



Cooperative Management in the Middle Rio Grande

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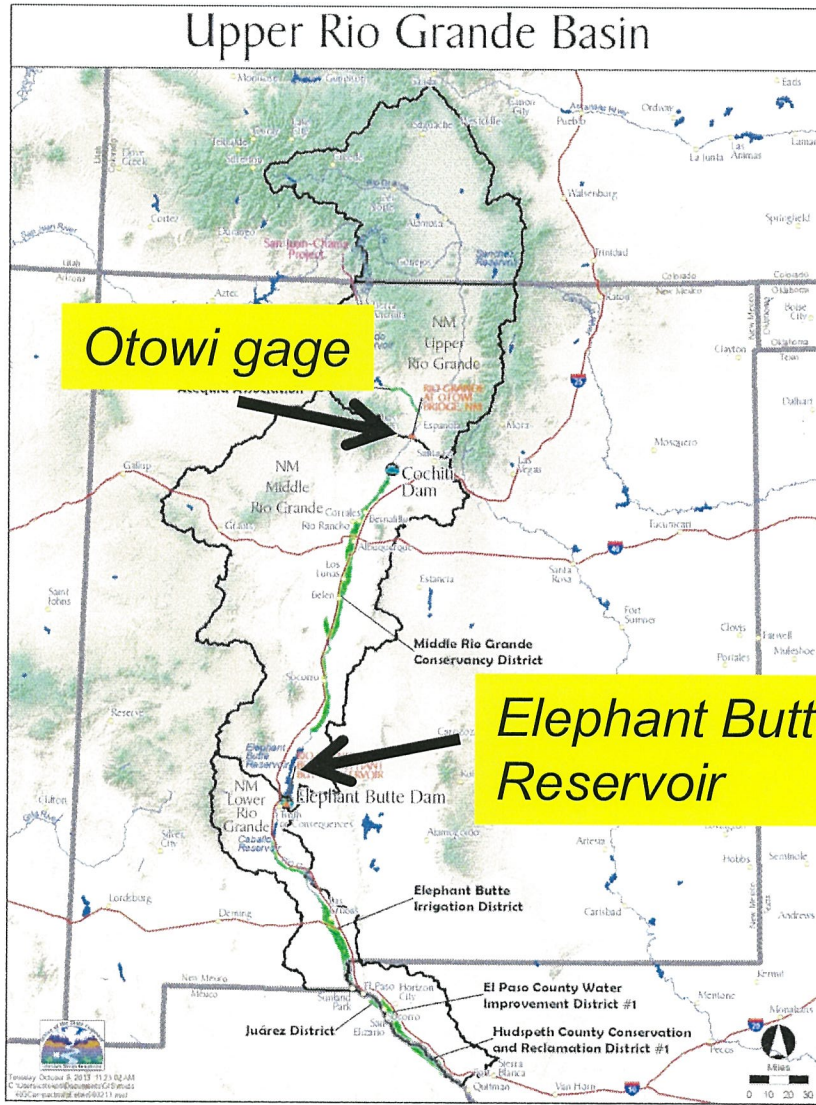
Truth or Consequences, NM

The Rio Grande Compact



- Upper Rio Grande Basin
 - Headwaters of Rio Grande in Colorado to Fort Quitman, Texas
 - The basin includes parts of 3 states and two countries

