

WATER  2120

**SECURING  
OUR WATER  
FUTURE**

# Water 2120 Update

Mark Kelly, PE

Water Resources Division Manager

Albuquerque Bernalillo County Water Utility Authority

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# The Water Authority:

- ~ 210,000 customer accounts
- ~ 670,000 people served
- ~ 650 employees
- Serving ~ 30 billion gallons of drinking water
- Treating ~ 18.5 billion gallons of wastewater
- Reusing ~ 1 billion gallons of reclaimed water each year



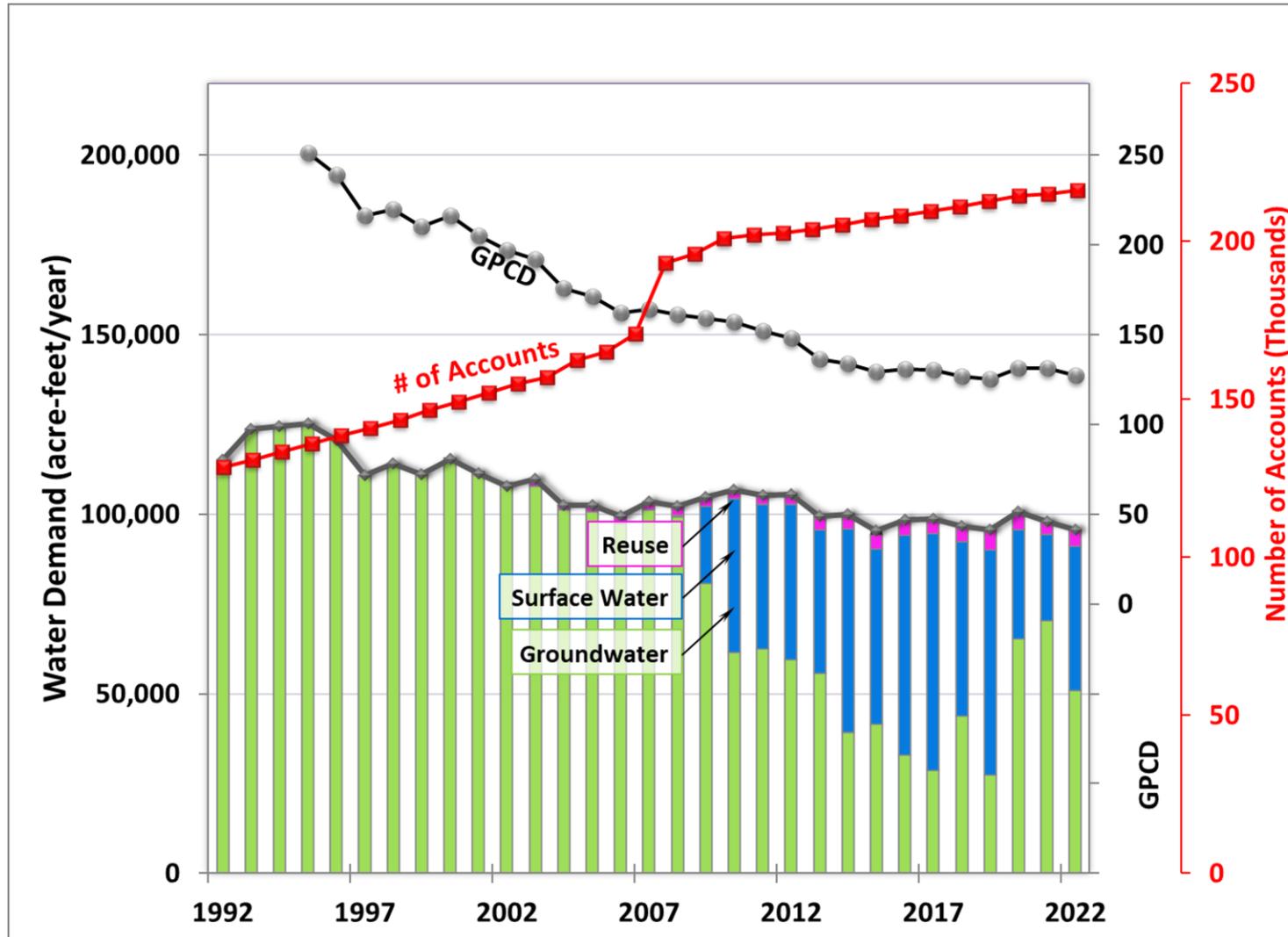
# WHERE OUR WATER COMES FROM



# Current Supply Portfolio

- Surface Water
  - San Juan-Chama Project
  - Vested and acquired native rights
- Groundwater
  - Over 60 wells active in 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

