



Water 2120 Update

**WATER AUTHORITY BOARD MEETING
DECEMBER 9, 2020**

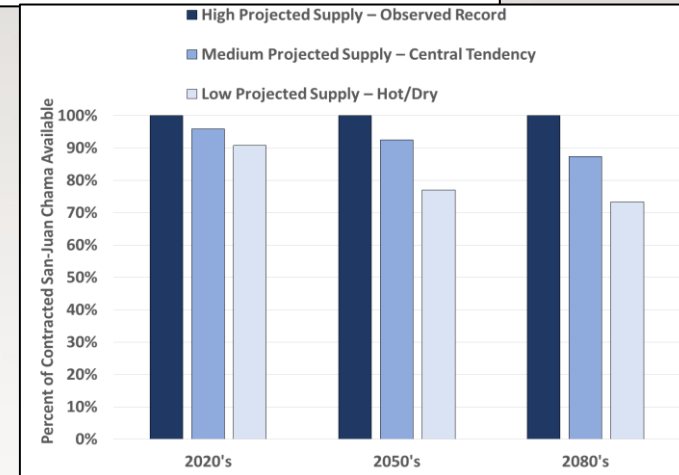
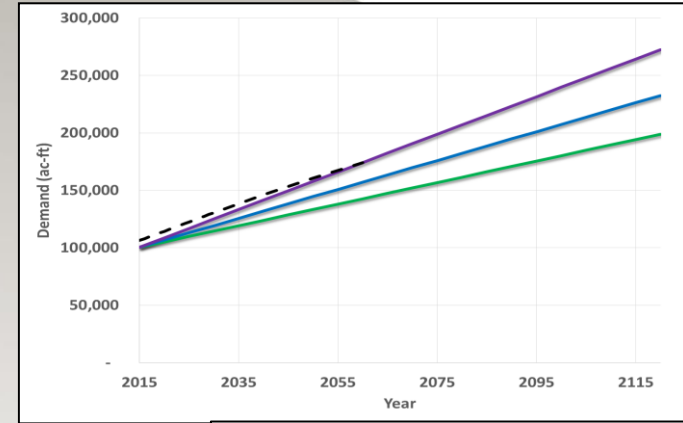
Water 2120 Update

- Water 2120 Background
- RG Summer 2020 Operations Review
- Conservation Plan
- Environmental Plan
- Abiquiu Reservoir – additional storage for native and San Juan-Chama water



100-Year Water Plan – How Was it Developed?

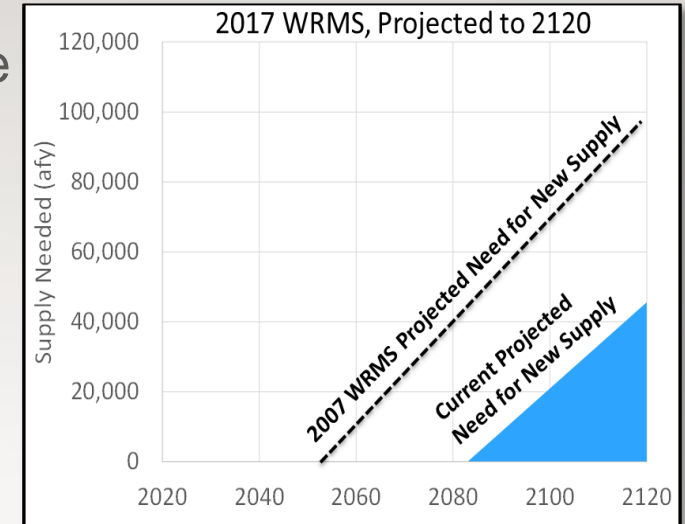
- Demand – How much water do we need?
- Supply – How much water do we have?
- Gaps – Do we need additional supply?
- Filling the Gaps – What will the new supplies be?