The Rio Grande Compact – New Mexico



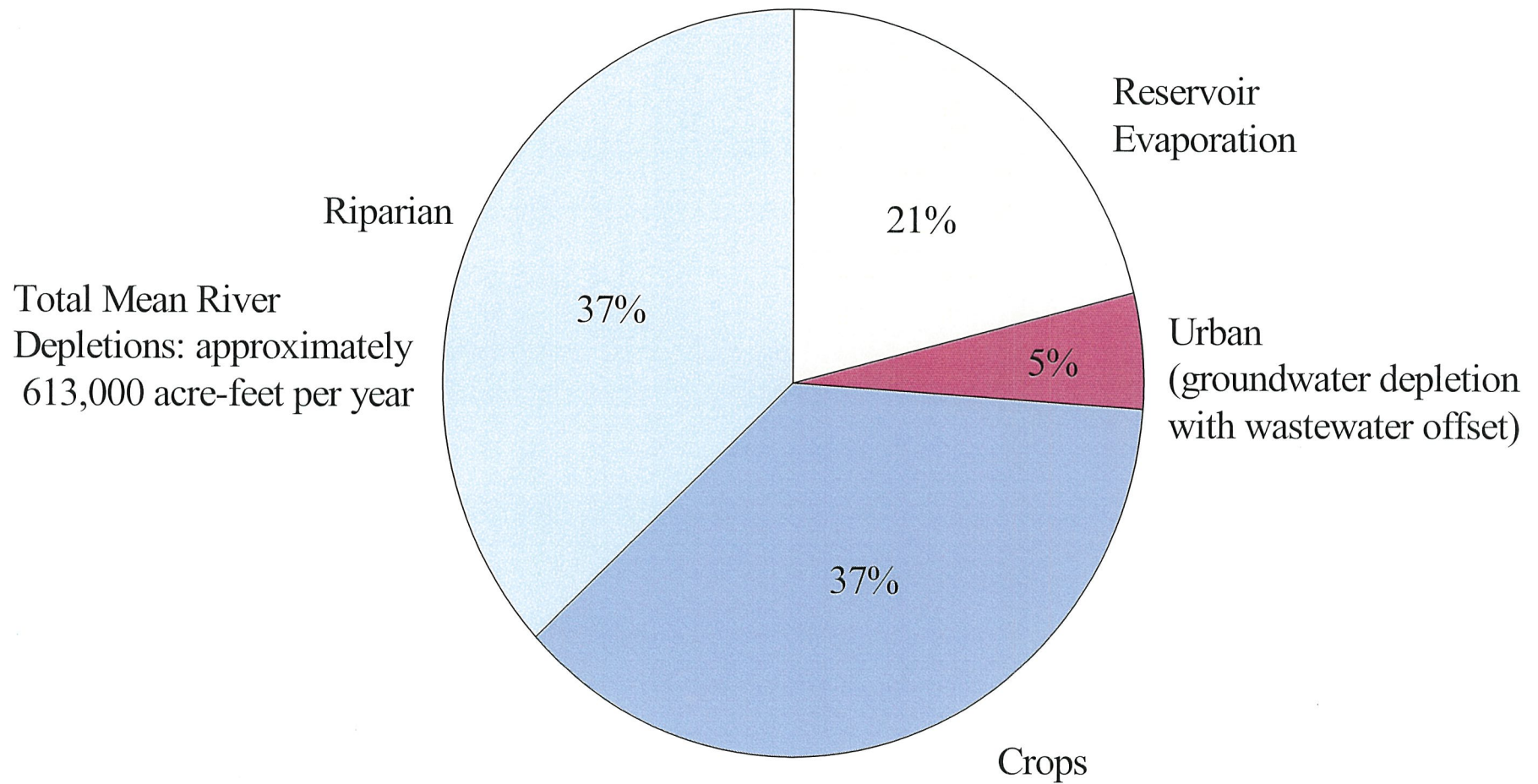
New Mexico is Required to Deliver Water to Texas at Elephant Butte Reservoir (the Rio Grande Project):

If depletions change between the Stateline with Colorado and Otowi Bridge, modify Middle Rio Grande allocation