# Demand and Supply Trends





# Water 2120



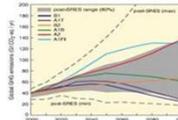
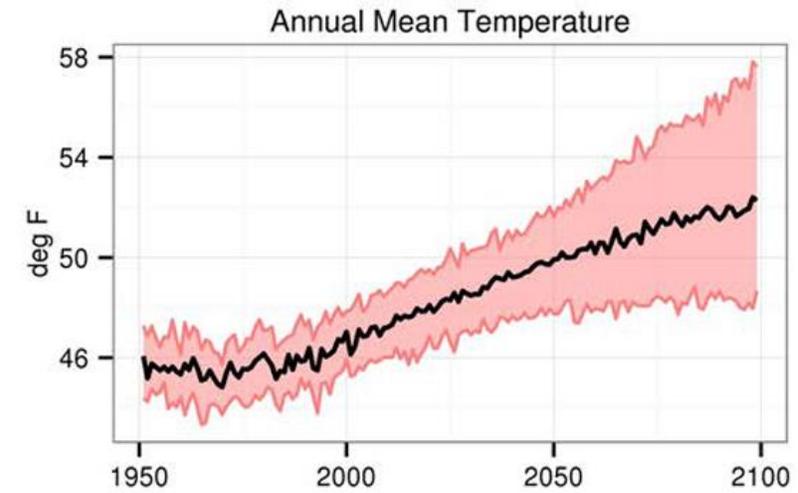
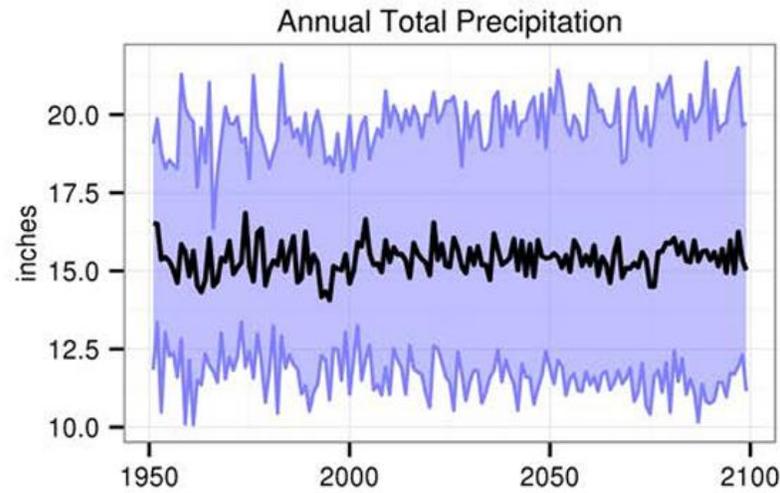
# Deliverables



- Updated demand / supply data based on climate change projections
- A groundwater management approach
- Possible supply alternatives / enhancements
- Ranked water resource portfolios
- Public and advisory board input and responses
- Policies

# Climate Change and Supply Availability

- Integration of climate change risk analysis in Water 2120
- Predicted spring runoff peaks happening earlier in the year
- Decline in median Snow Water Equivalent (SWE) into the future → reduced snowpack



Emission Scenarios  
(3 scenarios: A2, A1b, B1)



General Circulation Models  
16 GCMs

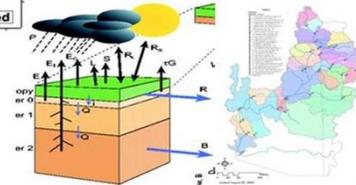
Bias Correction & Spatial Downscaling

(112 downscaled projections)

