



## Technical Customer Advisory Committee

### AGENDA

#### *Members*

Elias Archuleta	Anjali Mulchandani
John Fleck	Jill Peterson
Brian Freeman	Mario Nuño-Whelan
Kerry J. Howe	Andrew Robertson
Donald T. Lopez	

**Public participation for this meeting will be via WebEx video conference. To request login information for this meeting or to submit public comment, contact Jordan Salas at [jsalas@abcwua.org](mailto:jsalas@abcwua.org) or 505-289-3100. Requests for login information and public comments must be submitted before 2:00 PM on the date of the meeting.**

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**Thursday, January 15, 2026**

**4:00 PM**

**1441 Mission Ave NE  
Conference Room 204**

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1. Call to Order
2. Approval of Agenda
3. Approval of November 6, 2025, Action Summary
4. Approval of December 4<sup>th</sup>, 2025, Action Summary
5. Election of Chair and Vice Chair
6. Approval of Open Meetings Resolution
7. 2026 TCAC Workplan Review
8. Public Comment
9. Water 2130 and Climate Change and Supply
10. Water Report
11. Other Business
12. Adjournment

**NOTICE TO PERSONS WITH DISABILITIES:** If you have a disability and require special assistance to participate in this meeting, please contact the Water Utility Authority Office, Suite 5012, Albuquerque/Bernalillo County Government Center, phone 289-3100, as soon as possible prior to the meeting date.

**ALBUQUERQUE BERNALILLO COUNTY  
WATER UTILITY AUTHORITY  
TECHNICAL CUSTOMER ADVISORY COMMITTEE**

**RESOLUTION**

**DETERMINING REASONABLE NOTICE OF PUBLIC MEETINGS OF THE  
TECHNICAL CUSTOMER ADVISORY COMMITTEE**

WHEREAS, the Albuquerque Bernalillo County Water Utility Authority's Technical Customer Advisory Committee (TCAC) meets in regular session at Conference Room 204, 1441 Mission Ave NE, and other locations; and

WHEREAS, Section 10-15-1(B) of the Open Meetings Act (NMSA 1978, Sections 10-15-1 to Section 10-15-4) states that, except as otherwise provided in the constitution of New Mexico or the Open Meetings Act, all meetings of a quorum of members of any board, committee, administrative adjudicatory body or other policy making body of any state or local agency held for the purpose of formulating public policy, discussing public business or for the purpose of taking any action within the authority of or the delegated authority of such body, are declared to be public meetings open to the public at all times; and

WHEREAS, any meetings subject to the Open Meetings Act at which the discussion or adoption of any proposed ordinance, resolution, rule, regulation or formal action occurs shall be held only after reasonable notice to the public; and

WHEREAS, Section 10-15-1(D) of the Open Meetings Act requires the TCAC to determine at least annually what constitutes reasonable notice of its public meetings.

**BE IT RESOLVED BY THE COMMITTEE:**

Section 1. Meetings of the TCAC will normally be held in Conference Room 204 of 1441 Mission Ave NE, Albuquerque, New Mexico, and other locations as needed.

Section 2. Regular meetings will normally be held on the first Thursday of each month. The agenda will normally be available seventy-two (72) hours prior to the meeting on the Water Authority website and at the offices of the Water Authority.

Section 3. Special meetings may be called by the Chair of the TCAC upon seventy-two (72) hours notice. Special Meetings shall be subject to the same notice and agenda availability requirements as noted for regular meetings in Section 2.

Section 4. Emergency meetings will be called only under circumstances when an unexpected occurrence or condition, or the state resulting there from, requires immediate consideration or action to protect the health, safety and property of citizens or to protect the public body from substantial financial loss. The TCAC will avoid emergency meetings whenever possible. Emergency meetings may be called by the Chair of the TCAC upon twenty-four (24) hours notice. The notice for all emergency meetings shall include an agenda for the meeting or information on how the public may obtain a copy of the agenda.

Section 5. For the purpose of regular and special meetings described in Sections 2 and 3 of this Resolution, notice requirements are met if notice of the date, time and place are posted at least seventy-two (72) hours prior to the meeting on the Water Authority website and on the lobby bulletin screen of the Albuquerque Government Center. The Secretary of the TCAC shall also provide copies of the above information to those broadcast stations licensed by the Federal Communications Committee and newspapers of general circulation in Albuquerque, which entities have made a written request for notice of public meetings.

Section 6. For the purpose of emergency meetings described in Section 4 of this Resolution, notice requirements shall be met by posting notice of the date, time, place and agenda on the Water Authority website and in the lobby of the Albuquerque Government Center. The Secretary of the TCAC shall also provide copies of the above information to those broadcast stations licensed by the Federal Communications Committee and newspapers of general circulation in Albuquerque, which entities have made a written request for notice of public meetings.

Section 7. In addition to the information specified above, all notices shall include the following language, except the last sentence applies only to full Committee meetings:

NOTICE TO PERSONS WITH DISABILITIES: If you have a disability and require special assistance to participate in this meeting, please contact the Water Utility

Authority Office, Suite 5012, Albuquerque Government Center, phone 289-3100, as soon as possible prior to the meeting date.

Section 8. Cancellations and different meeting times and places may be announced at prior meetings of the full TCAC. Cancellations so announced shall also have notice given by the same methods and time frames as provided for regular meetings in Section 2. Weather, lack of quorum and other related issues may cause the cancellation of a meeting.

Section 9. Action summary minutes shall be made of all open meetings with the following minimal information:

- A. Date, time, and place of meeting
- B. Names of staff in attendance and a list of members present
- C. A general statement of each discussion topic and of how each member voted on any motion before the TCAC. A draft copy of the minutes shall be available within ten (10) working days following each meeting. Minutes do not become official until approved by the TCAC at a subsequent meeting.

Section 10. Closed meetings shall not be held except as provided in Open Meetings Act.

Section 11. All or any part of this Resolution may be amended or modified by the TCAC from time to time. At a minimum, the TCAC shall review the resolution annually as required by the Open Meetings Act.