An explicit Middle Rio Grande allocation and delivery

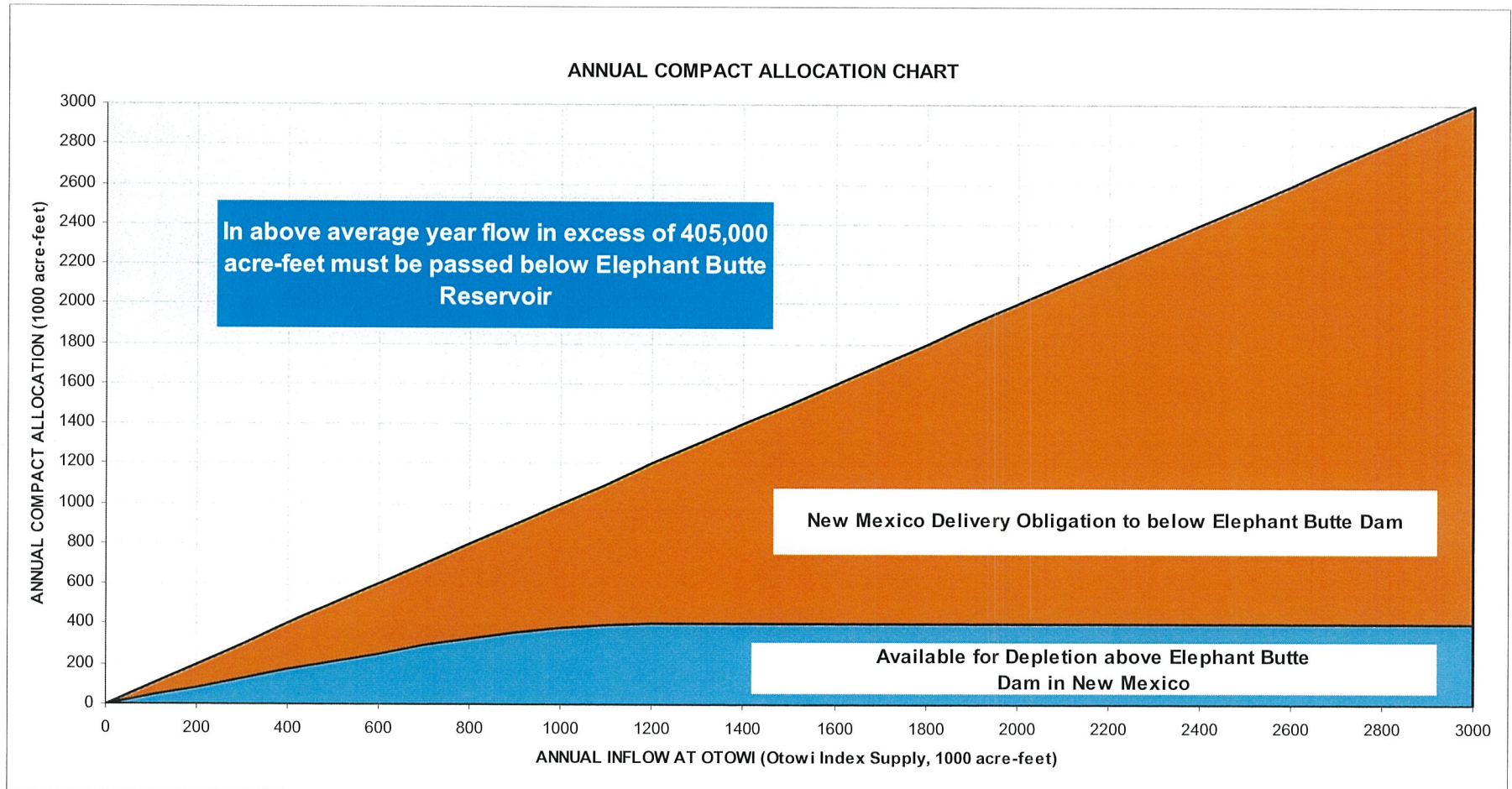
57% of the Rio Grande Project Supply used in New Mexico