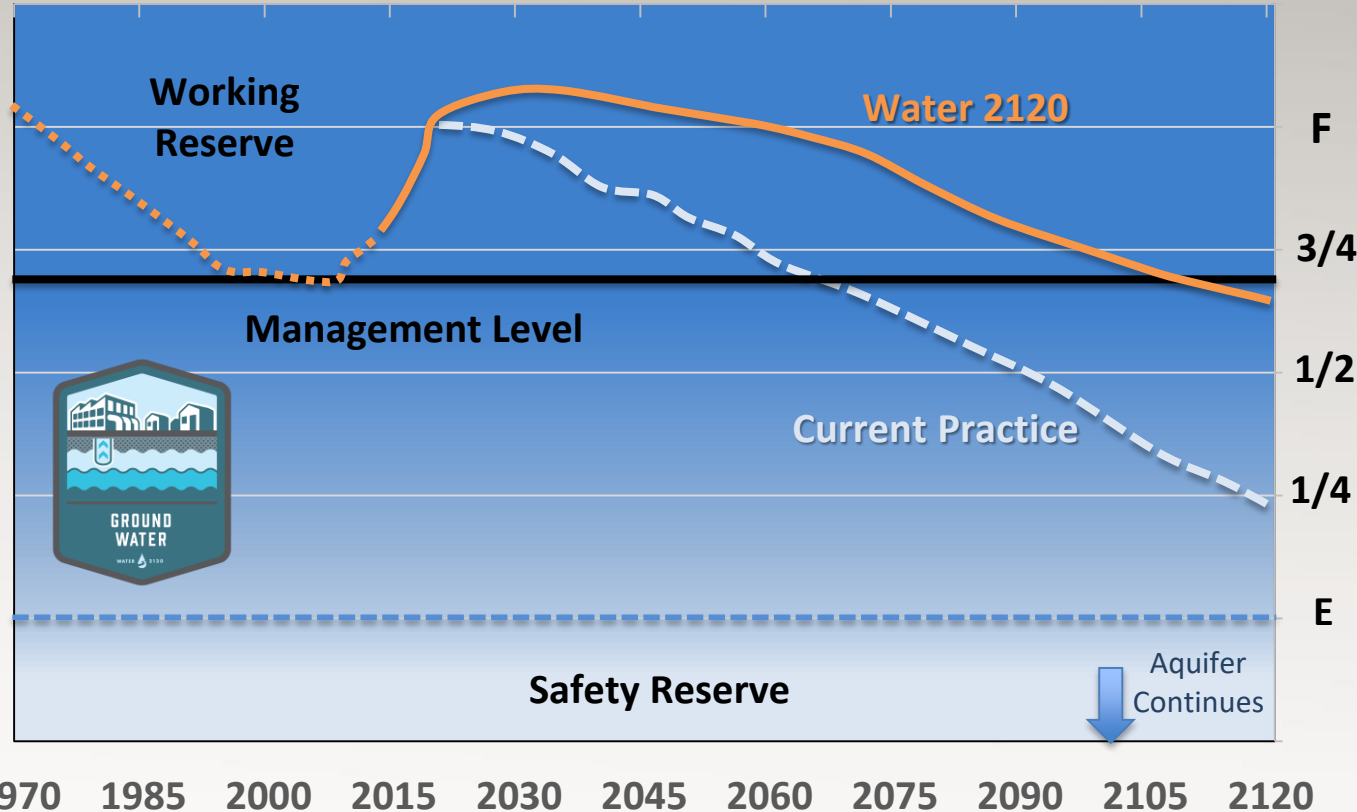
	Supply →		
Demand ↑	High Low	High Medium	High High
	Medium Low	Medium Medium	Medium High
	Low Low	Low Medium	Low High

Filling the Gaps Between Supply and Demand

- Utilize Existing supplies (groundwater and surface water)
- Additional Water Conservation – 110 GPCD in 20 years
- Additional Non-Potable Reuse
 - Connect North I-25 to Southside Reuse
 - Aquifer Storage and Recovery
 - Storage
- Storm water
- Indirect potable reuse (IDPR)
- Watershed management



