

# DROP:

## Depletion Reduction and Offset Program



Elephant Butte Irrigation District

Presentation to Water and Natural Resources

Interim Committee

August 26, 2024

# Motivation for DROP



- Municipal and Industrial (M&I) water users withdrawal of groundwater affects the surface water supply of the Rio Grande Project, and therefore EBID's surface water allotment.
- EBID is the only authorized user of Rio Grande Project water in New Mexico.
- M&I users cannot continue or expand the use of hydrologically connected groundwater without further impairing EBID's surface water supply.
- DROP provides a market-based means for M&I users to square up with the Rio Grande Project

# The core of the US Complaint:

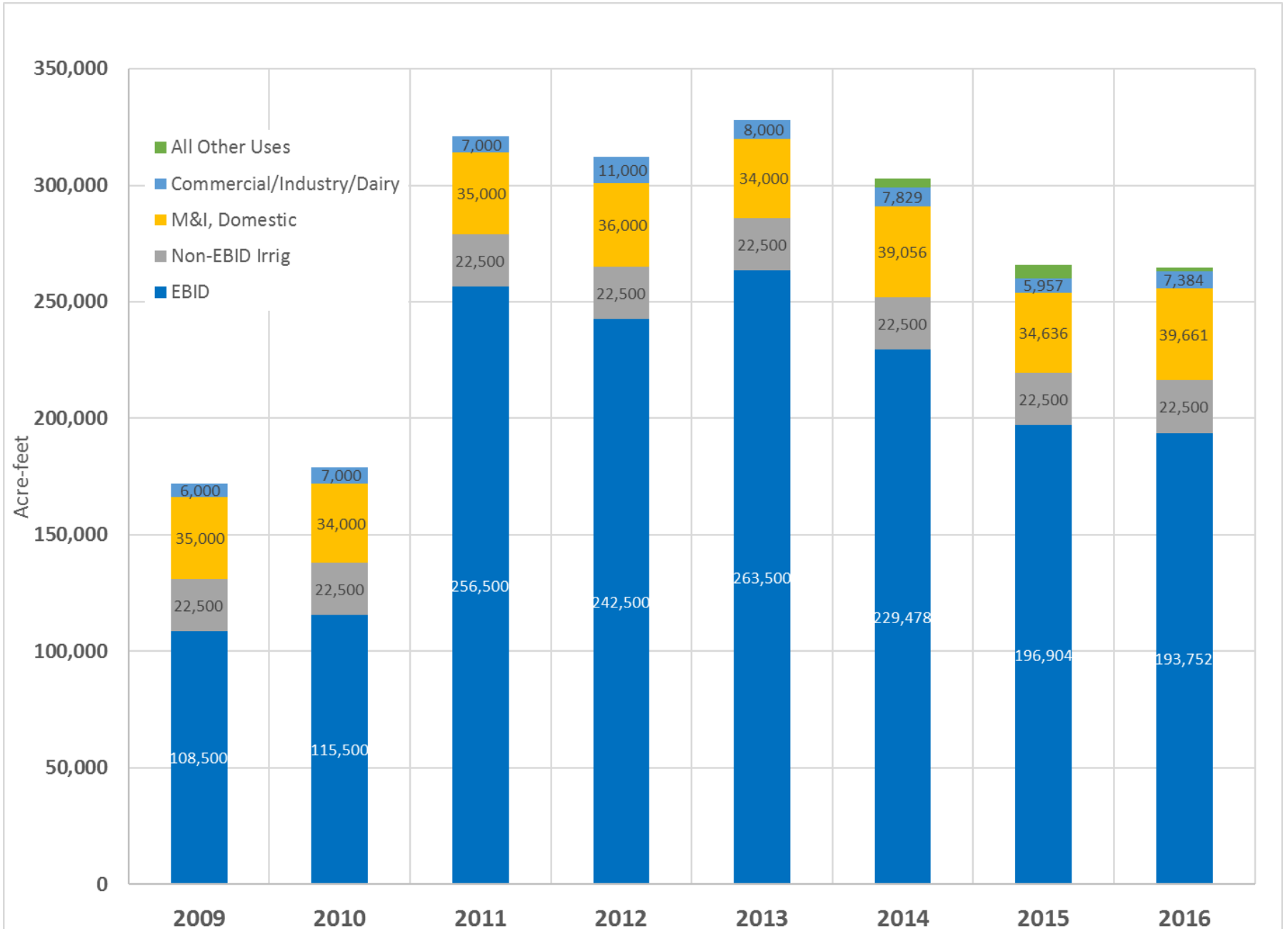
*“New Mexico has allowed the diversion of surface water and pumping of groundwater that is hydrologically connected to the Rio Grande downstream of Elephant Butte Reservoir by water users who either do not have contracts with the Secretary of the Interior or are using water in excess of contractual amounts.”*