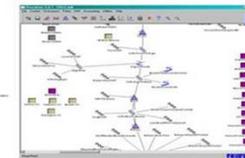


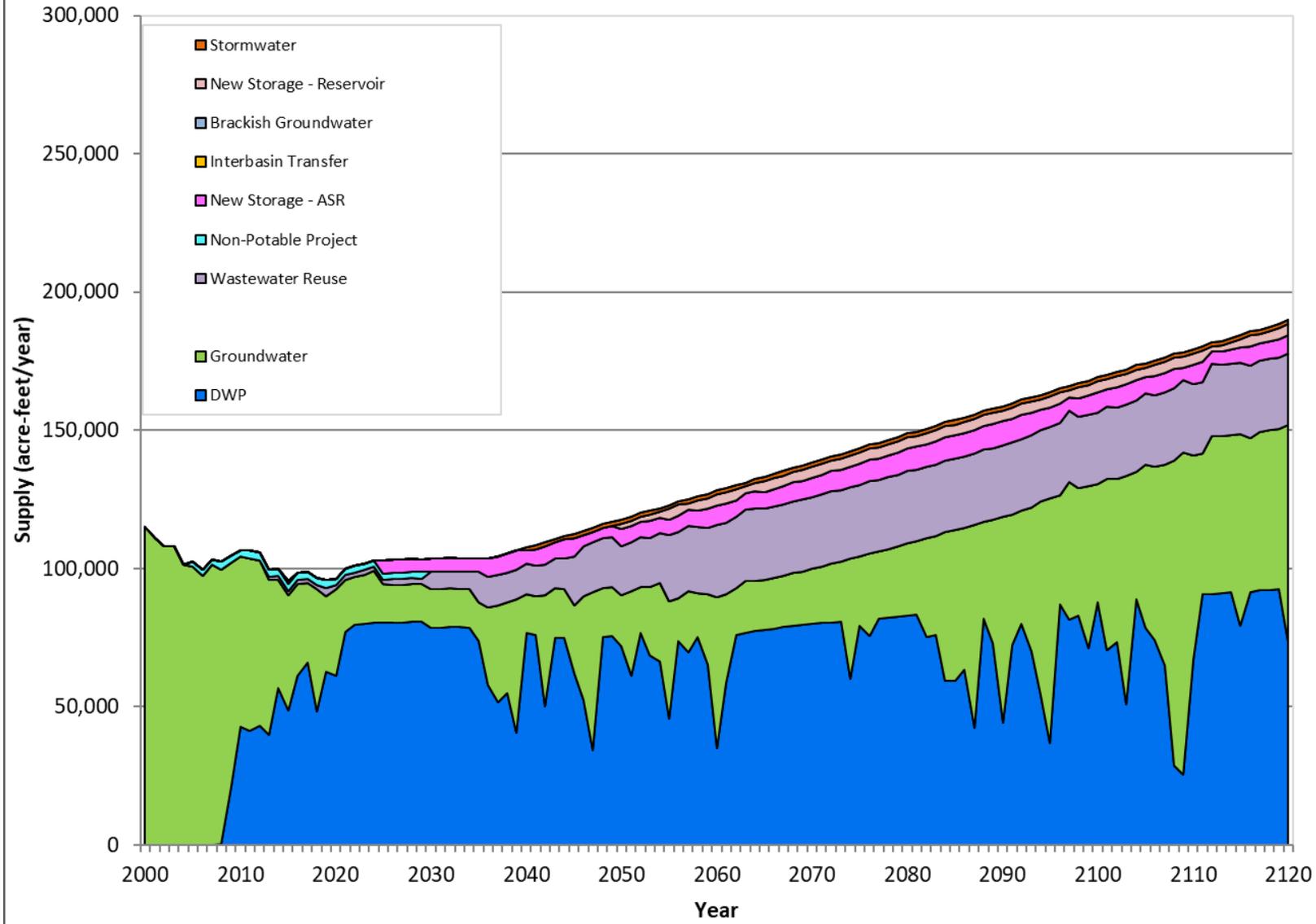
Hydrologic Modeling

(112 downscaled projections)



Systems Modeling  
(112 sequences)

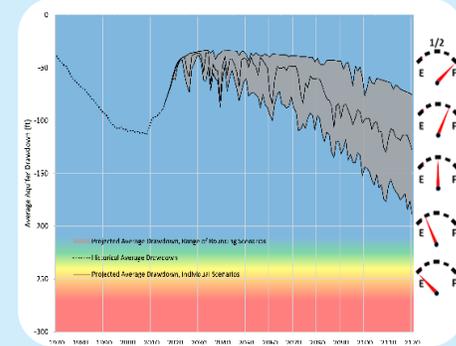




# Predicting Demand and Supply



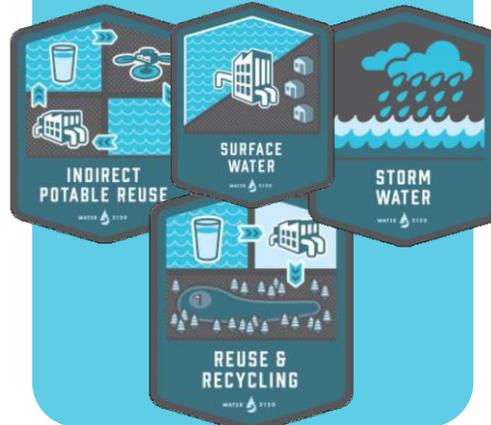
# Water 2120: Securing Albuquerque's Water Future