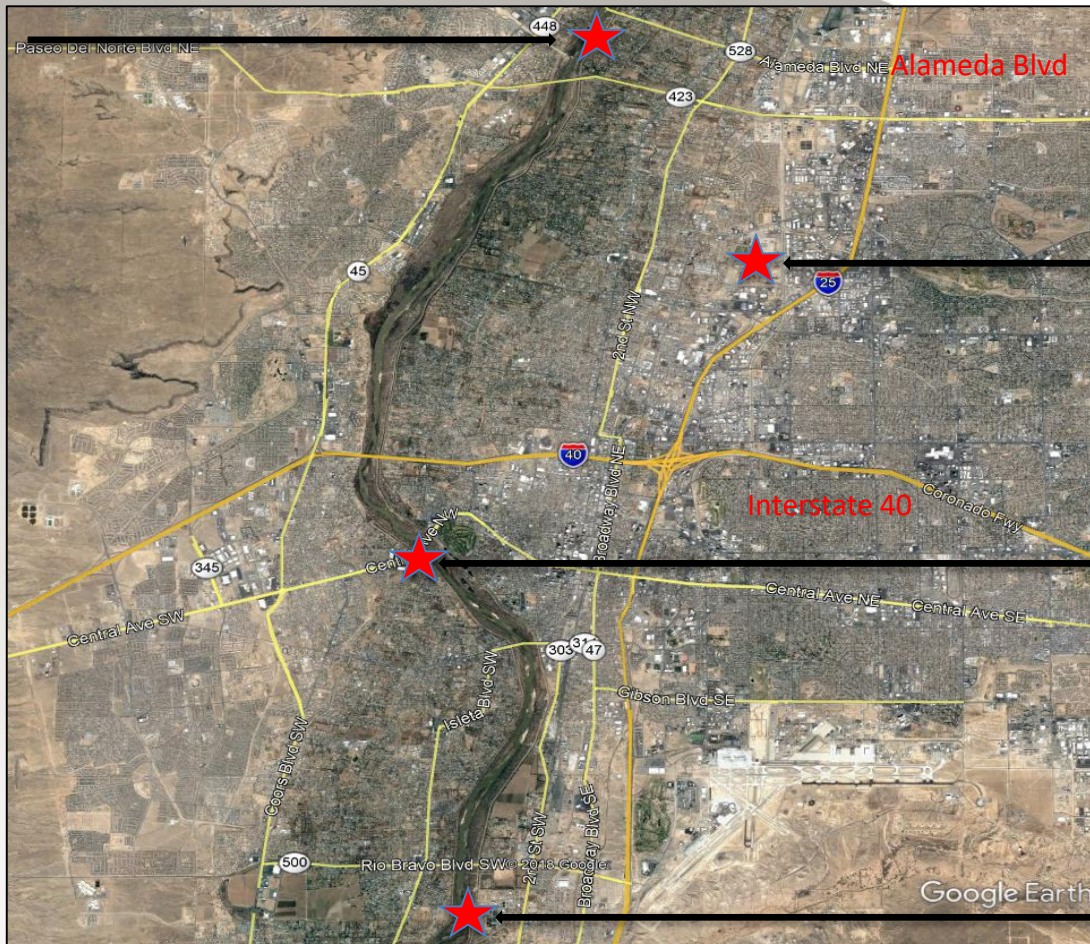
Groundwater Management Plan



**Water
2120**

**Current
Practice**

Water Authority