# Considerations

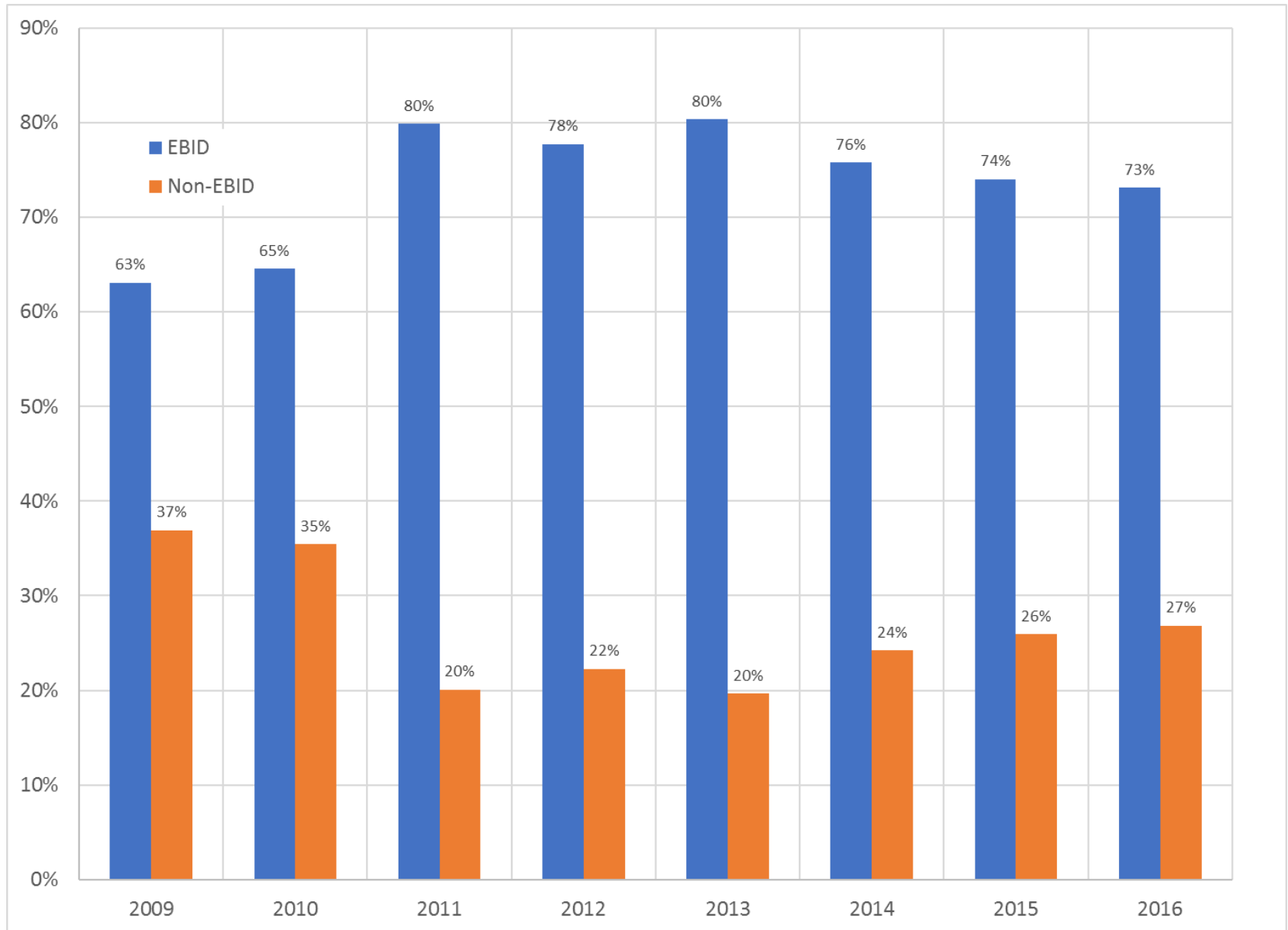
- Plaintiffs in Texas v. New Mexico seek to protect the Rio Grande Project water supply from depletions by “non-Project contractors.”
- DROP will allow M&I users to become Project contractors.
- Direct use of surface water for M&I use is probably not practical due to the highly variable supply of surface water.
- Depletion reduction directly addresses effect on interactive surface water-groundwater system and reduces stress on aquifer systems.
- Excessive or poorly planned fallowing can threaten the viability of agriculture.