# Technical Customer Advisory Committee 2026 Work Plan

The TCAC workplan is intended to plan for the presentations and discussion topics for the year. The topics and timelines may change as needed to address topical and timely subject matters.

## 1<sup>st</sup> Quarter

Non-Functional Turf Pilot Projects

FY27 Goals and Objectives

Colorado River update

Endangered Species Collaborative Program

Endangered Species Listing

Rio Chama Update

Conservations Rebate Pilots

Grants Update

Modeling Update

## 2<sup>nd</sup> Quarter

Summer Conservation Planning

2026 Annual Operating Plan (AOP)

FY26 Operating/Capital Budgets

Rate Study

Consumer Confidence Report

Lead and Copper Rule Update

Rio Grande Compact Update

3rd Quarter

Federal Funding Updates

Water Conservation

Source Water Protection Update

Asset Management

NPDES Permit Update

Reservoir Rehabilitation

To'Hajiilee update

4<sup>th</sup> Quarter

Kirtland Air Force Base Project Update

Education Program Update

AMI

Water Treatment Plant Startup

Aquifer Storage Recovery (ASR) Wells Update

Bosque Reclamation Plant Update



Albuquerque Bernalillo County  
Water Utility Authority

# Water 2130: Climate Change and Supply

PRESENTATION TO THE  
TCAC  
JANUARY 15, 2026

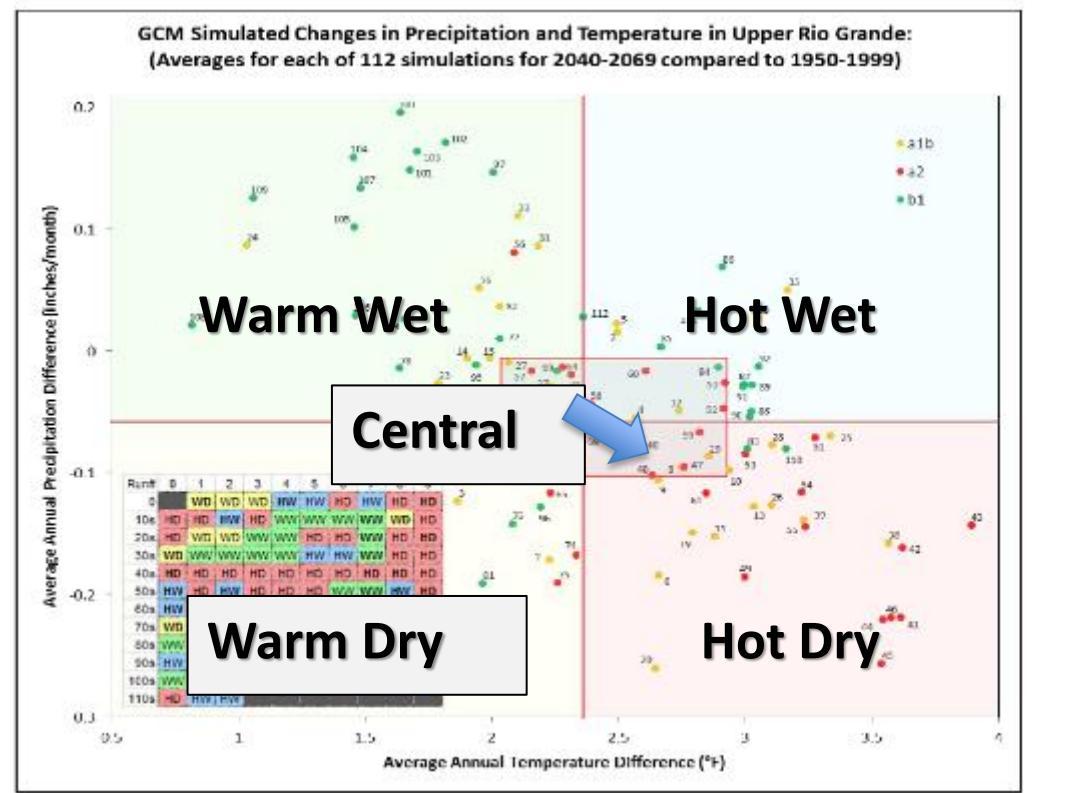
# Purpose of Today's Presentation



- Review Climate Change and associated supply in Water 2120
- Changes since Water 2120
- Climate Change in Water 2130
  - Rio Grande Basin Study
  - CMIP6
- Solicit feedback on approach