River Diversion

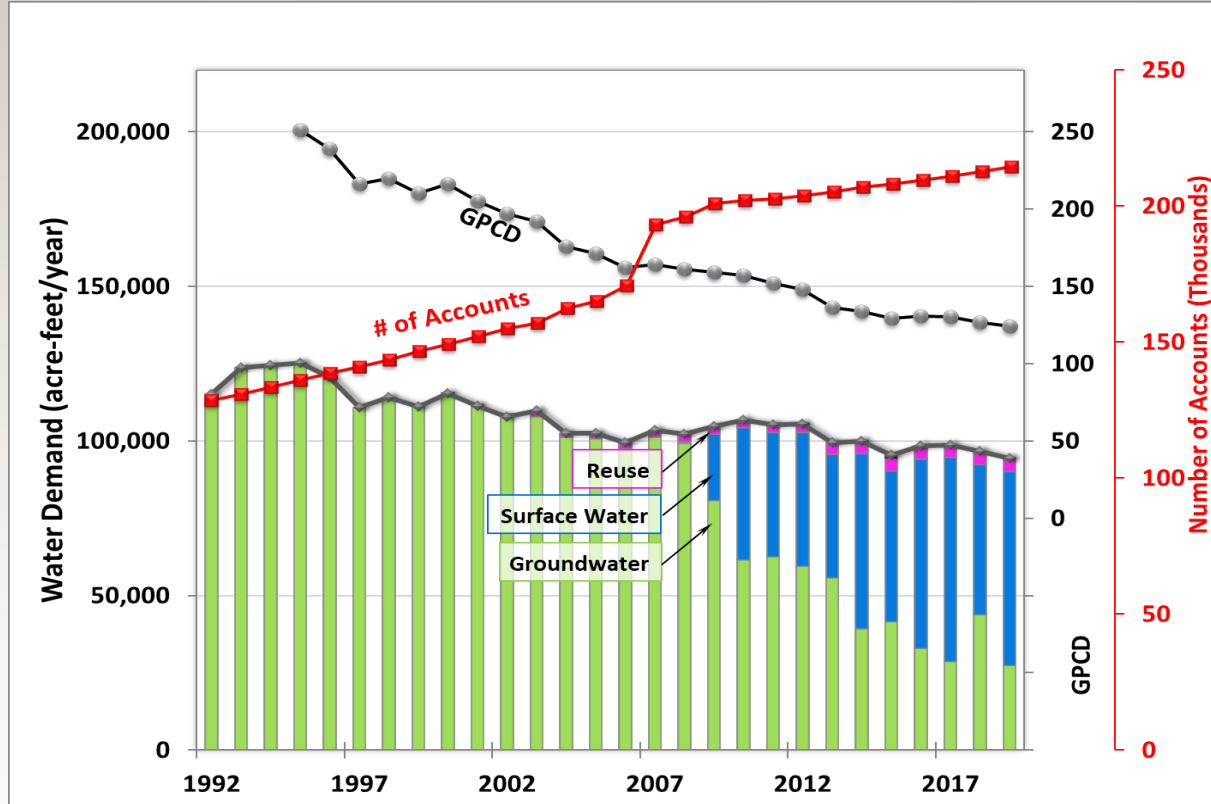


San Juan-Chama
Drinking Water
Treatment Plant

USGS Alb Gage
(Central Avenue)

