

Water 2120: Securing Our Water Future

Understanding *Water 2120* and
Water Resource Management in Albuquerque

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Water Resources Division Manager



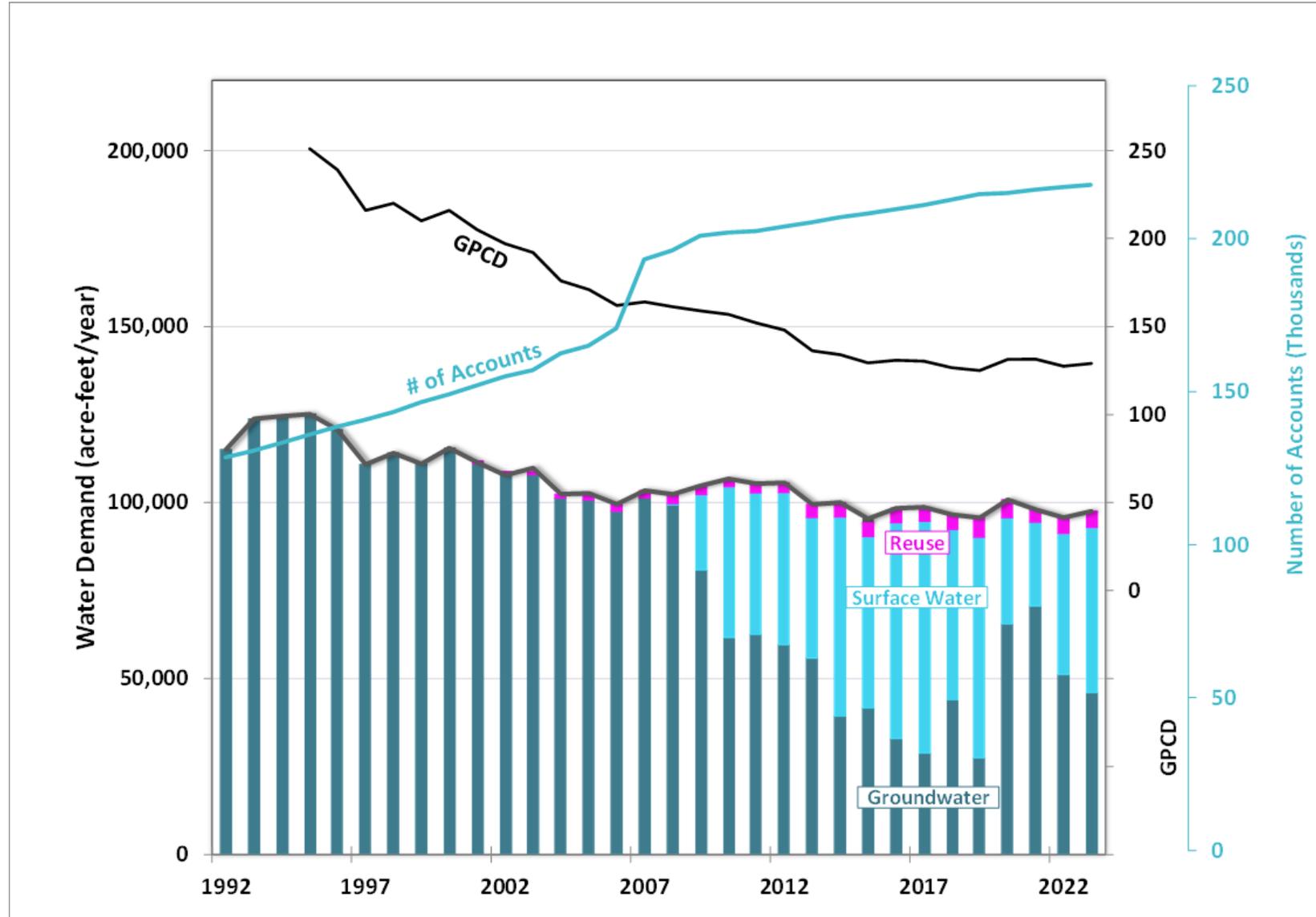
Current Supply Portfolio

- Surface Water
 - San Juan-Chama Project
 - Vested and acquired native rights
- Groundwater
 - Over 60 wells active in the service area
- Reclaimed Water
 - 18.5 billion gallons per year
- Reuse/non-potable Water
 - Irrigation of green spaces in Albuquerque
- Aquifer Storage and Recovery
 - Surface recharge and injection



Where We Have Been

Water 2120 builds on the 1997 and 2007 Water Resource Management Strategy (WRMS) approaches.