# Water 2120 – Climate Change Data



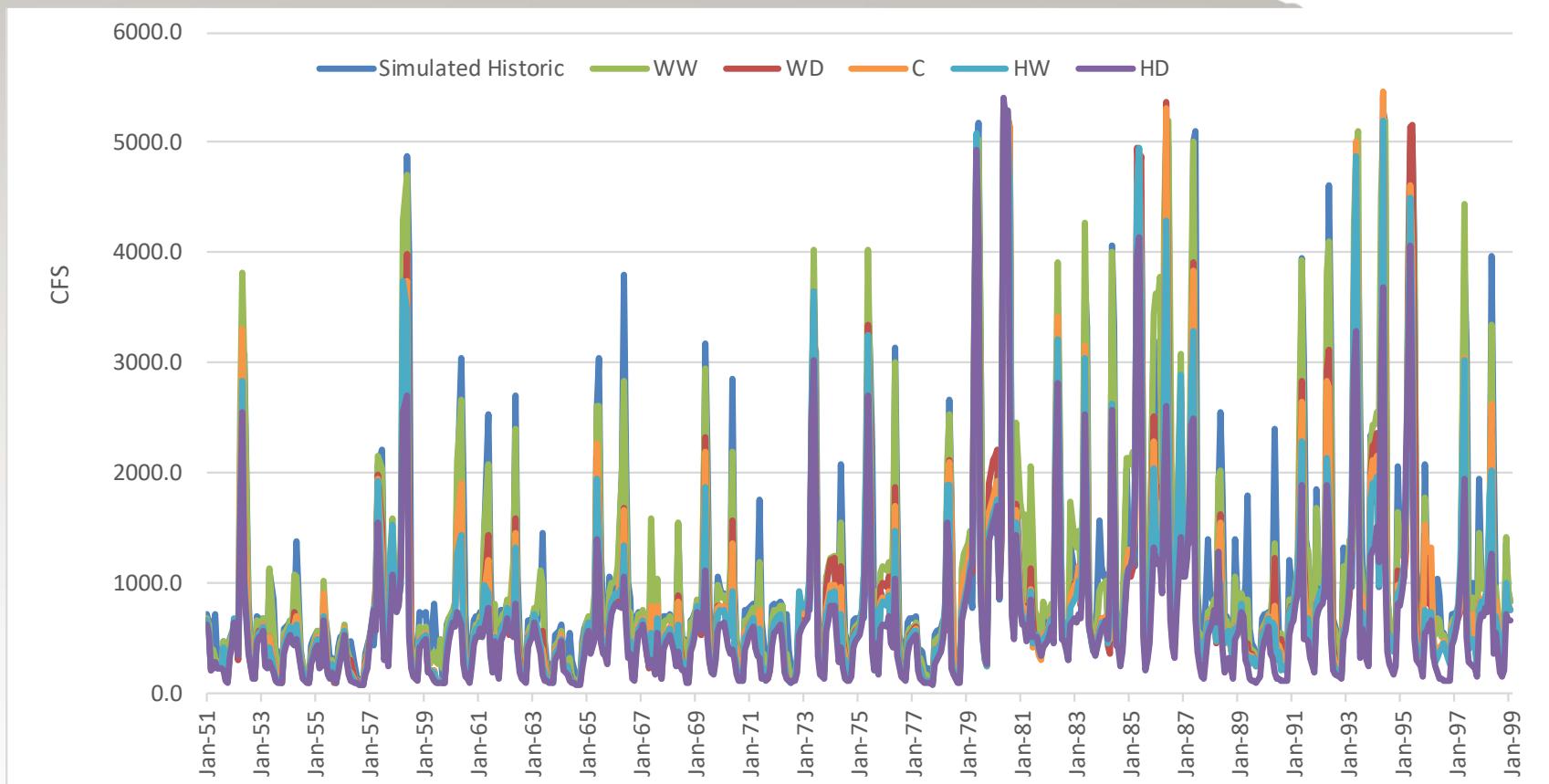
The climate-change data were derived by Reclamation from base data first developed as part of the West-Wide Climate Risk Assessment