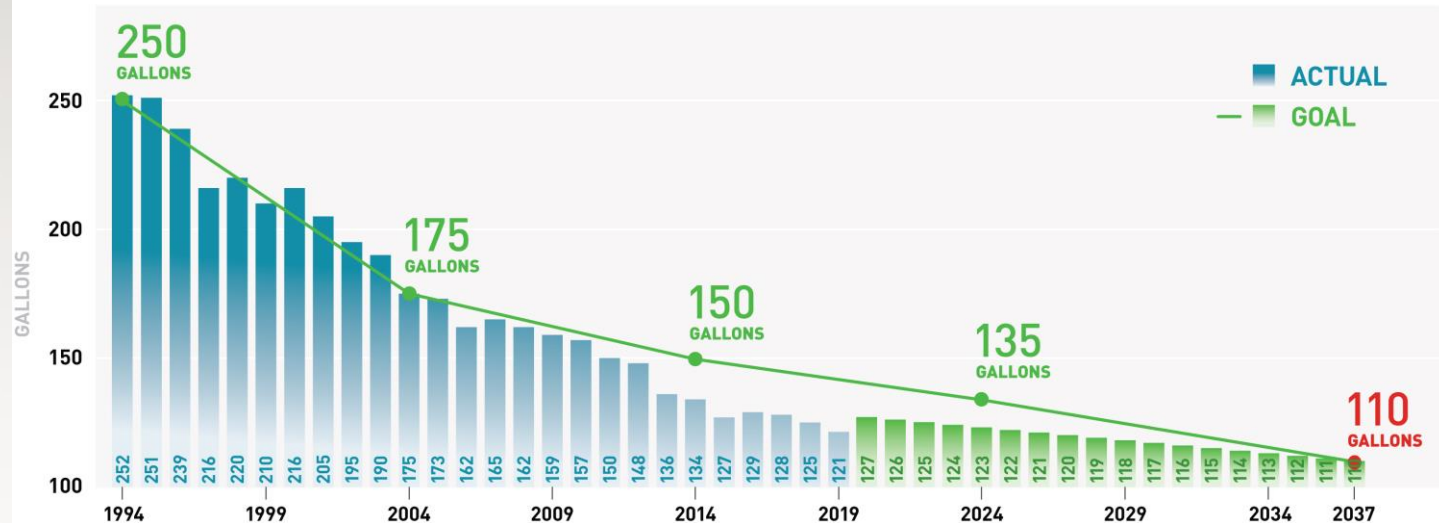
Water Authority
Effluent Discharge

Water Usage has Decreased Even with Growth

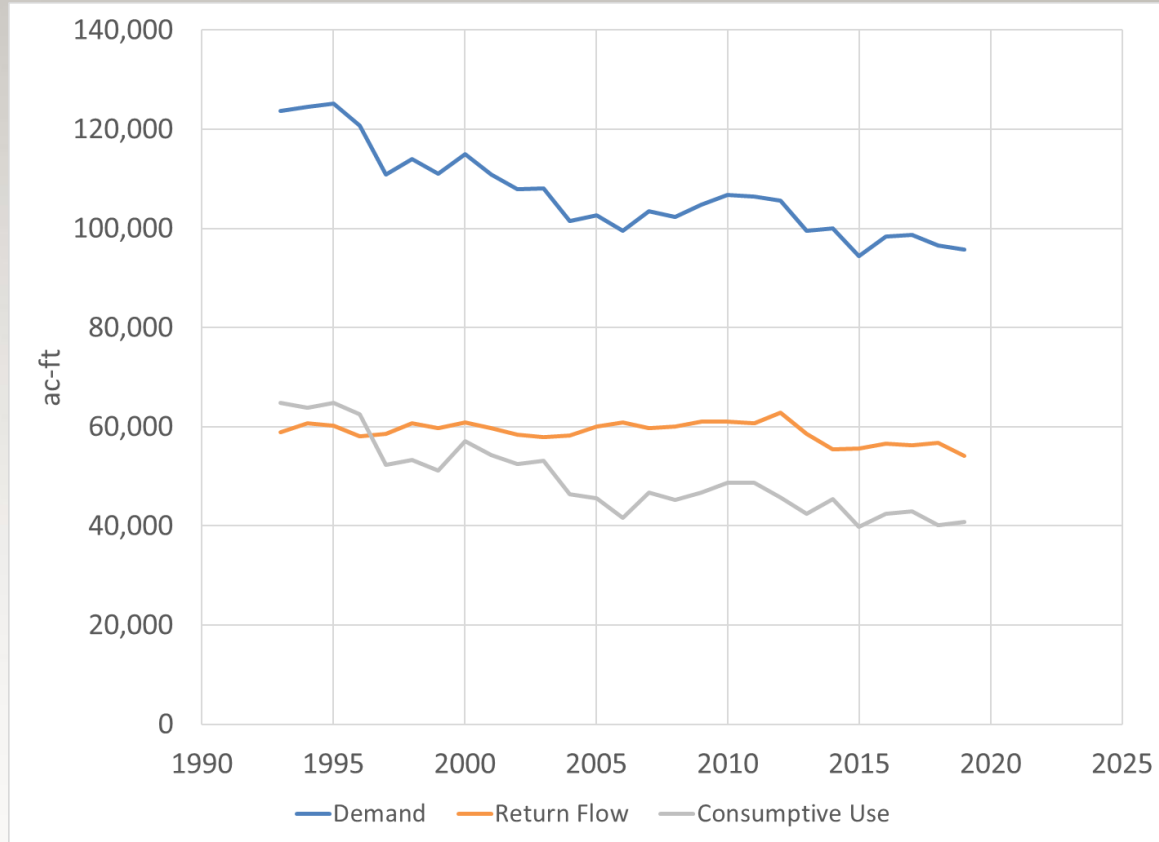