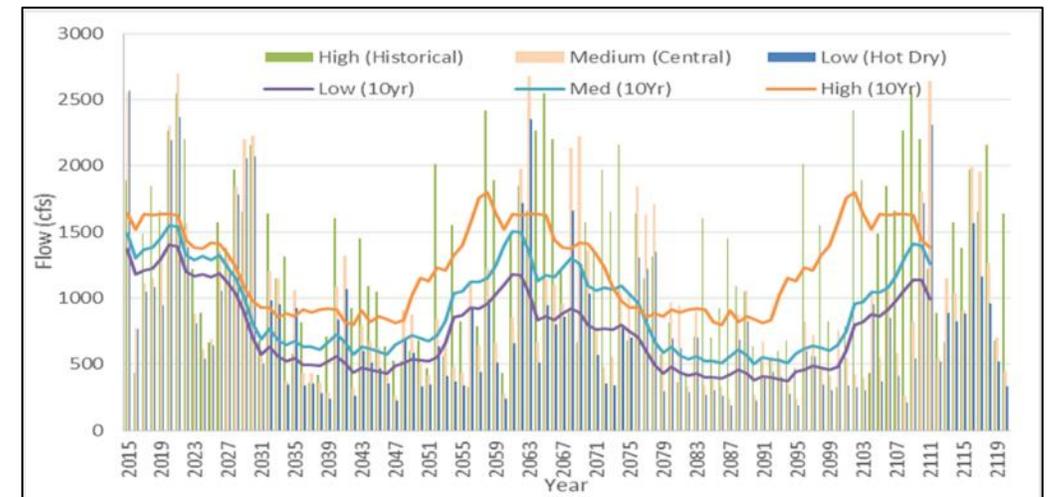
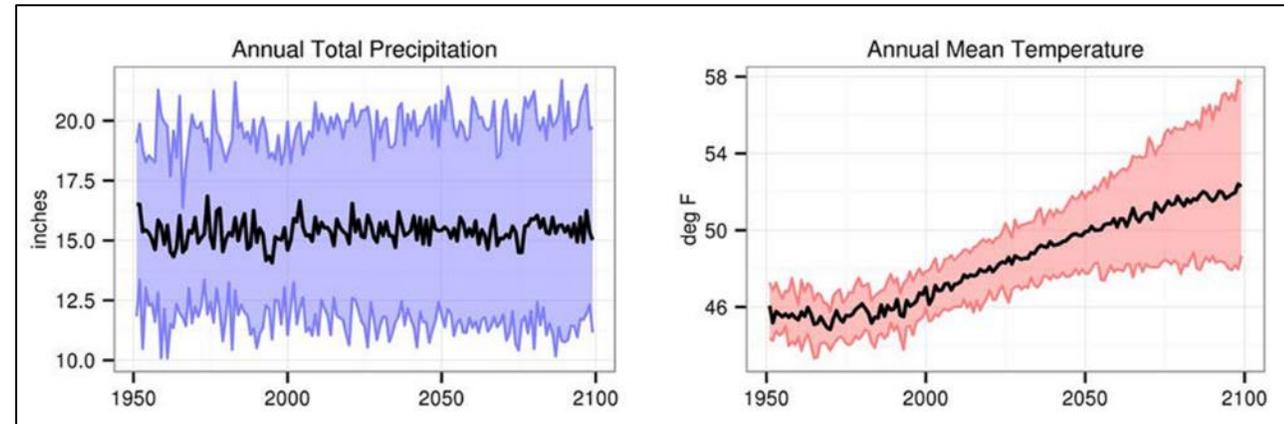


Water 2120: Planning for Change



Climate Change and Supply Availability

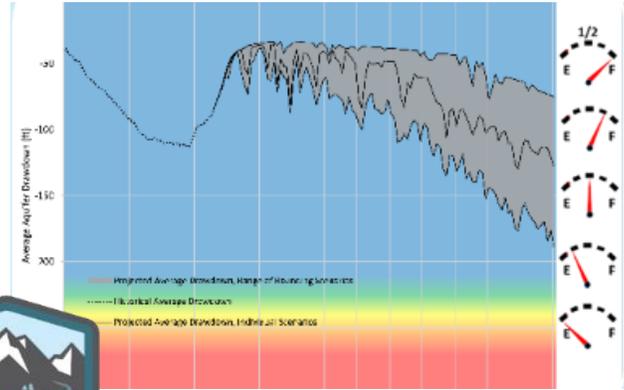
- *Water 2120* integrates climate change risk analysis
- Predicted spring runoff peaks happening earlier in the year
- Climate change analysis anticipates increasing aridification and shortages in surface water supply