# URGIA

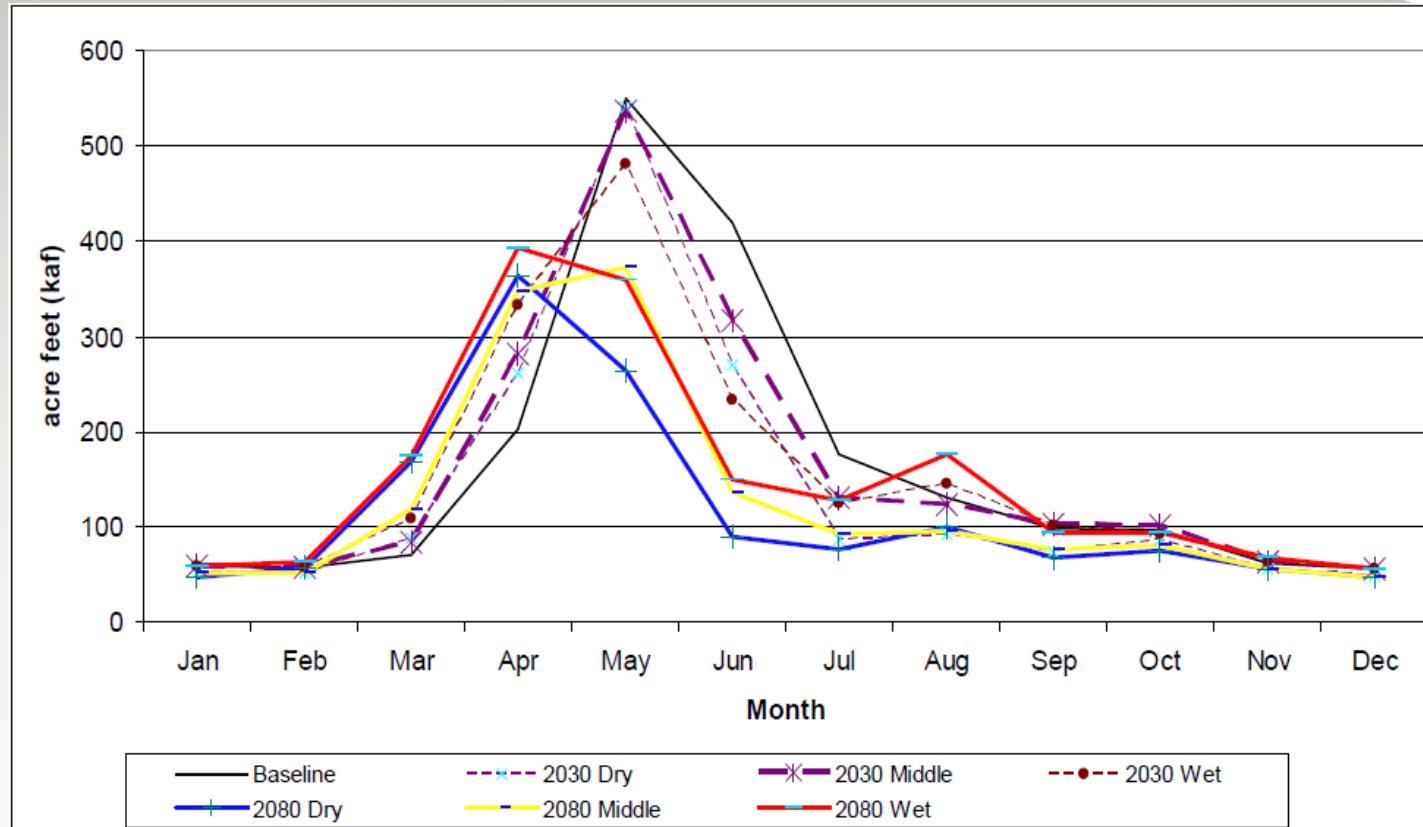


	2020s				2050s				2080s								
	Base	WD	WW	HD	HW	C	WD	WW	HD	HW	C	WD	WW	HD	HW	C	
	Average																
1951-1998	1,084	924	1,262	932	1,111	1,034	865	1,182	716	929	944	848	1,104	644	791	843	
1971-1998	1,322	1,147	1,561	1,169	1,368	1,280	1,084	1,474	906	1,165	1,181	1,075	1,382	814	999	1,060	
2006-2060	1,052	888	1,221	902	1,072	1,002	838	1,141	695	898	913	824	1,067	625	769	815	
2006-2130	1,133	970	1,323	981	1,164	1,085	911	1,242	756	979	993	895	1,162	680	835	889	
		Base	WD	WW	HD	HW	C	WD	WW	HD	HW	C	WD	WW	HD	HW	C
		Median	Median														
1951-1998	727	604	791	602	694	661	569	721	494	602	605	561	699	456	547	568	
1971-1998	867	722	1,049	750	880	817	695	997	611	736	743	669	889	523	640	669	
2006-2060	724	599	775	599	690	659	567	712	486	600	602	561	691	444	546	565	
2006-2130	747	624	840	636	738	682	595	755	514	625	633	578	738	476	565	589	