# Groundwater withdrawals in the LRG



# Percentage of total LRG groundwater withdrawals by EBID and all other LRG users



# M&I Groundwater Withdrawals in the LRG



# More help from the Federal Government

## Biden-Harris Administration Invests Up to \$400 Million to Address Drought, Conserve Water through Production of Water-Saving Commodities

*USDA also announces record \$2.3 billion investments under the Western Water Framework; Funding builds on Administration's historic water conservation efforts, which have stabilized short-term western water supply and are investing in long-term solutions*

**WASHINGTON, Aug. 1, 2024** – Agriculture Secretary Tom Vilsack announced the U.S. Department of Agriculture (USDA) will invest \$400 million with at least 18 irrigation districts to help farmers continue commodity production while also conserving water across the West. This funding – which will support irrigation districts and producers in using innovative water savings technologies and farming practices while producing water-saving commodities in the face of continued drought – is expected to conserve up to 50,000 acre-feet in water use across 250,000 acres of irrigated land in production, while expanding and creating new, sustainable market opportunities.

### **Press Release**

Release No. 0151.24

**Contact:** USDA Press

**Email:** [press@usda.gov](mailto:press@usda.gov)



# EBID's most recent grant award

- There is an increasing demand for water in the West, but available water is in fast decline. Impacts of climate change, including the increasing frequency, intensity, and duration of drought, are already being experienced across the West and are projected to worsen.
- USDA is taking an all-hands approach to help address this challenge, which includes working directly with irrigation districts.
- We are one of the 18 irrigation districts that has agreed to participate in this effort.
- We are working with USDA to scale up the tools available to producers in our irrigation district to voluntarily conserve water as well as create and expand markets for water-saving commodities.

# Creating partnerships

- This partnership will support producers in utilizing water efficient technologies while maintaining and increasing commodity production and consumption in the face of continued drought.
- In total, USDA is investing up to \$400 million from the Commodity Credit Corporation in this effort that will help farmers produce commodities during drought through increased water efficiency.
- USDA selected irrigation districts based on several commodity production and water management related criteria in order to maximize the ability to achieve program objectives.
- In the coming weeks, our irrigation district will continue to work with USDA to finalize the details of the planned reductions in water consumption and water-saving commodities produced.
- We understand that as part of the whole effort, USDA is targeting a reduction of up to 50,000 acre-feet of water across more than 250,000 acres of irrigated land in production.

# How the partnerships work

- The Irrigation District will work with USDA.
- The Irrigation District will in turn work with producers in their district to provide payments for voluntarily reducing water consumption while maintaining commodity production.
- The needs of producers will determine the specific strategies for water conservation, including irrigation improvements, shifts in management practices, shifts in cropping systems, and other innovative strategies.
- USDA will learn from the diversity of strategies used and identify additional opportunities to maintain and expand water-saving commodity production in the future.
- USDA and our Irrigation District will work on finalizing agreements. The agreements will include the details of each individual district's water-saving strategies, commodities to be produced, and specific budgets.
- Following the finalization of the agreement, we'll work with producers in our district to participate.

# DROP in a Nutshell



- M&I users motivated to offset the impact of their groundwater use on the surface water supply of the Rio Grande Project enter into **voluntary fallowing** agreements with farmers.
- Farmers are paid by the M&I user through EBID to rotationally fallow land, eliminating the local hydrologic depletion that would have occurred on that land, taken to be 2.6 acre-feet per acre of fallowed land.
- M&I users continue to use their groundwater wells (or expand groundwater use), having offset their effect on the local hydrologic system and the Rio Grande Project.

# Contingencies

- Entry by farmers into DROP forbearance agreements is voluntary.
- Land entering program must have been irrigated four of the past five years, and must have surface water and groundwater rights.
- Farmers may enroll up to 20 percent of their land into forbearance agreements, though the EBID board has the ability to waive this limit.
- Lands under forbearance agreements are fallow, and not irrigated with surface water or groundwater.
- Surface water allotted to land under forbearance agreement will stay with the farmer who entered into the program for use on his cultivated land or transfer to other EBID lands.
- Farmers rotate land in the program through entire acreage, with a given parcel being fallowed for no more than three consecutive years.
- Land in the program must be maintained according to a land management plan.
- DROP will last for up to the term of the 2008 Operating Agreement.

# DROP Example: 50 acre farm, 12" surface water allotment

20% = 10 acres in DROP forbearance agreement

- No surface water or groundwater use on 10 acres
- Depletion reduction (offset) = 2.6 ft CIR x 10 acres = 26 AF

50 acre account

40 acres in production

- Surface water allotment: 12" to 50 acres (50 AF)
- 15" surface water on 40 acres in production (50 AF)
- 15" – 12" = 3" reduced groundwater use on 40 acres in production (10 AF)

# The Bottom Line



- Change of Purpose of Project Water requires compliance with the Sale of Water for Miscellaneous Purposes Act, 43 USC §521.
- Price range to be determined in that process.
- Must be high enough to attract participating farmers – this is a voluntary program.
- Cost borne by M&I users participating in the program after initial investment from USDA is gone.

Questions?