## Conserve



## Diversify



## Store

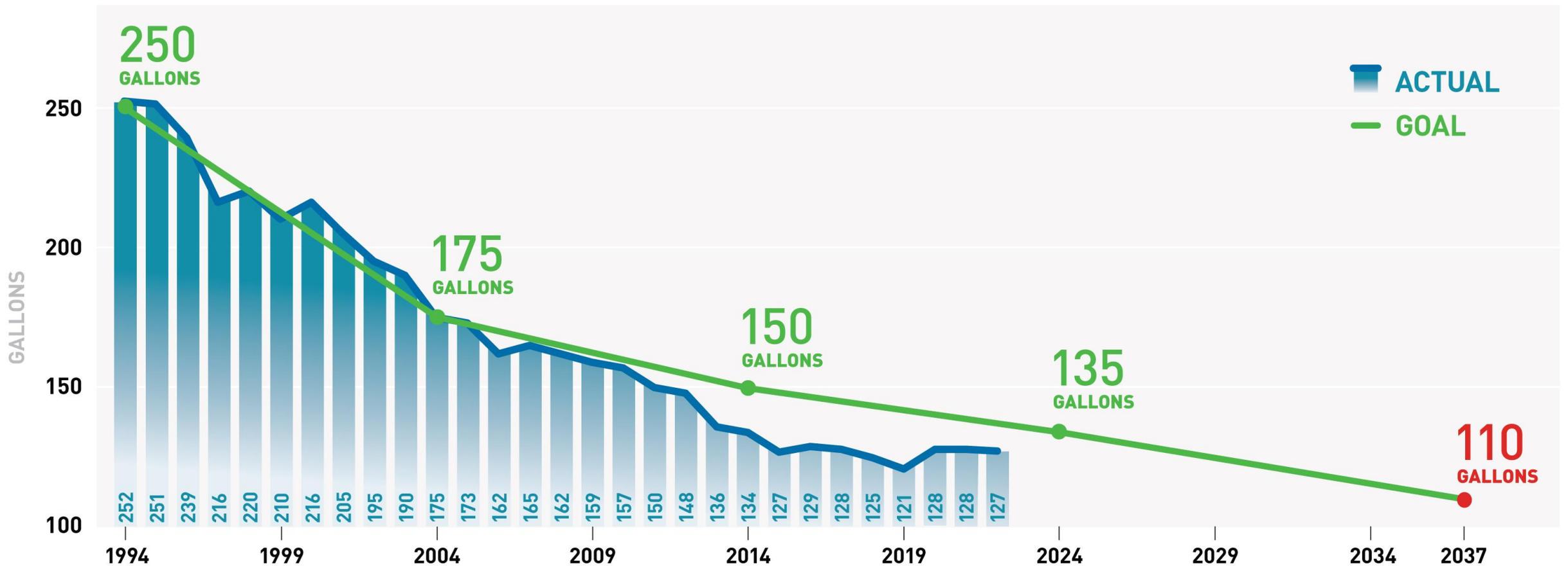


## Manage



# Water Conservation

## Gallons Per Capita Per Day, 1994-2037



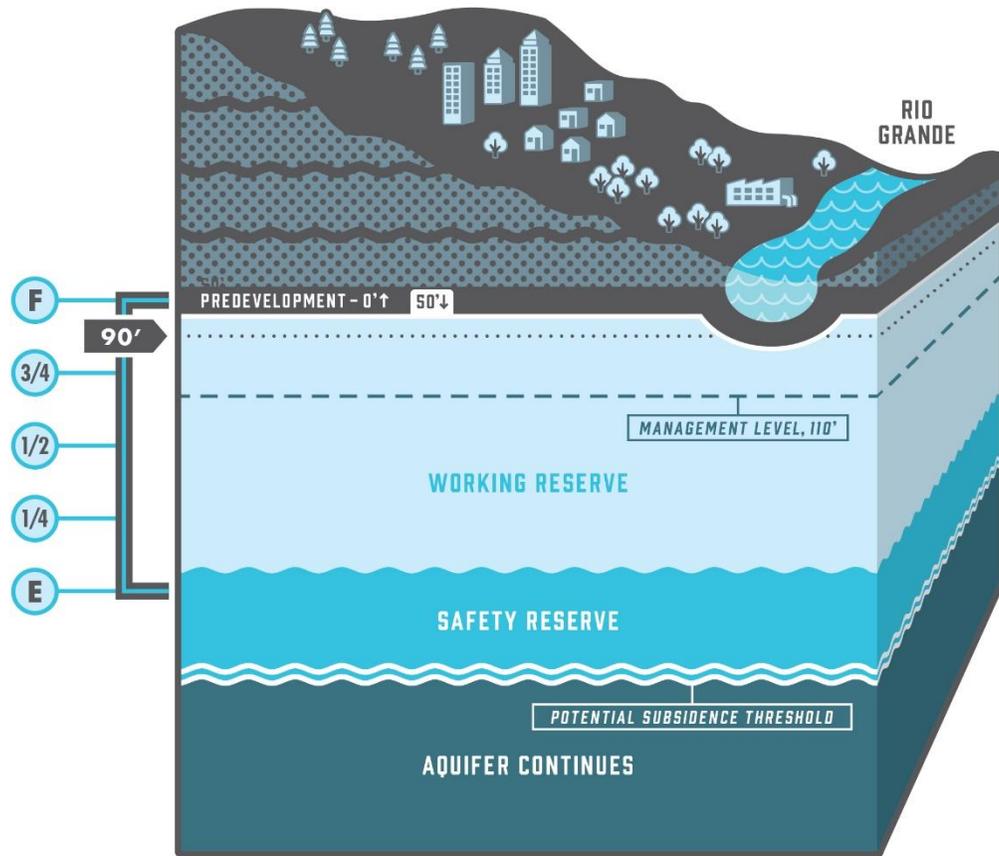
# Groundwater Management Levels

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 target for average well drawdown