Middle Rio Grande River System Depletions

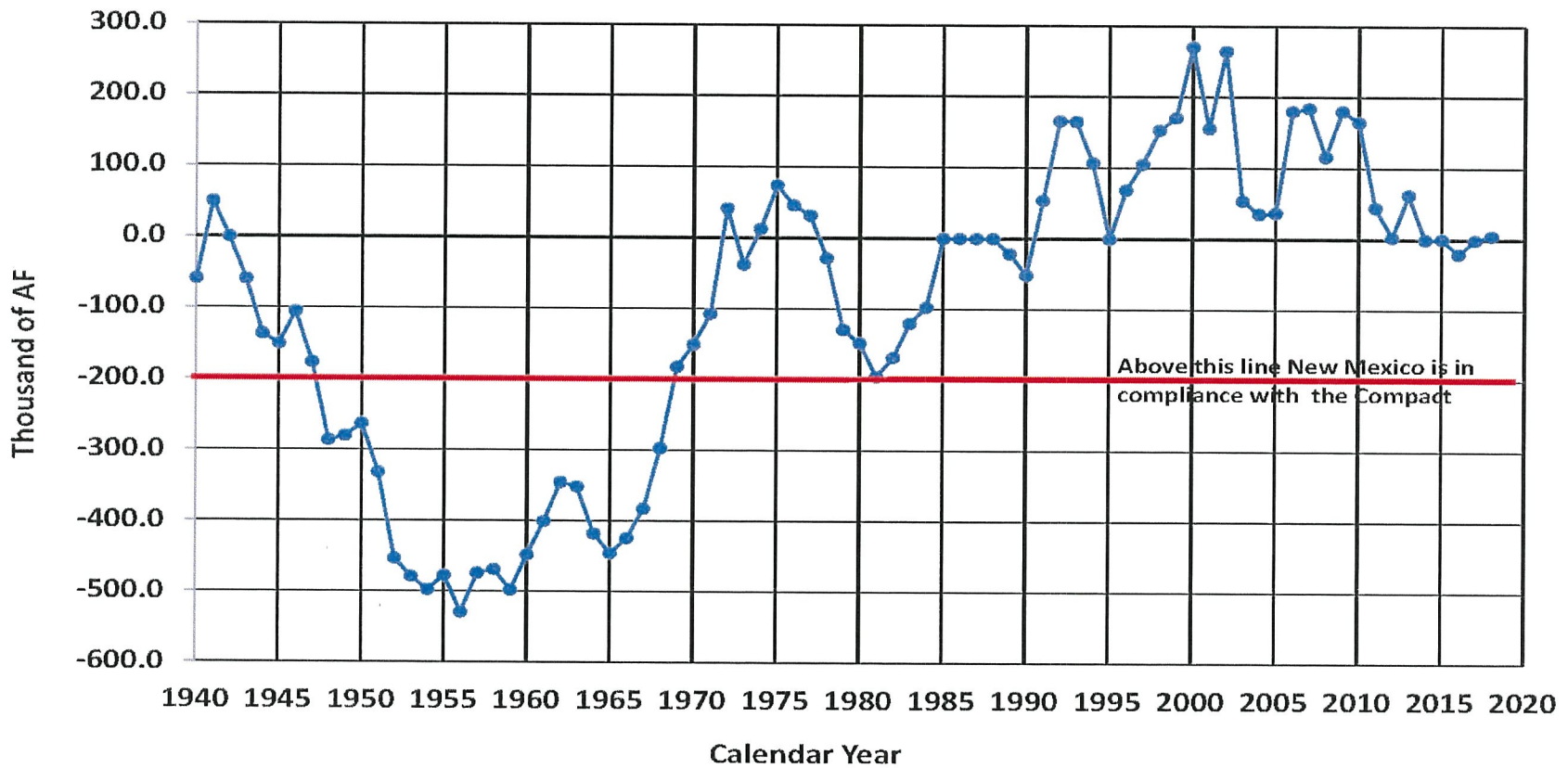


Source: SSPA, July 2000 Water Supply Study of the Middle Rio Grande

Middle Rio Grande Allocation

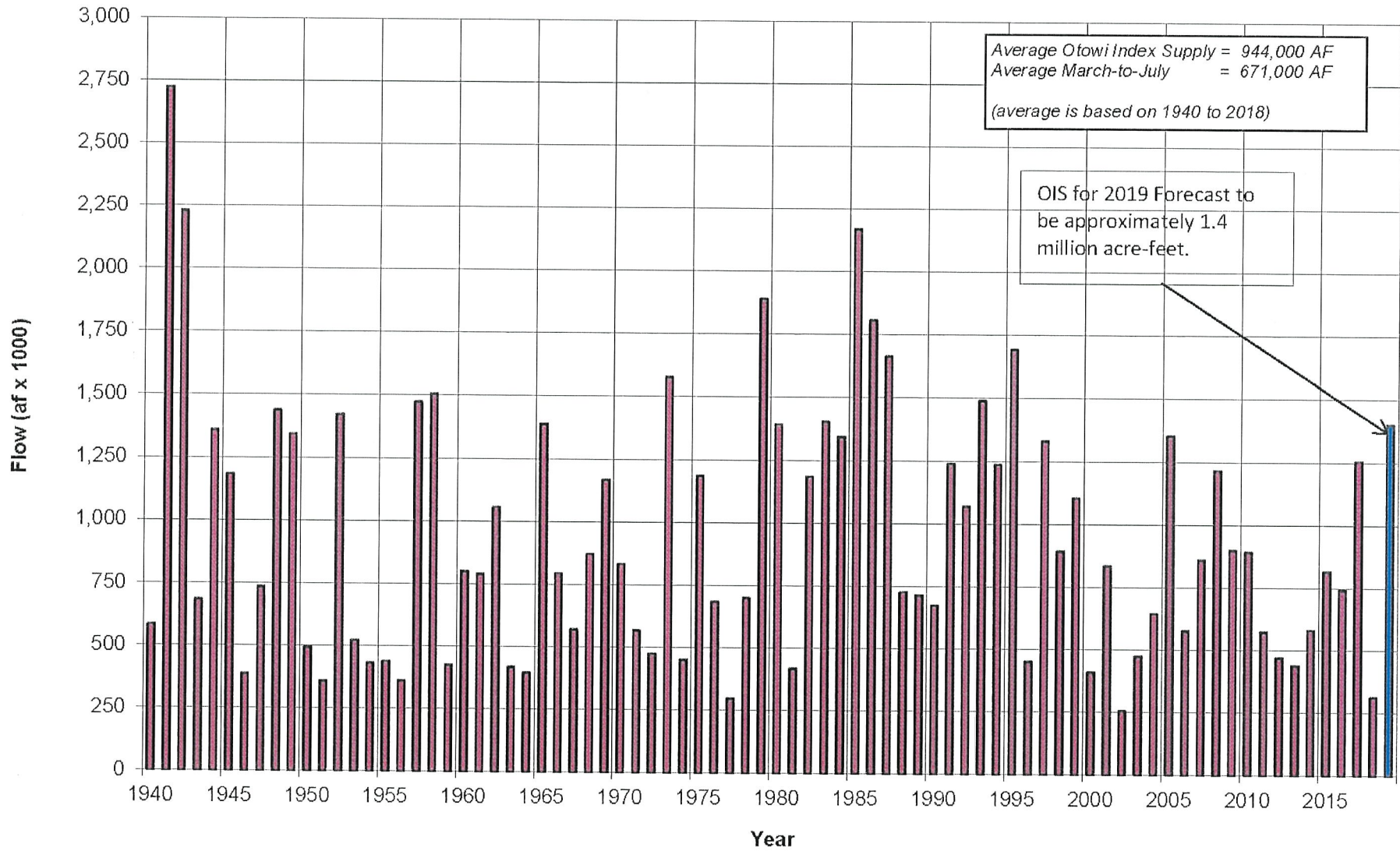


Rio Grande Compact Cumulative Departures 1940 to 2018

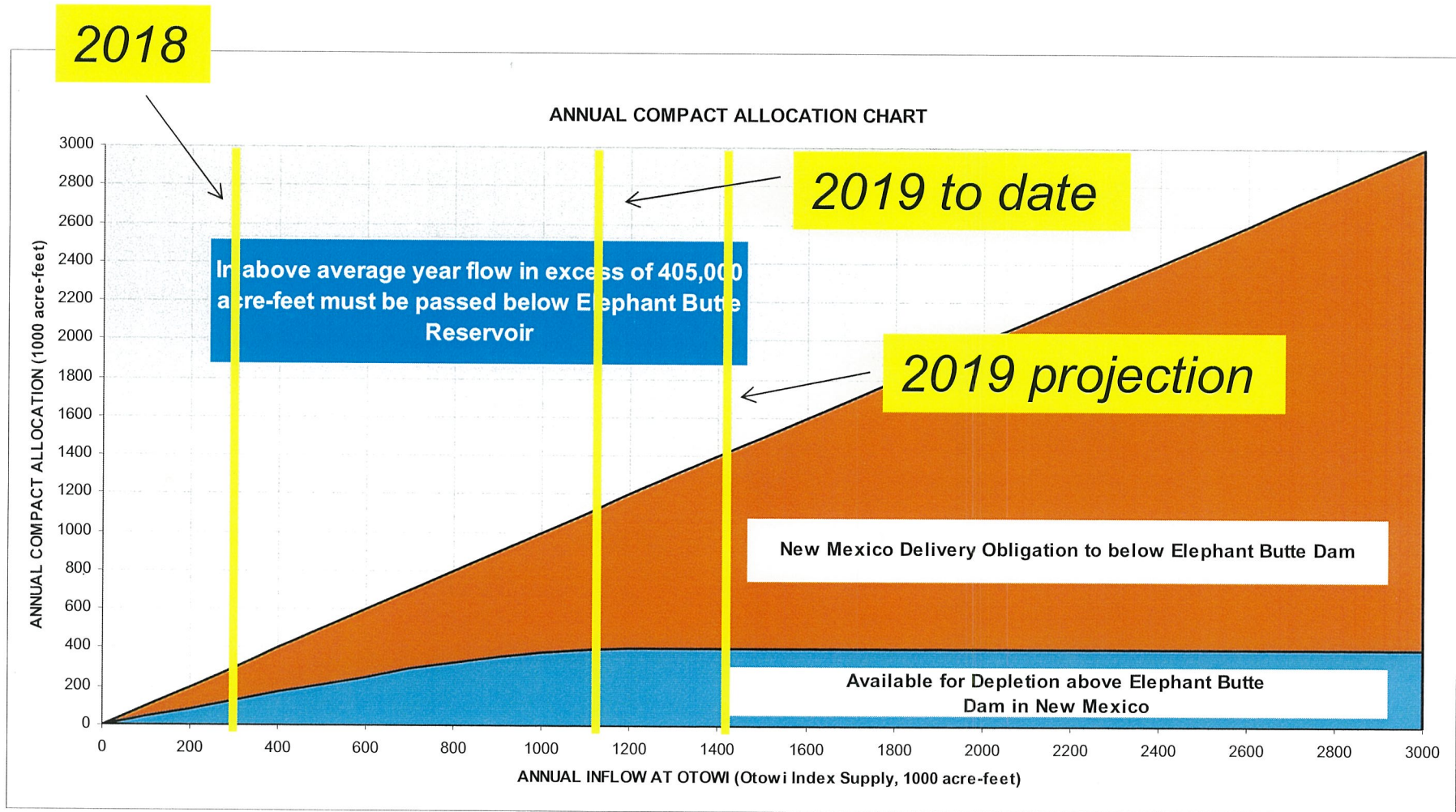


Note: The Compact Commission has not approved annual accounting since 2011. Values in the chart since that time are those calculated and proposed by the New Mexico Engineer Adviser as described in annual reports to the Compact Commission

Annual Otowi Index Supply 1940 thru 2019 (projected)