Key Outcomes of *Water 2120*



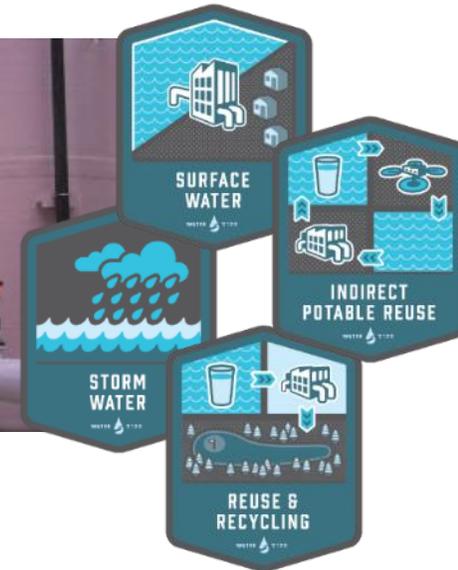
CONSERVE



MANAGE

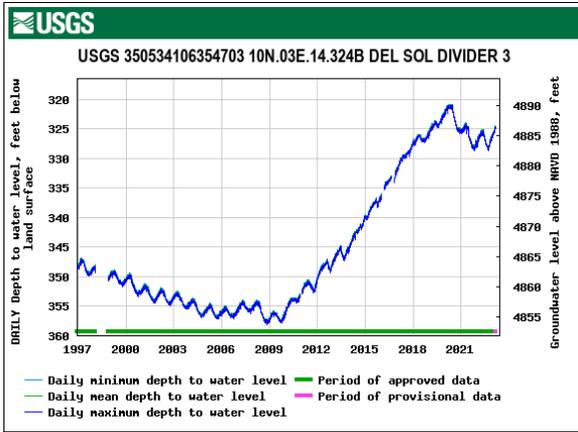


STORE

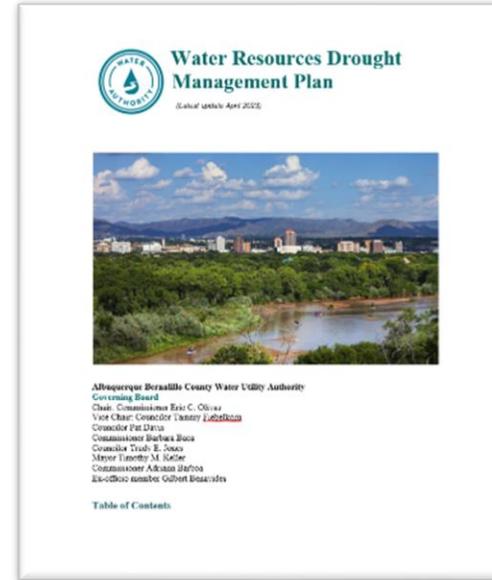


DIVERSIFY

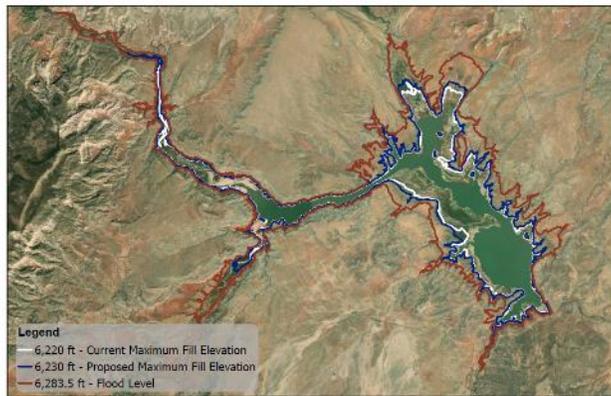
Water 2120 Policies



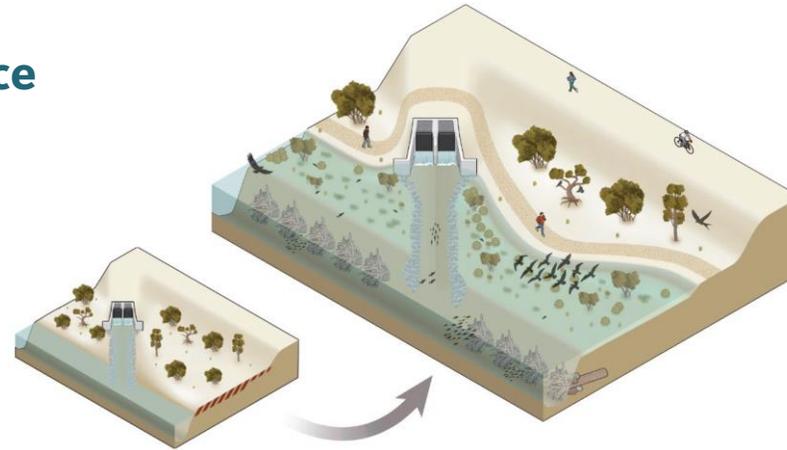
Establish and Maintain a Groundwater Reserve