Below 300 feet = potential for aquifer compaction

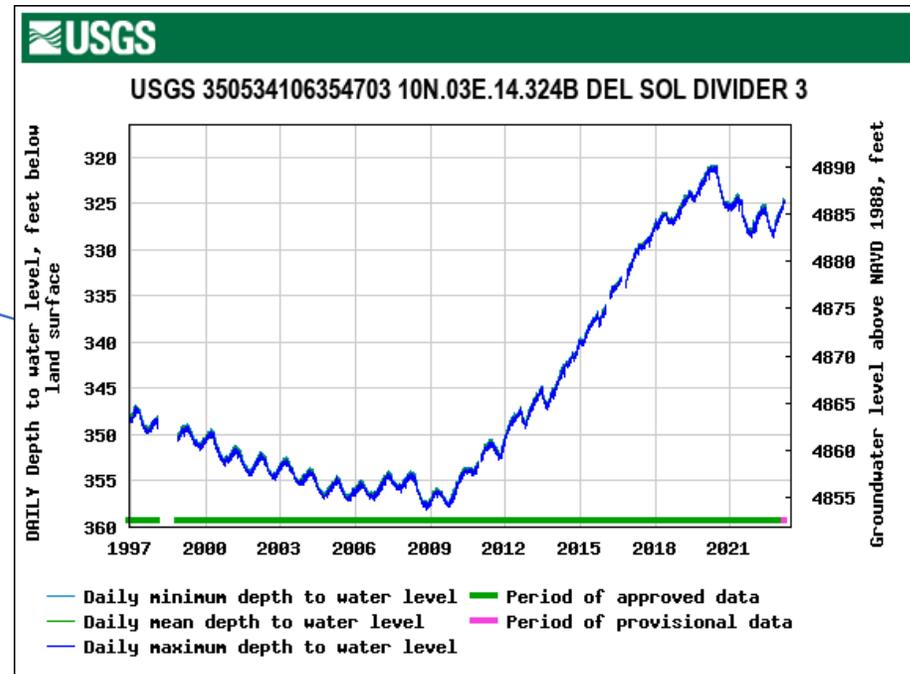