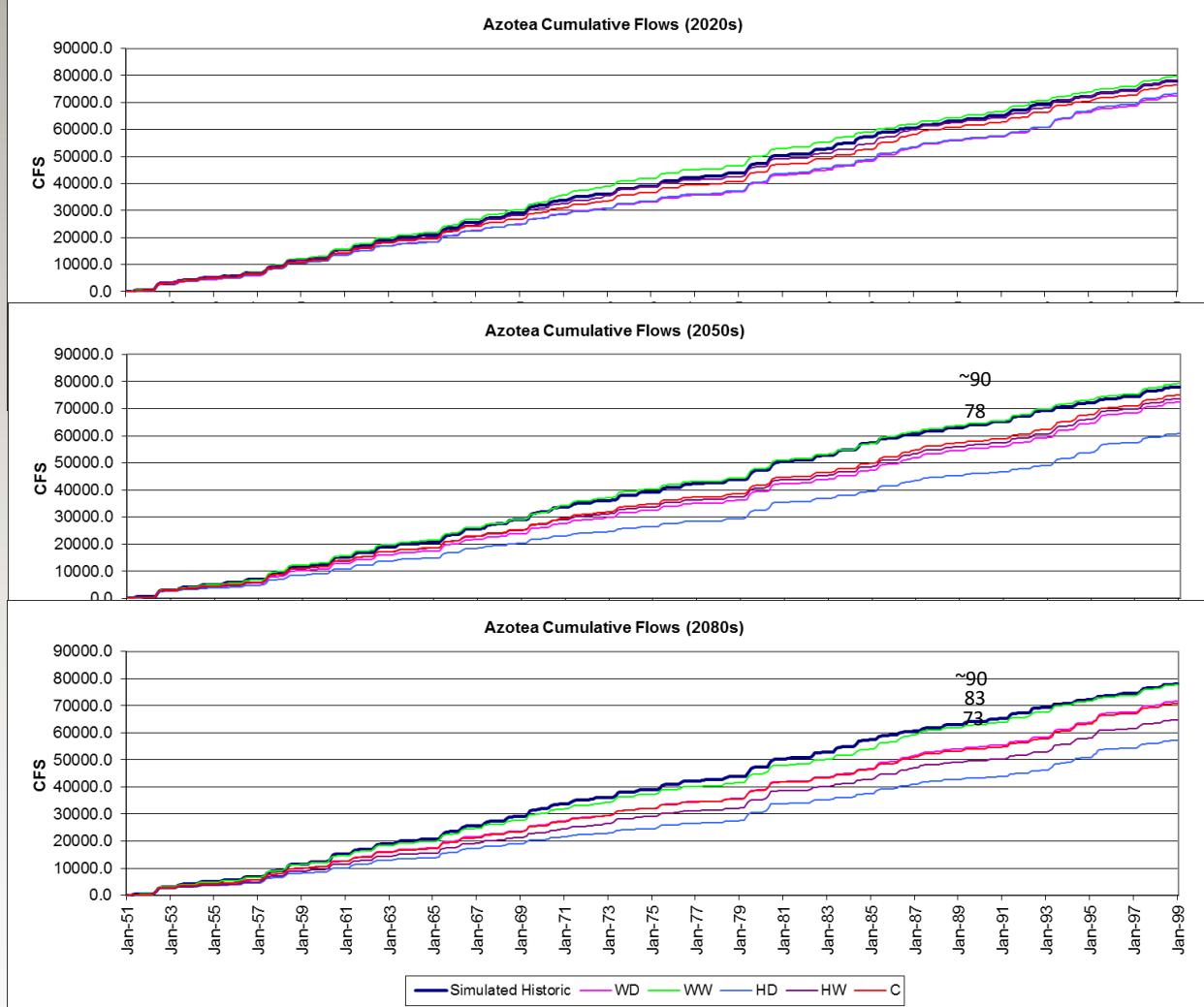
# URGIA 2080s flow



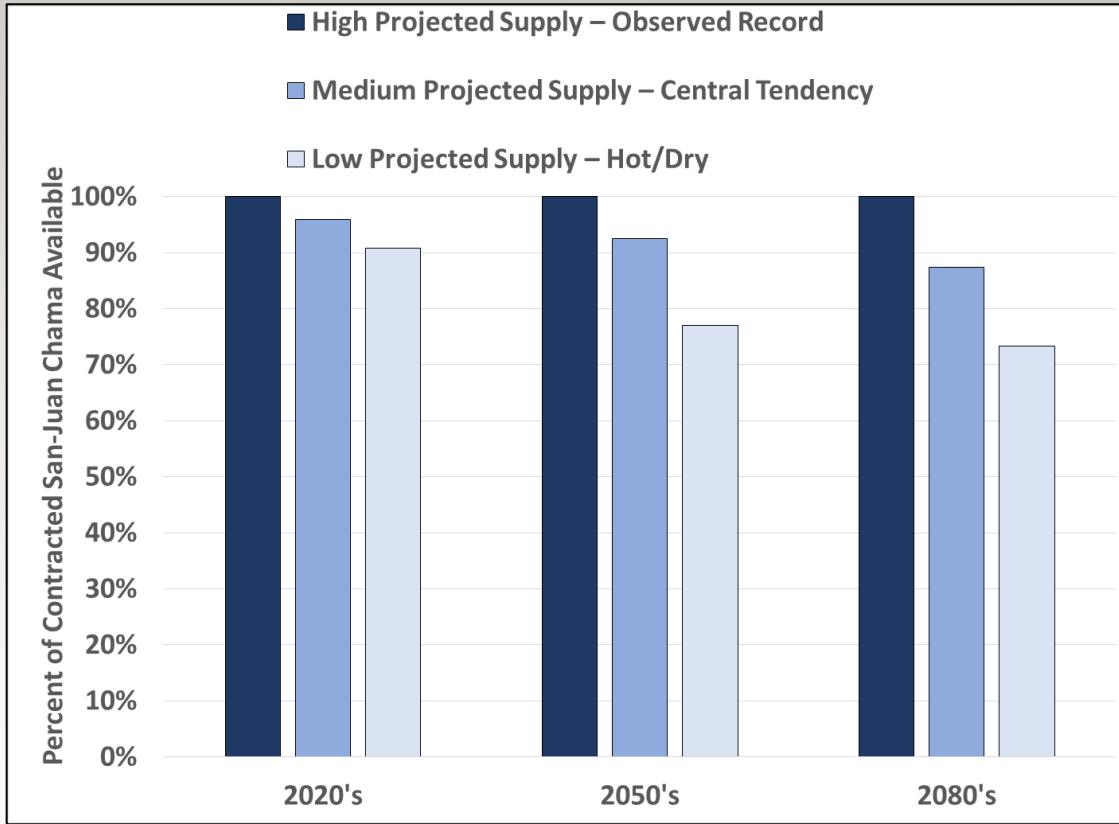
# Water 2120 - Projected Rio Grande Climate Change Variability



# Water 2120 - URGIA SJC



# Water 2120 – SJC yield under climate change scenarios



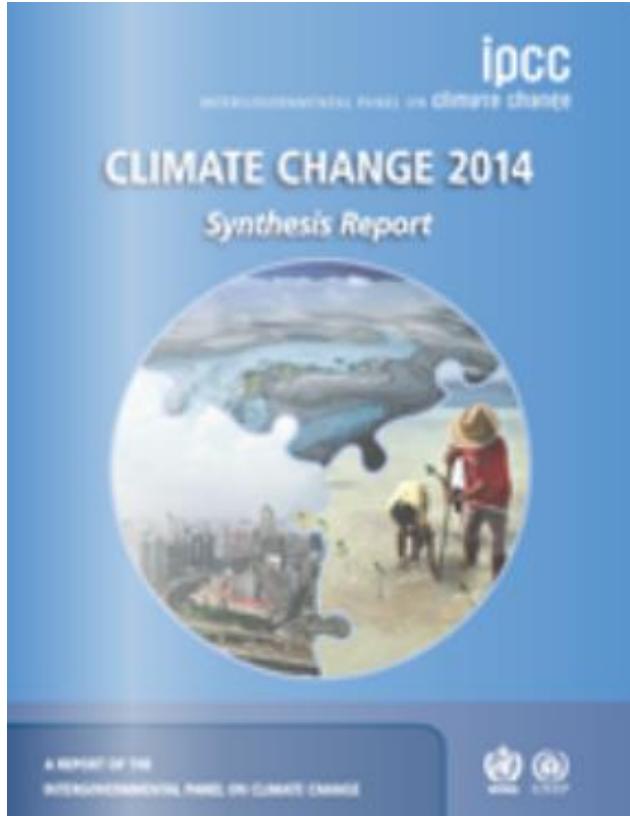
# Changes since Water 2120 - State of Climate Science



- CMIP5
- Leap Ahead Report
- CMIP6
- Recent Hydrology

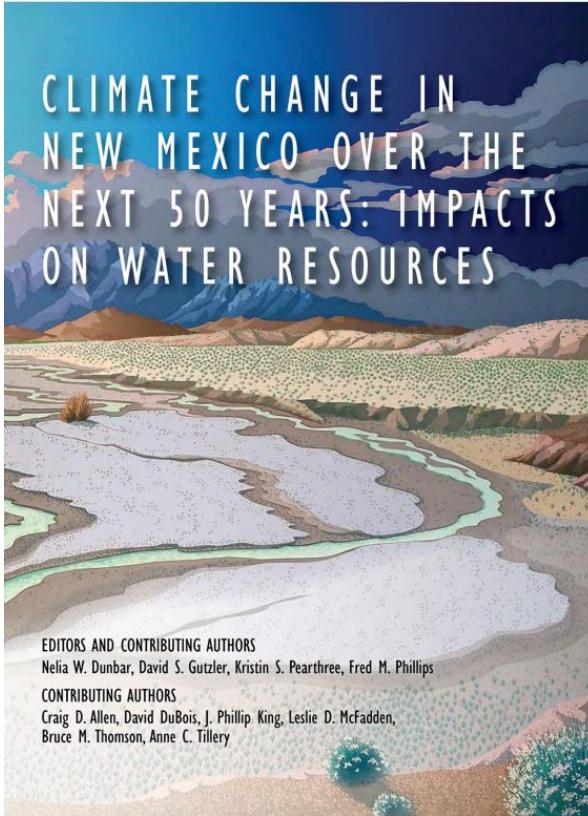
# Changes since Water 2120 – CMIP5

- CMIP5 datasets supported the 5<sup>th</sup> assessment (AR5)
  - Published in 2014
- Trends similar to CMIP3 in Temp and precip
- Generally somewhat wetter in New Mexico compared to CMIP3