Update and Maintain the Water Conservation Strategy

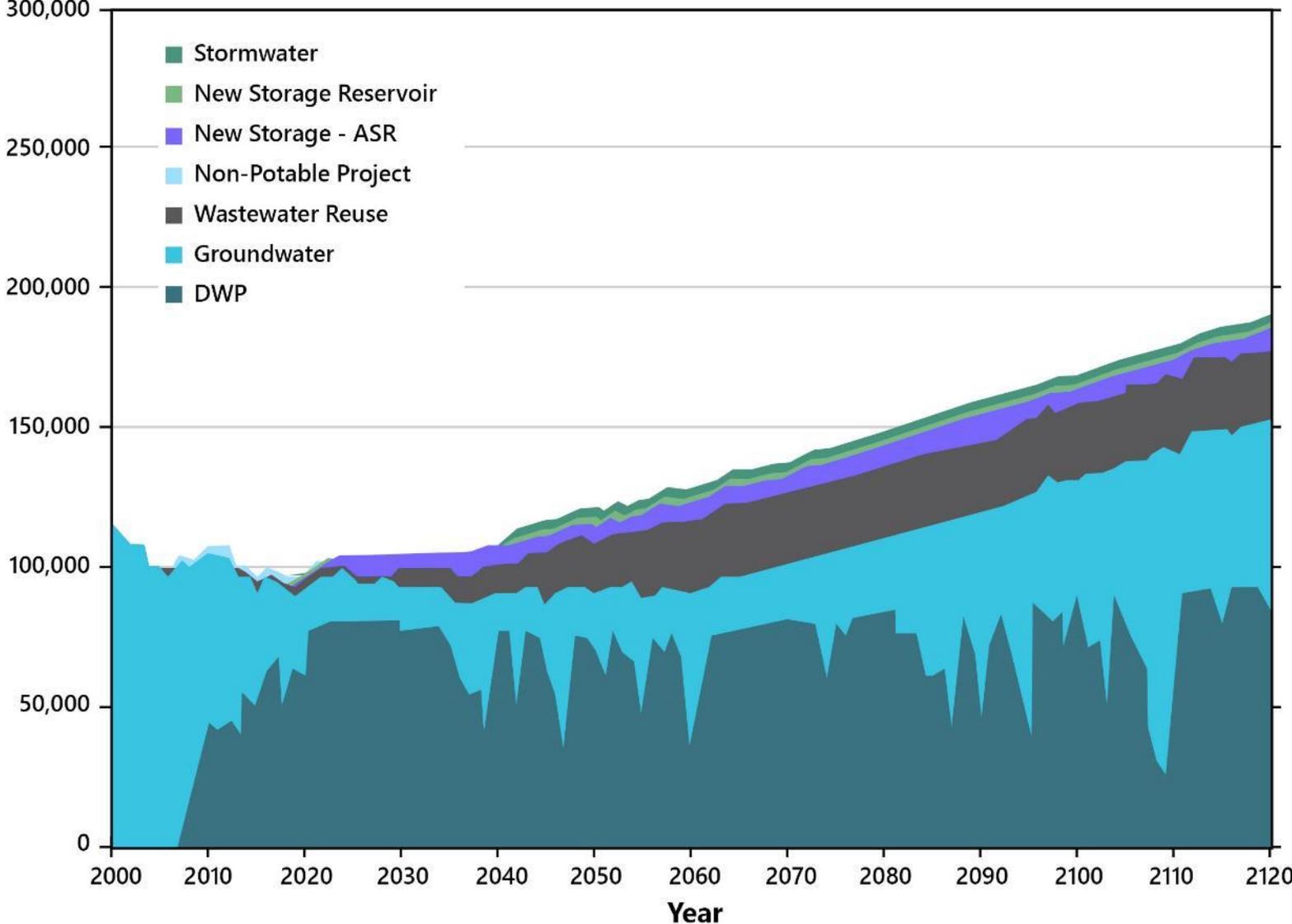


Protect and Enhance Storage of Native and San Juan-Chama Water



Protect Valued Environmental and Cultural Resources