Conservation Goal of 110 GPCD by 2037

Gallons Per Capita Per Day, 1994-2037

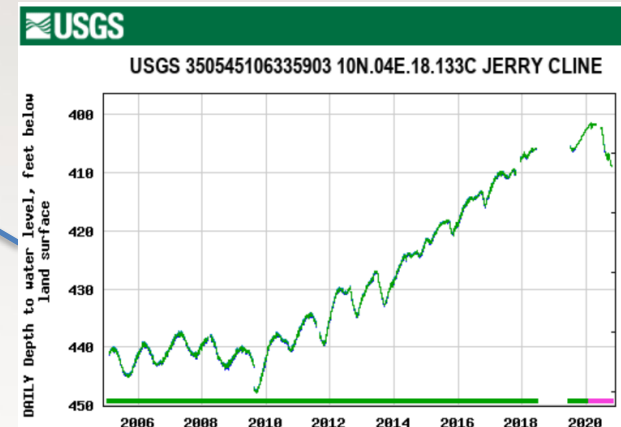
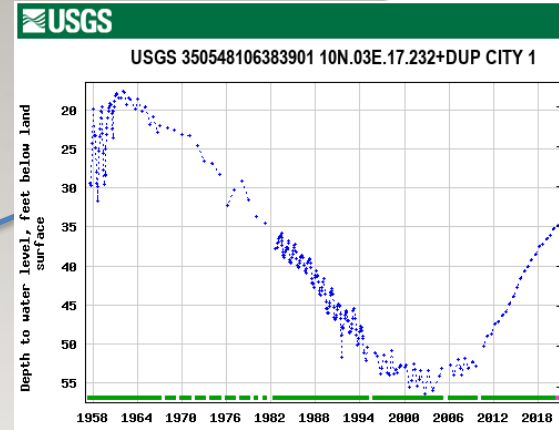
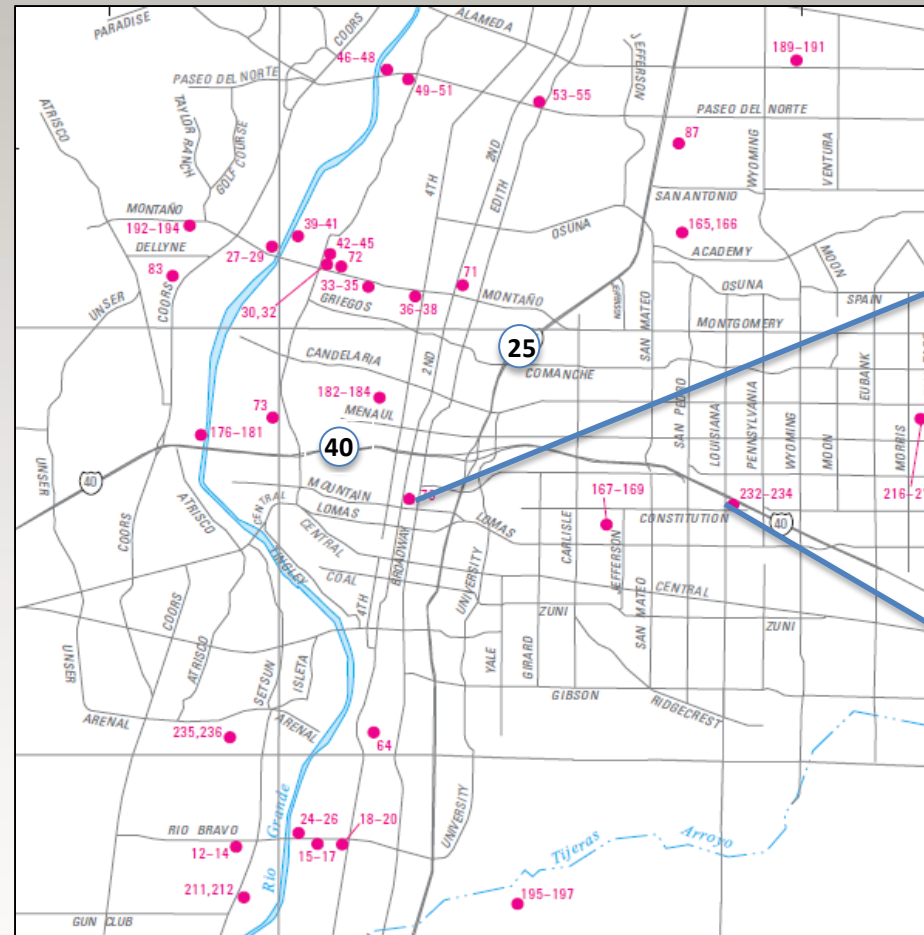