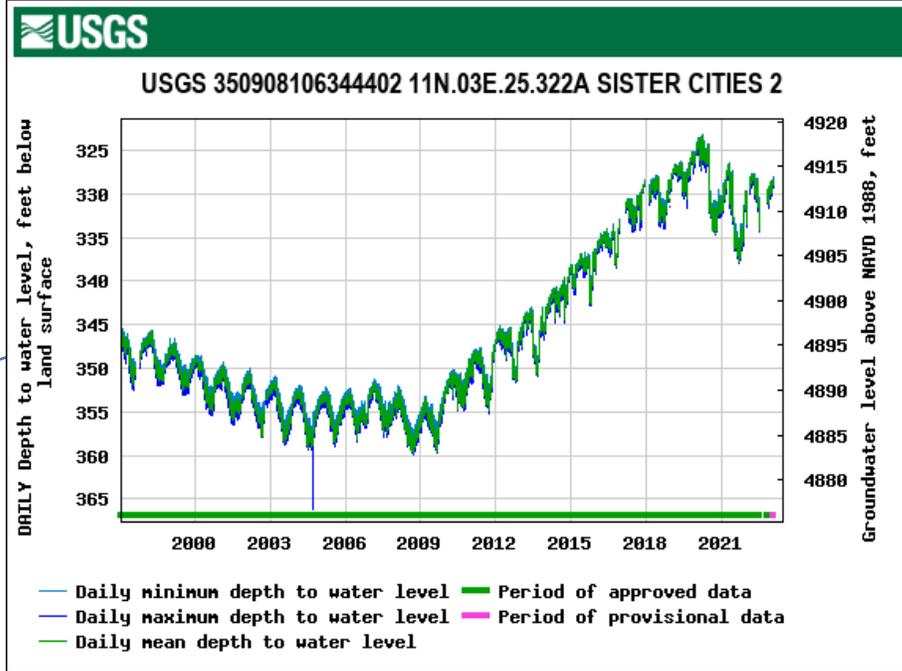
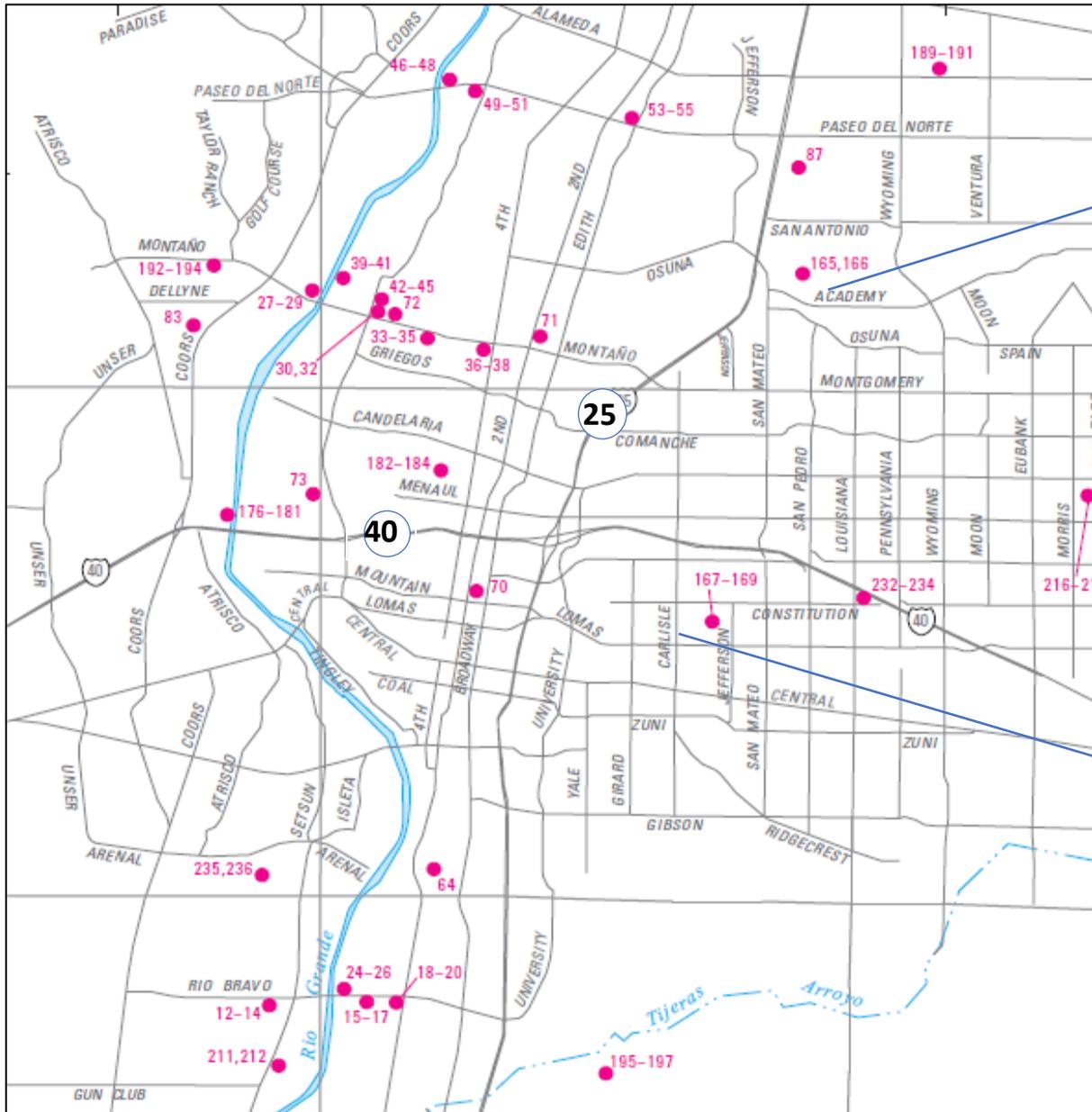
“Fuel gauge” is water level relative to 250 ft