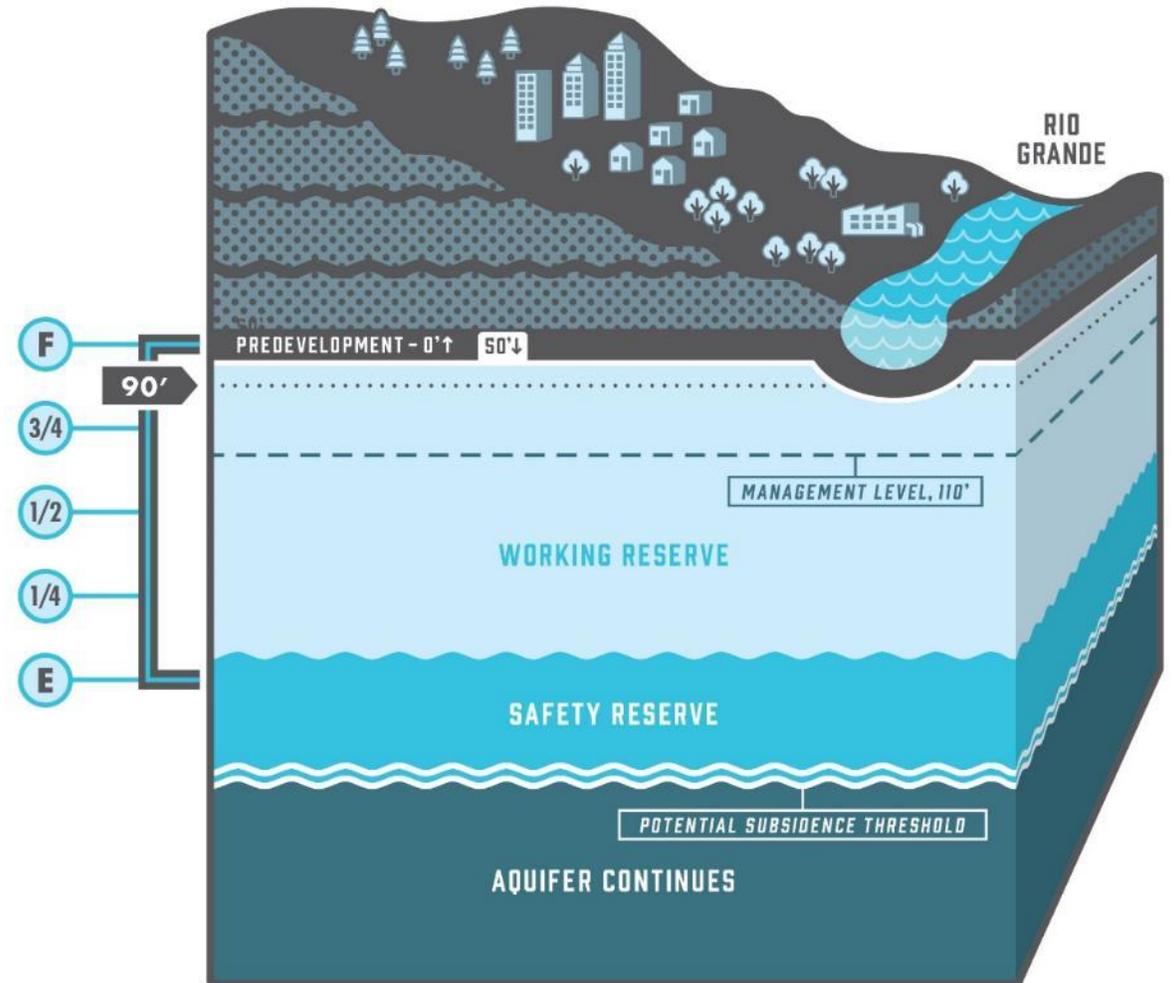
Diverse Supply Portfolio for Resiliency



Groundwater Management Levels

Relative to pre-development (the elevation of groundwater before affected by pumping):