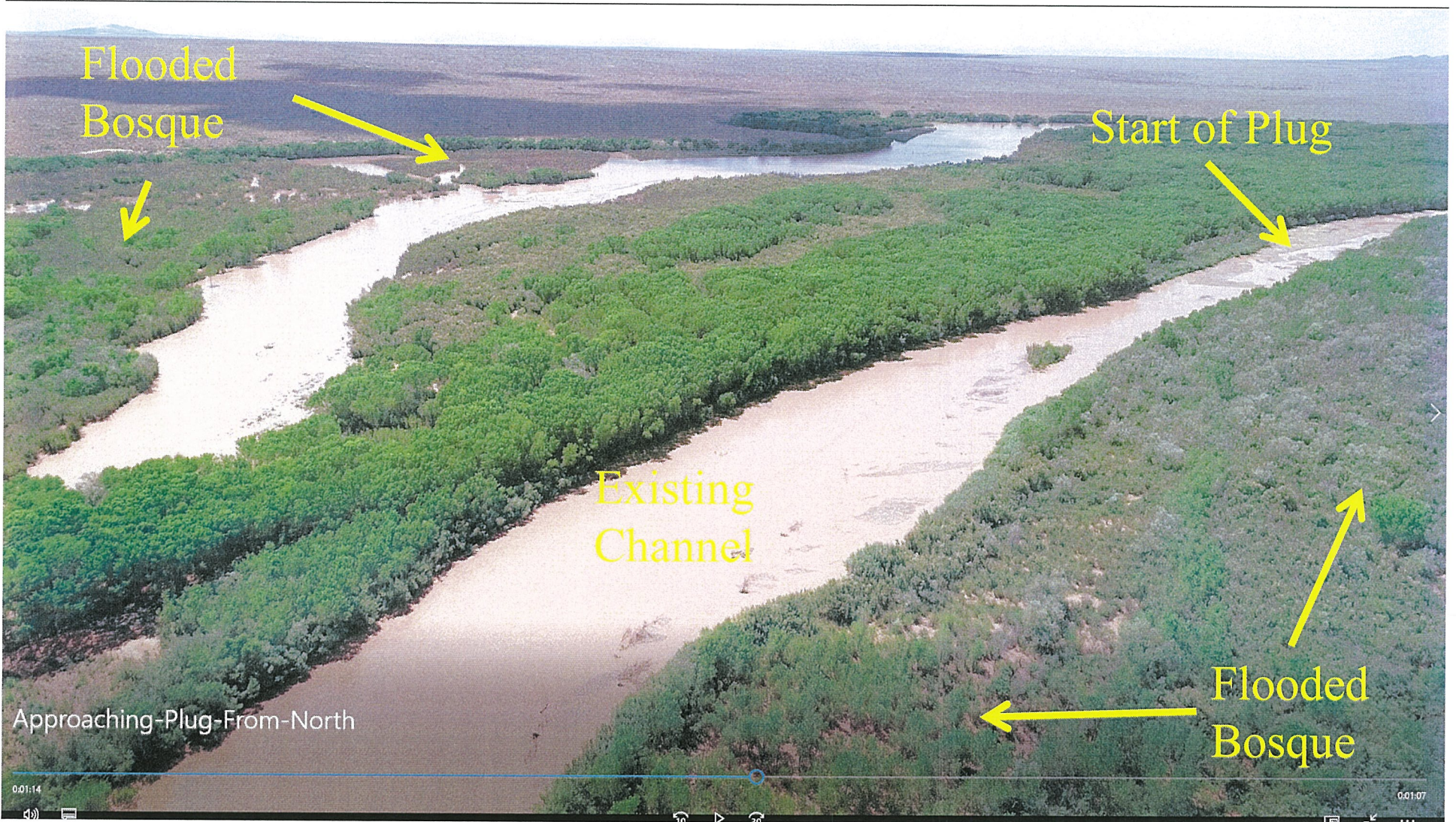
Middle Rio Grande Allocation



Middle Rio Grande Cooperative Management

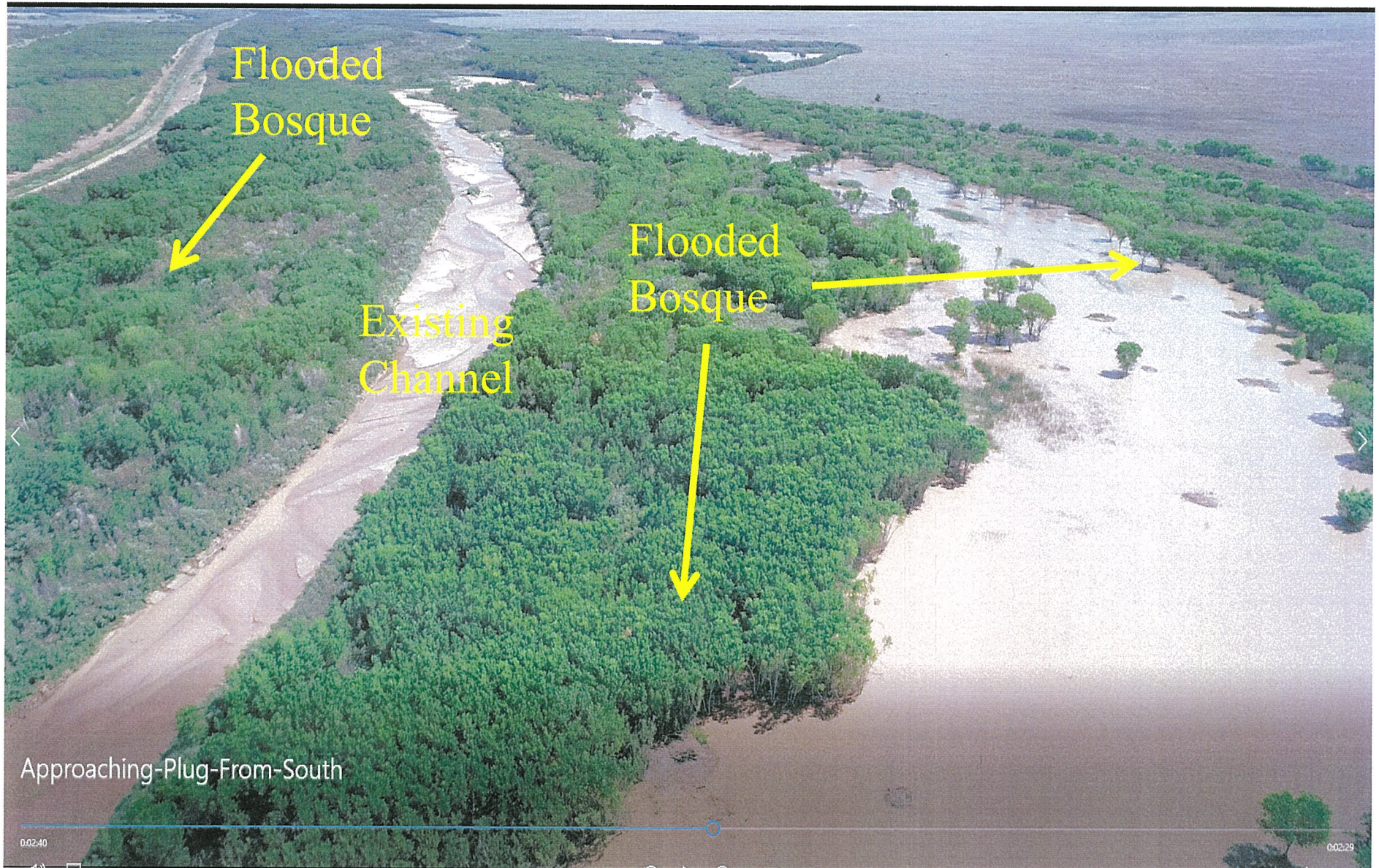
- Water Operations –
 - Pass early season river flow to Elephant Butte
 - Store in El Vado when the opportunity exists
 - Conduct coordinated water operations conference calls
 - Release water previously stored in
 - Water Rights Transfer Processes
 - Offsetting (treated water returns, San Juan Chama water, senior rights transfers)
 - Channel Maintenance – Remove accumulated sediment
 - Flood Protection – Maintain and Construct Levees and Habitat Restoration
 - Comply with the 2016 Biological Opinion
-