Reduction in Consumptive Use

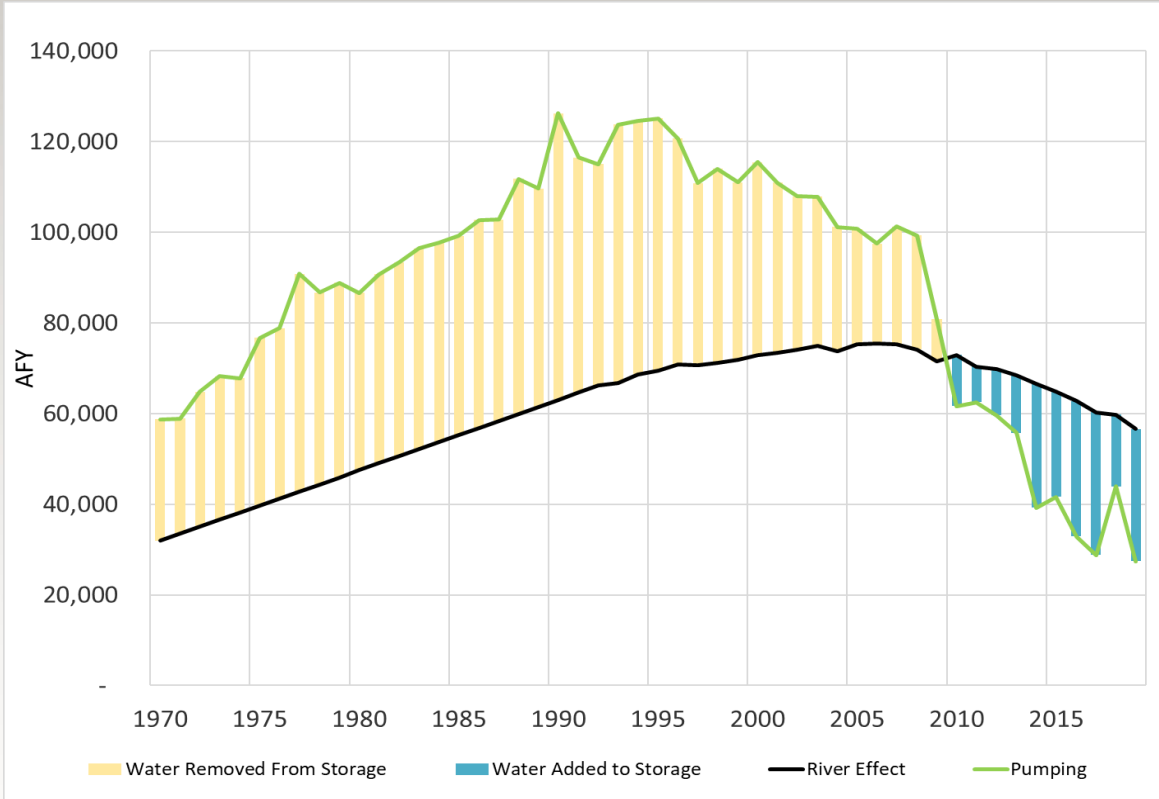


- Return Flow Relatively Constant
- >35% CU Reduction
- CU is less than SJC Allocation

The Aquifer Continues to Rise



River Depletions Significantly Reduced



- Reduction in GW Use
- Significant Reduction in River Effects
- Transition to SJC Water