1. Working reserve 50-250 ft drawdown
 2. Safety reserve 250-300 ft drawdown
 3. 110 ft is management level
- Below 300 feet = potential for aquifer compaction
 - "Fuel gauge" is water level relative to 250ft



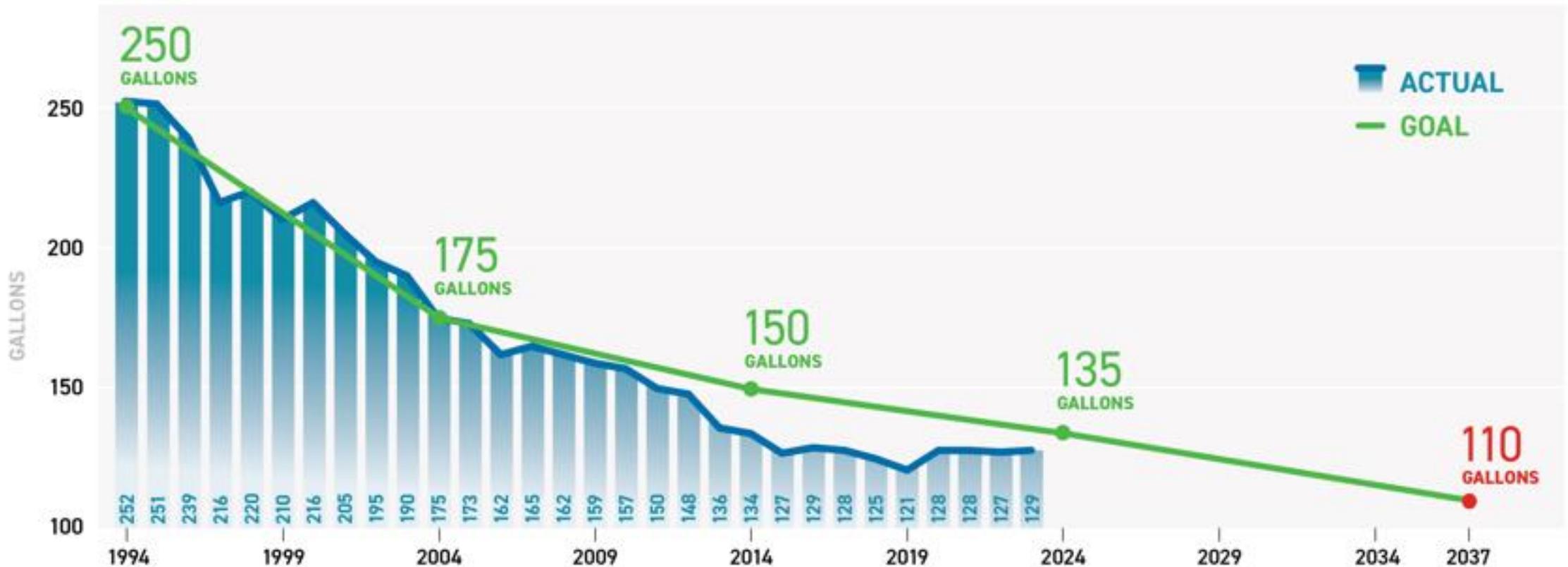
Graph not to scale

Current Status of *Water 2120*



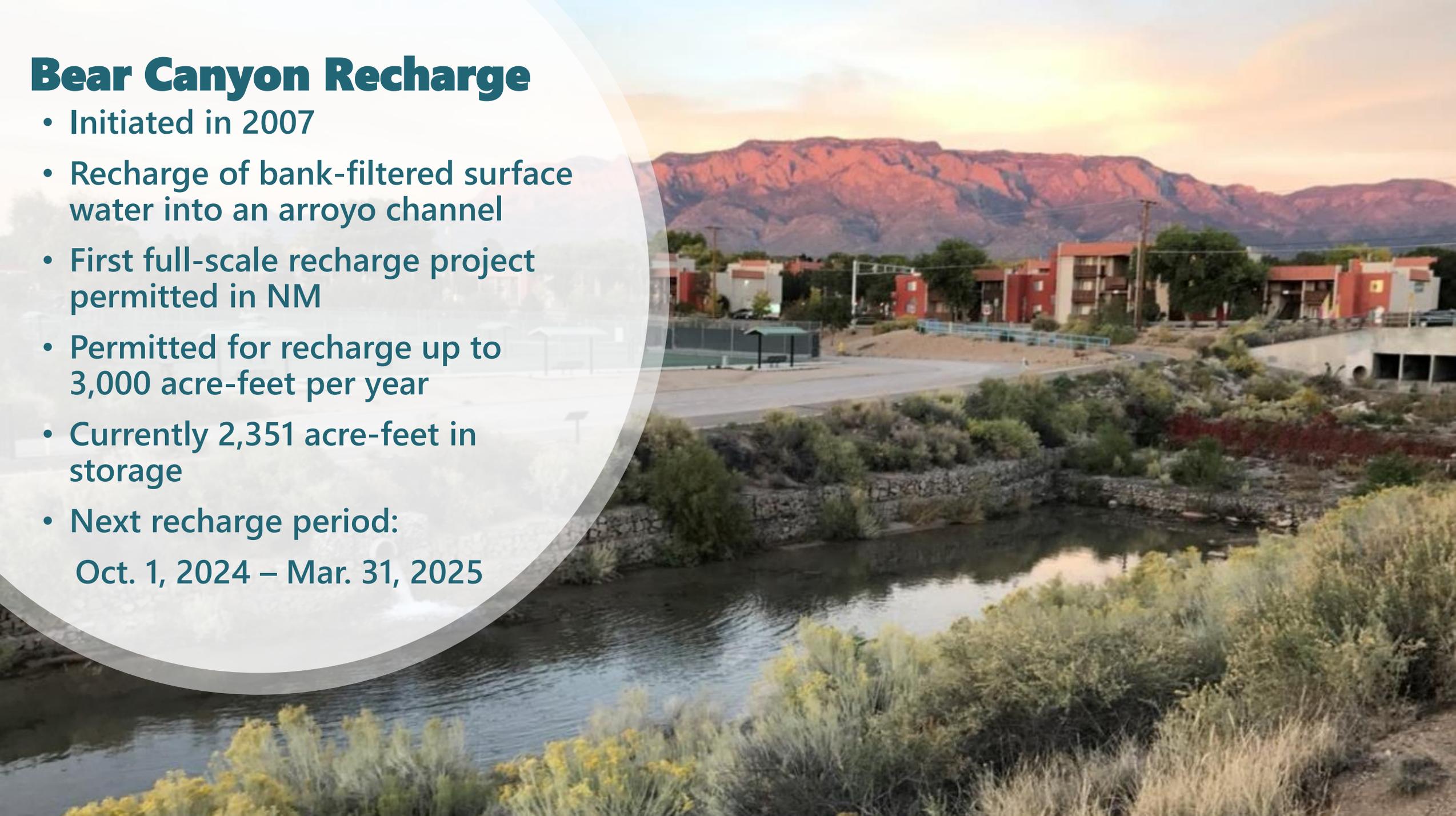
Water Conservation

Gallons per capita per day, 1994-2037



Bear Canyon Recharge

- Initiated in 2007
- Recharge of bank-filtered surface water into an arroyo channel
- First full-scale recharge project permitted in NM
- Permitted for recharge up to 3,000 acre-feet per year
- Currently 2,351 acre-feet in storage
- Next recharge period:
Oct. 1, 2024 – Mar. 31, 2025



DWTP Large-Scale Recharge

- Recharge treated San Juan-Chama surface water
- Permitted for 5,000 acre-feet per year
- Currently 4,715 acre-feet in storage



Watershed Management

- Water Authority contributes \$200,000 per year to Rio Grande Water Fund
- Funding is leveraged for forest treatment on private land in San-Juan Chama headwaters