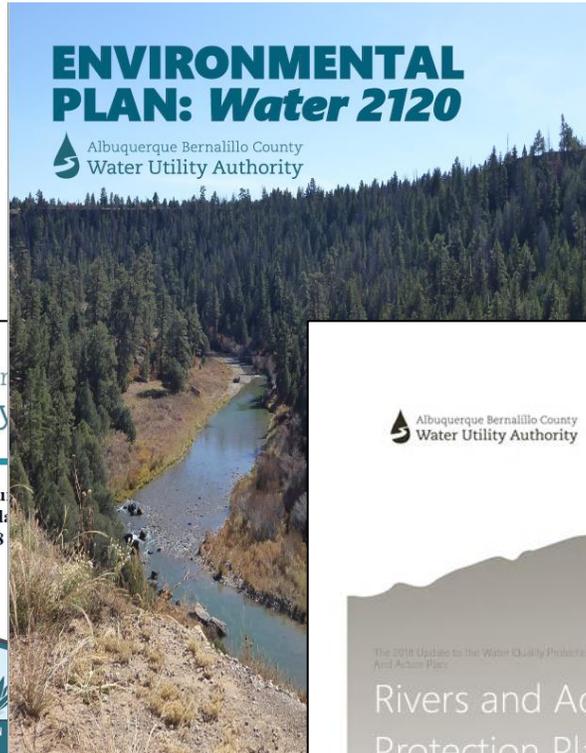
Graph not to scale



# Rising Aquifer

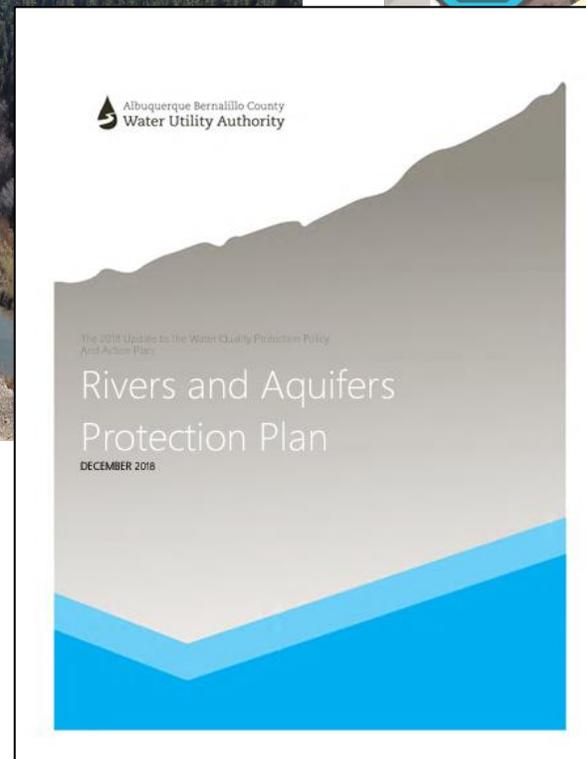
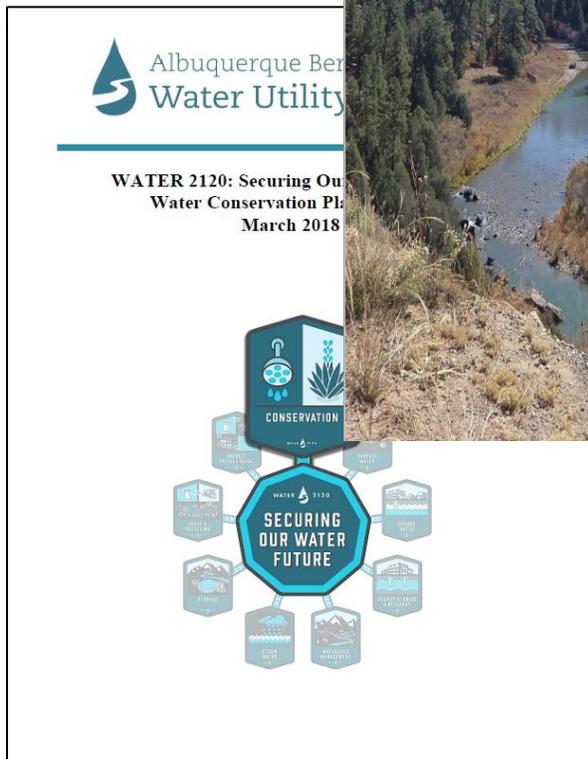