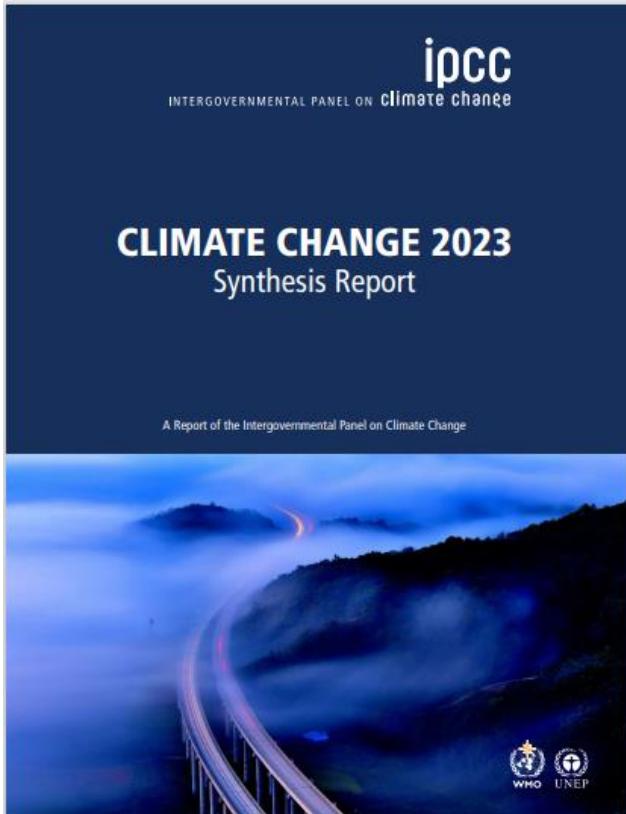
# Changes since Water 2120 – Leap Ahead

- High level overview of climate challenges for New Mexico
- Examined CMIP5 datasets for temp and precip
- Doesn't develop hydrologic data from CMIP5
- Provides insight into the "best" performing GCMs



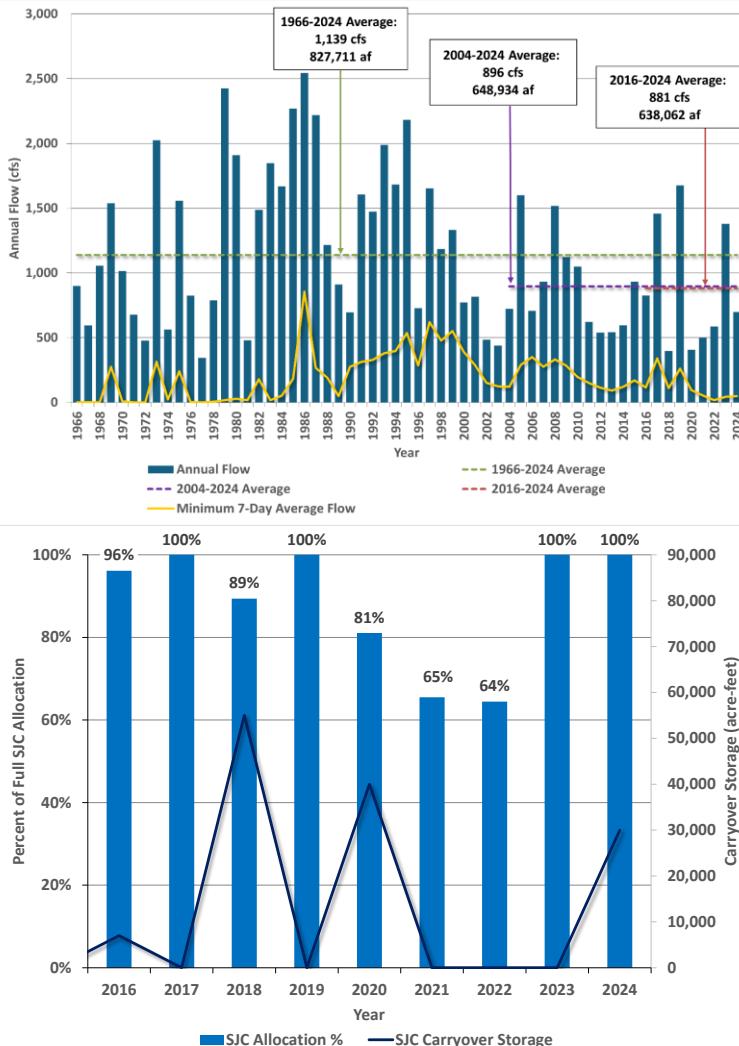
# Changes since Water 2120 – CMIP6

- CMIP6 datasets supported the 6<sup>th</sup> assessment (AR6)
- Published in 2022
  
- Trends similar to CMIP3/5 in Temp and precip
- More emphasis on interannual variability than previous models



# Recent year supply with reduced RG and SJC water

- San Juan-Chama water supply has been reduced
  - 2025 is lowest allocation on record (39%)
- Rio Grande flow have been trending downward
- El Vado dam construction is affecting timing of RG flows and therefore WA operations