Policy J - Environmental Plan



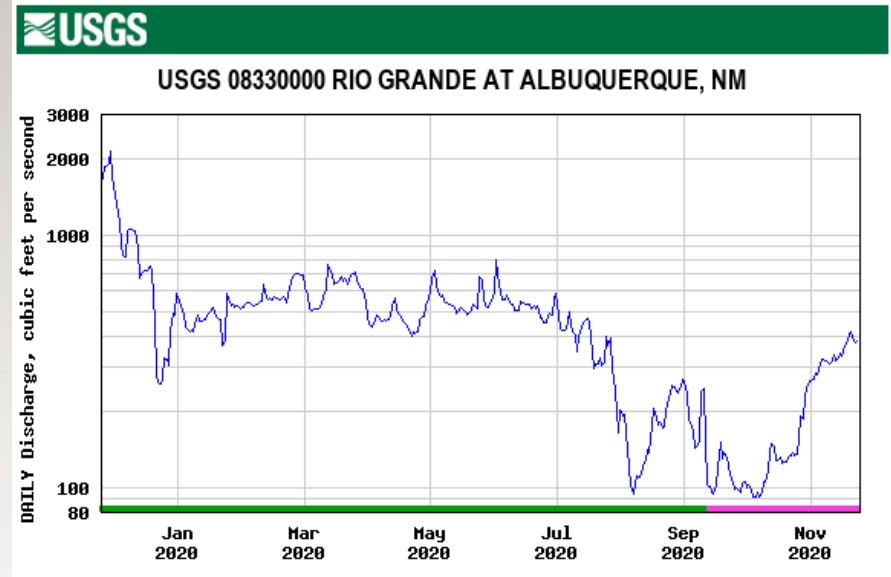
- Watershed Management
 - Rio Grande Water Fund
- BioPark Refugium
- Endangered Species Collaborative Program
- Lease SJC to supplement flows during droughts
- Environmental Pool in Abiquiu Reservoir



Water Authority River Diversion and Return to Rio Grande

Rio Grande Summer Operations

- Flows at Central gage in the Albuquerque reach were low through the summer.
- DWP diversions shut down over the summer due to low flows.



Rio Grande Summer Operations

- Water Authority provided 7,000 acre-feet of San Juan-Chama water for end of 2020 irrigation season.
- Already starting preparations for next season important as Water Authority has provided water in times of need for irrigation and endangered species.

Rio Grande Future Operations

- Storage of native water in Abiquiu Reservoir will be a part of that solution.
- Water Authority working to ensure that the use of Abiquiu is a shared resource for solving problems in the MRG cooperating with multiple regional (RCAA) and tribal entities.

Water 2120 - Policy I.



Protect and Enhance Storage of Native, San Juan-Chama Water and Other Water Resources

The Authority shall protect the rights to store native, San Juan-Chama and other water resources including reuse and recycled water in a variety of storage facilities including Heron, Abiquiu and Elephant Butte Reservoirs. The Authority should seek additional off-channel storage capacity locally or within the Middle Rio Grande as needed to maximize the use of excess wastewater or other water resources in the future.

Key Sub-Policies:

4. The Authority should develop and implement a Rio Grande Compact pool within the Authority storage space working with the Interstate Stream Commission (ISC) and the Office of the State Engineer (OSE).
5. The Authority should continue providing space in Abiquiu Reservoir for environmental purposes.

Rio Grande Future Operations

- Management of RG Compact deliveries is an important opportunity in Abiquiu Reservoir.
- Storing RG Compact water in Abiquiu Reservoir reduces evaporative losses and may provide for active water resources management of deliveries.

Abiquiu Reservoir

- Water Authority contract for 170,900 acre-feet - required property acquisition for all storage
- Currently acquiring additional property for storage of additional 30,000 acre-feet
- Storage of native water in the 1990's but with legal stipulations that essentially prohibited use

Abiquiu Reservoir

- 2020 Water Resources Development Act (WRDA)
 - U.S. House approved language to allow for concurrent storage of native Rio Grande and San Juan-Chama water
- Use available space in Abiquiu to benefit numerous entities in the MRG basin (RCAA, ISC and others)

Thank You!

Questions?