Sediment Plug Within Bosque del Apache NWR
July 24, 2019
looking downstream



Sediment Plug Within Bosque del Apache NWR

*July 24, 2019
looking upstream*



Socorro Area Engineered Levee Replacement

- NMISC and MRGCD collaborated to provide non-federal cost share for levee improvements in the San Acacia reach.
- First segment is complete and provides flood control to the City of Socorro.
- Helps provide flexibility for flood control operations and consequently, for Rio Grande Compact deliveries.



2019 Spoil Bank Levee Repairs

- NMISC provided contractor support and materials to assist MRGCD with levee repairs in the Los Lunas and Belen areas.
- Again, levee protection helps protect people and infrastructure and provides flexibility for flood control operations and consequently, for Rio Grande Compact deliveries.
- Helps prevent loss of water from levee breaches



MRGCD and NMISC Efforts on 2016 BiOp

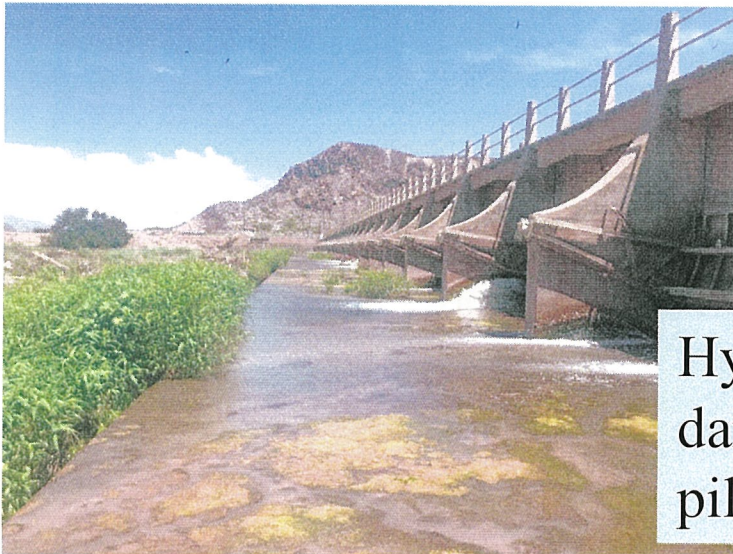
- Minnow Action Team
- Restored floodplain research and monitoring
- Drain outfall as refugia habitats during low flow
- Construction and maintenance of habitat



NMISC-MRGCD Pilot Study at the San Acacia Diversion Dam to provide fish passage



Fisheries biologists are conducting fish movement studies at the dam using Passive Integrated Transponder (PIT) tags



Hydraulic measurements at the dam are being collected to assist in pilot project design

Questions?