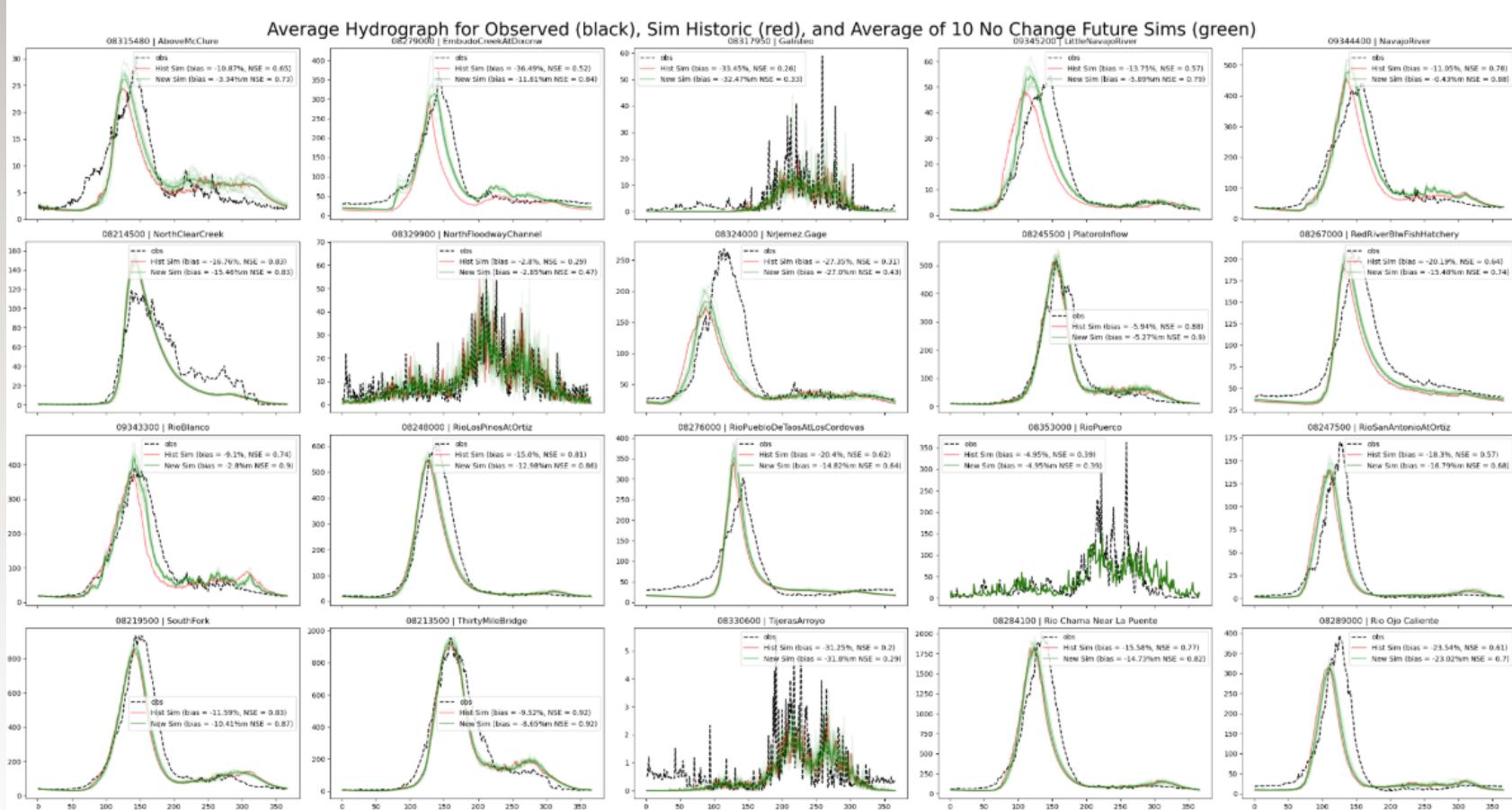


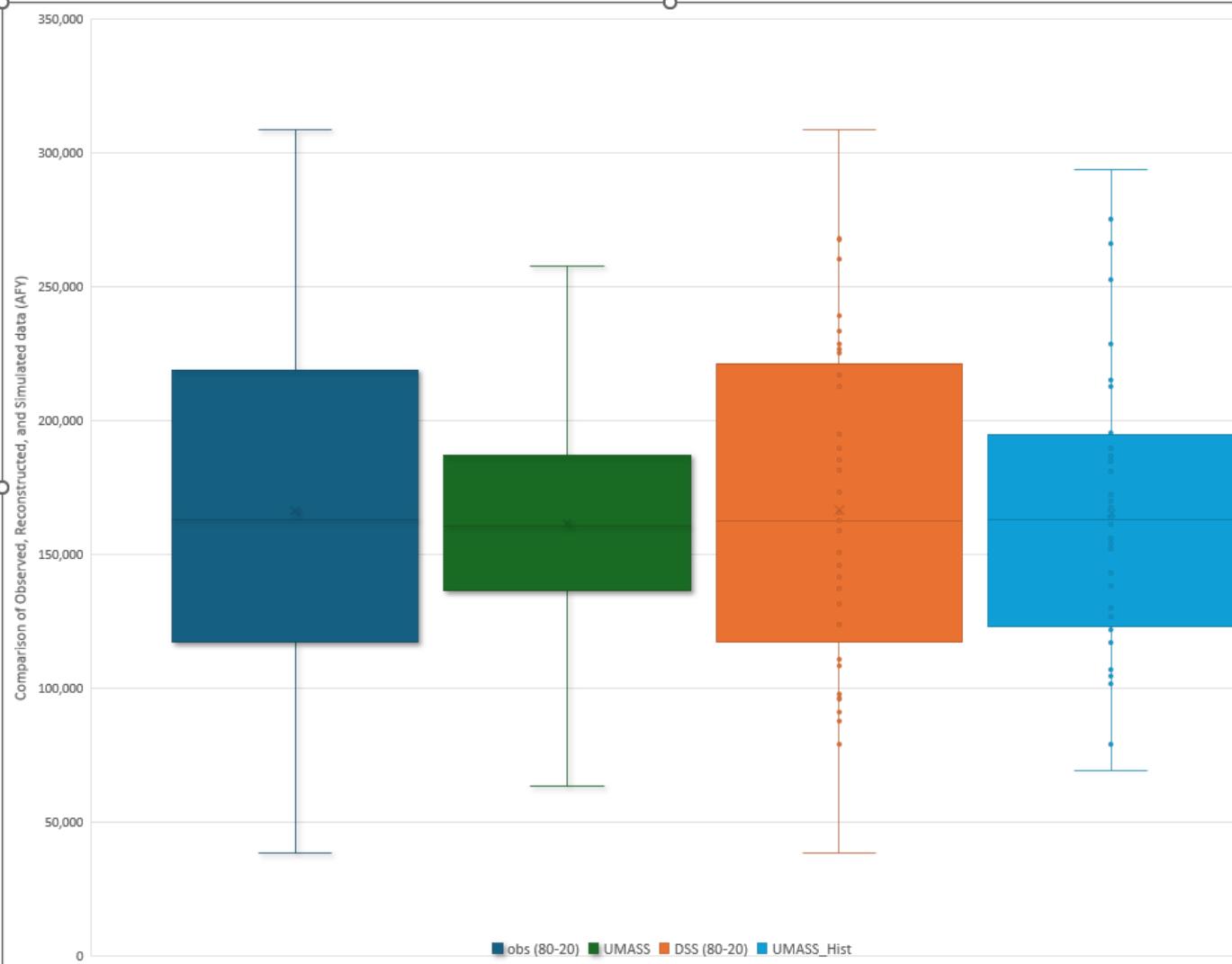
• +  
◦ • Climate Change in  
Water 2130 –

