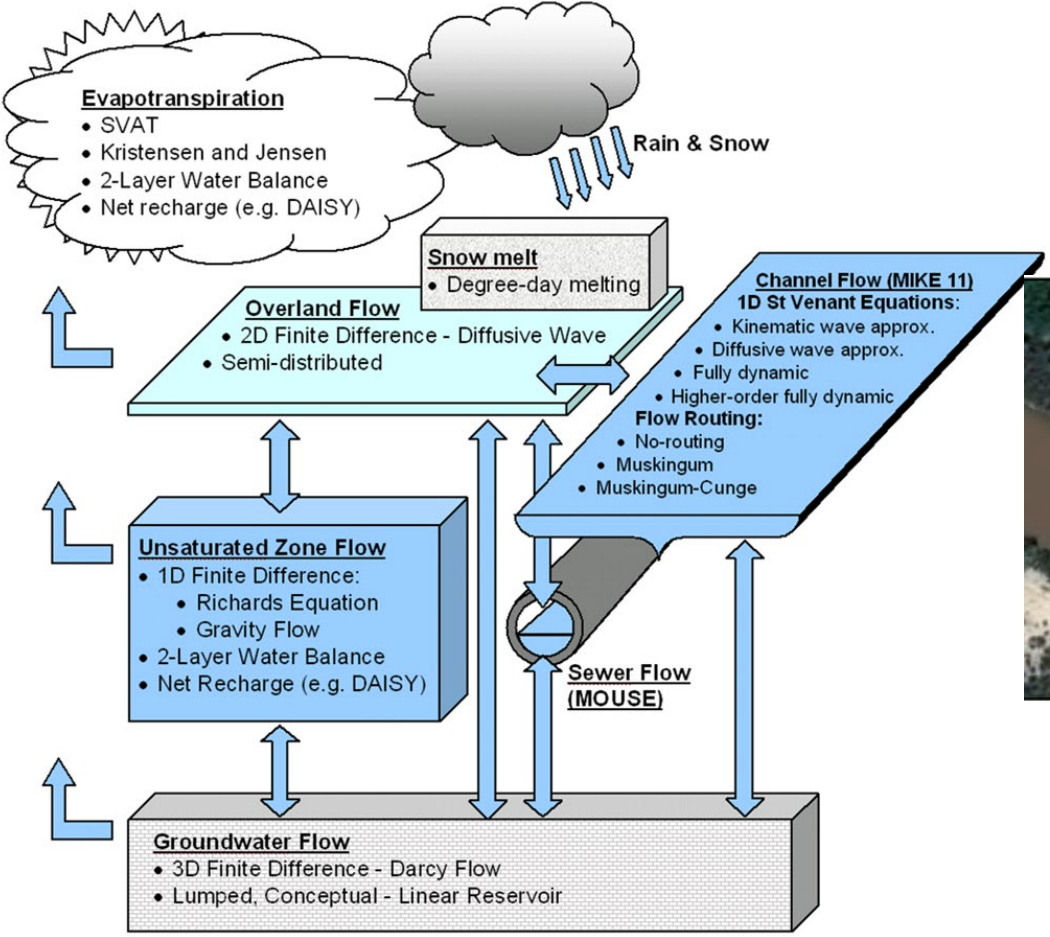


OBJECTIVES FOR ISC/MRGCD RIVER RESTORATION



- ✓ INTEGRATE CORE MISSIONS WITH RIVER HEALTH
 - ✓ CHANNEL CONVEYANCE
 - ✓ REDUCE NET DEPLETIONS
 - ✓ LEVEE INTEGRITY
 - ✓ IRRIGATION EFFECTIVENESS
 - ✓ RIVER FLOWS
 - ✓ FLOODPLAIN CONNECTIVITY
 - ✓ BOSQUE MOSAIC – CONTROL INVASIVES
 - ✓ FIRE FUEL REDUCTION
 - ✓ IMPROVE FISH AND WILDLIFE HABITAT
- ✓ RECOGNIZE AND RESPOND TO CLIMATE CHANGE REALITY
 - ✓ PLAN FOR A FUTURE WITH LESS WATER AND HIGHER DEMANDS
 - ✓ USE NEW TECHNOLOGIES TO BETTER QUANTIFY AND MANAGE WATER USE
- ✓ GROW COLLABORATIVE PARTNERSHIPS
- ✓ PROTECT CULTURAL VALUES

SCIENCE AND MONITORING



SUMMARY

THANK YOU!

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Commission

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