# Water 2120 Implementation Plans

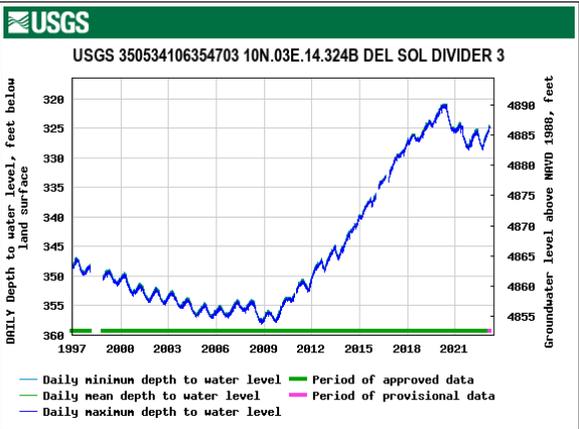


Albuquerque Bernalillo County Water Utility Authority  
**Governing Board**  
Chair: Commissioner Eric C. Olivas  
Vice Chair: Councilor Tammy Eibelkorn  
Councilor Pat Davis  
Commissioner Barbara Baca  
Councilor Trudy E. Jones  
Mayor Timothy M. Keller  
Commissioner Adriann Barboa  
Ex-officio member Gilbert Benavides

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# Water 2120 Policies



## Water Resources Drought Management Plan

(Latest update April 2023)

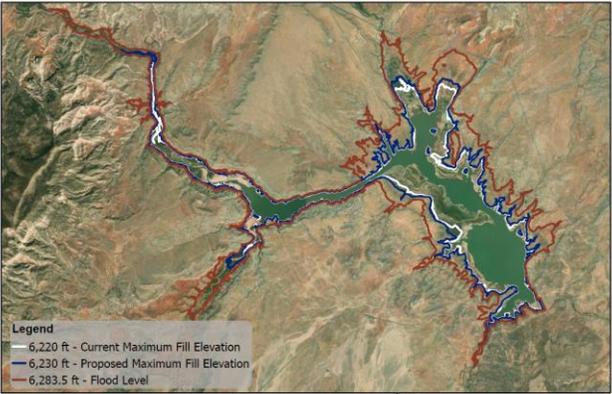


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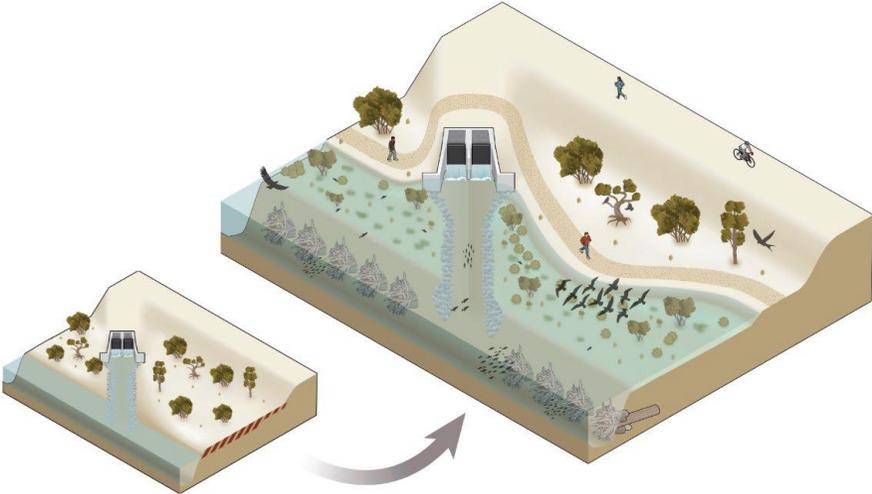
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C. Establish and Maintain a Groundwater Reserve

D. Update and Maintain the Water Conservation Strategy



Albuquerque Bernalillo County Water Utility Authority  
 Abiquiu Reservoir Current and Proposed Maximum Fill Elevations



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

J. Protect Valued Environmental and Cultural Resources



Questions?