Near term projects

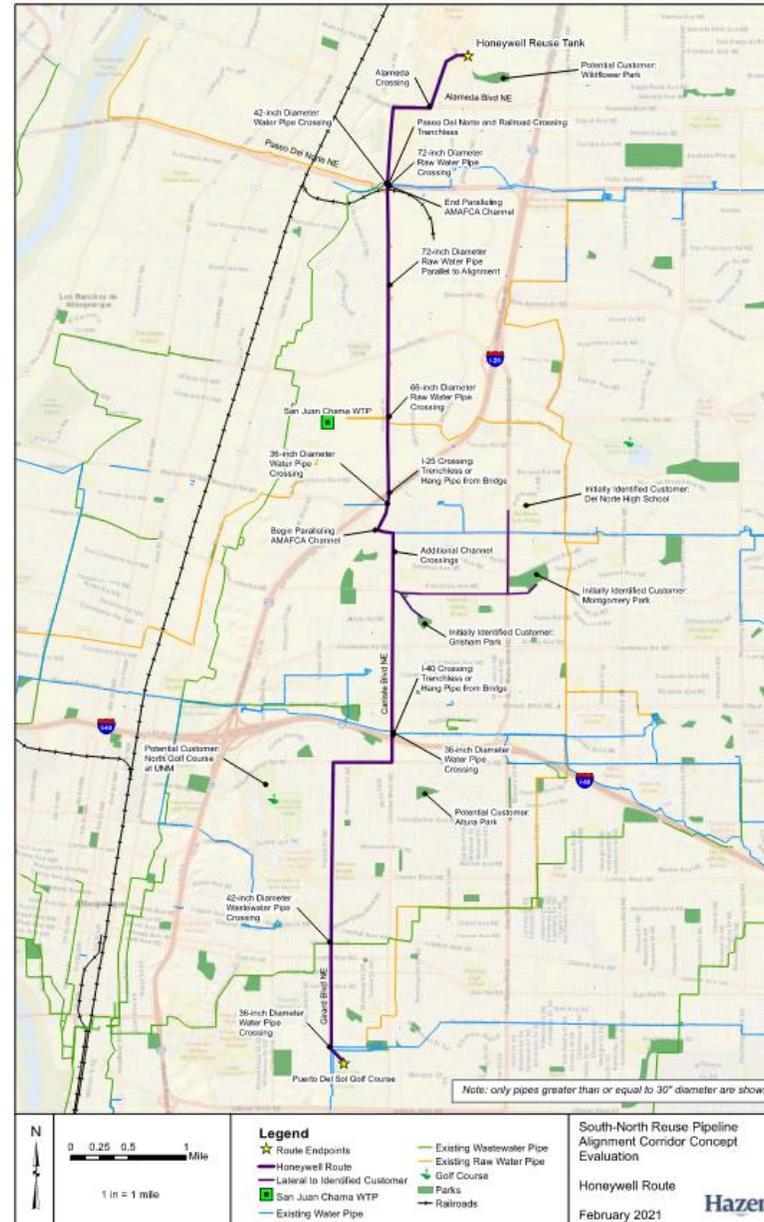
- The Water Authority continues to invest in key projects, including
 - Westside Reuse – Bosque Plant
 - Rio Grande Restoration – SWRP outfall
 - Abiquiu Storage Expansion
 - New Aquifer Storage and Recovery (ASR) capacity
 - Expanded capacity of Large-Scale ASR Project (at the DWP)
 - Expanded operational flexibility for Bear Canyon ASR with new wells
- Implementation includes conservation, management of current supply sources, and adding supply alternatives



Reuse Implementation

New projects and supply

- Bosque Reuse
2,000 -7,000 AFY
- South to North
1,000 AFY



Increasing Storage at Abiquiu



In 2016, the Water Authority began working with Congressional delegation to authorize Water Authority storage of native water in Abiquiu Reservoir.

WRDA 2020 instructed USACE to update the Water Control Manual and Water Authority Storage Contract to allow for native storage and increase storage elevation to 6230.

Storage of native water in Abiquiu Reservoir is possible with NEPA consistency analysis, OSE permit for native storage, and storage agreements with WUA.

2016

2020

2024

Congressional Authorization (WRDA 2020)

WCM and Storage Contract Update

Native Storage in Abiquiu Reservoir

Updated Water Authority Storage Contract

Updated WCM

FONSI

Integrity and Impact Assessment Findings Report



Water 2120 Update

- Anticipate scoping in mid-2024
- Water 2120 Plan Update by 2026
 - Updates to supply planning based on latest climate science
 - Updates to demand planning based on demand trends
 - Reanalysis of gaps in supply and demand
 - Reconsideration of timing and need for conservation goals and projects





Questions?