RGBS – UMASS  
CMIP6

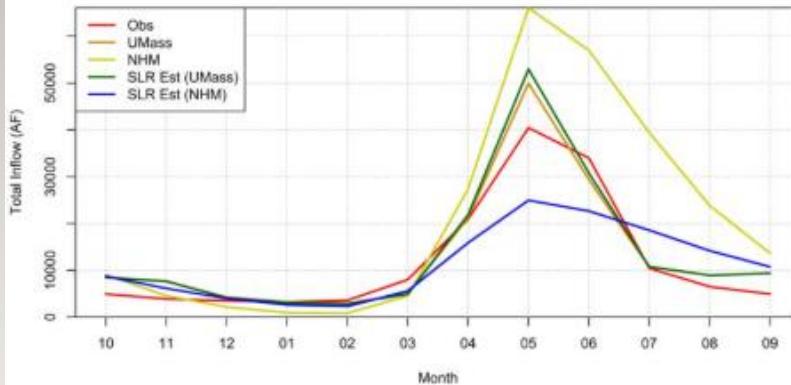


- Long-Short Term Memory (LSTM) model used to predict streamflow based off of observed data
- Future projections based on a stochastic weather generator
- Does not explicitly use projected climate data

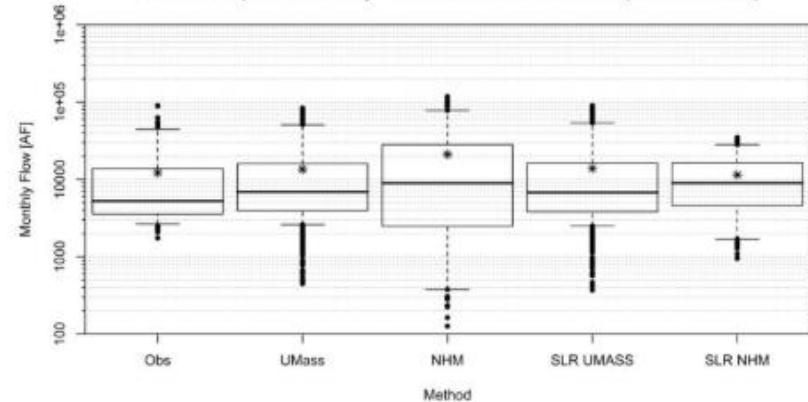




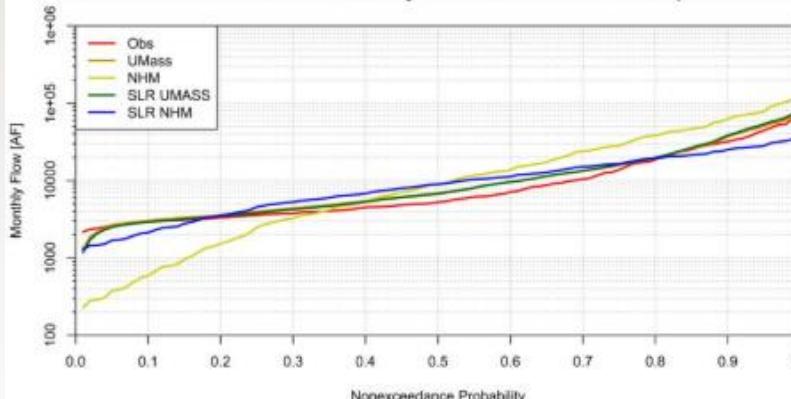
Panel A: Average Monthly Inflow for the San Juan Chama (Validation Data)



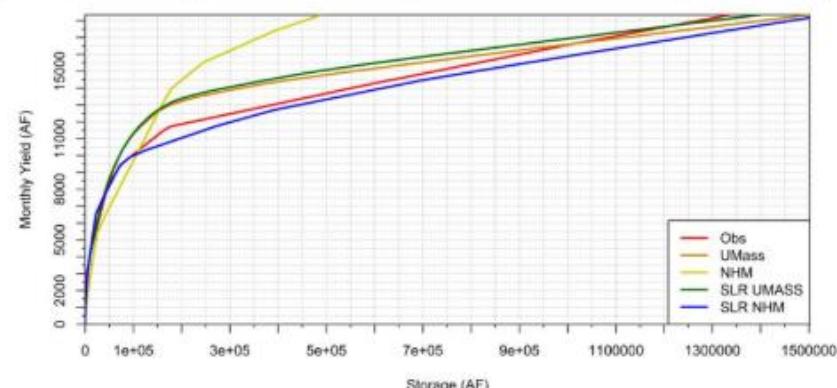
Panel B: Boxplots of Monthly Flow on the San Juan Chama (Validation Data)



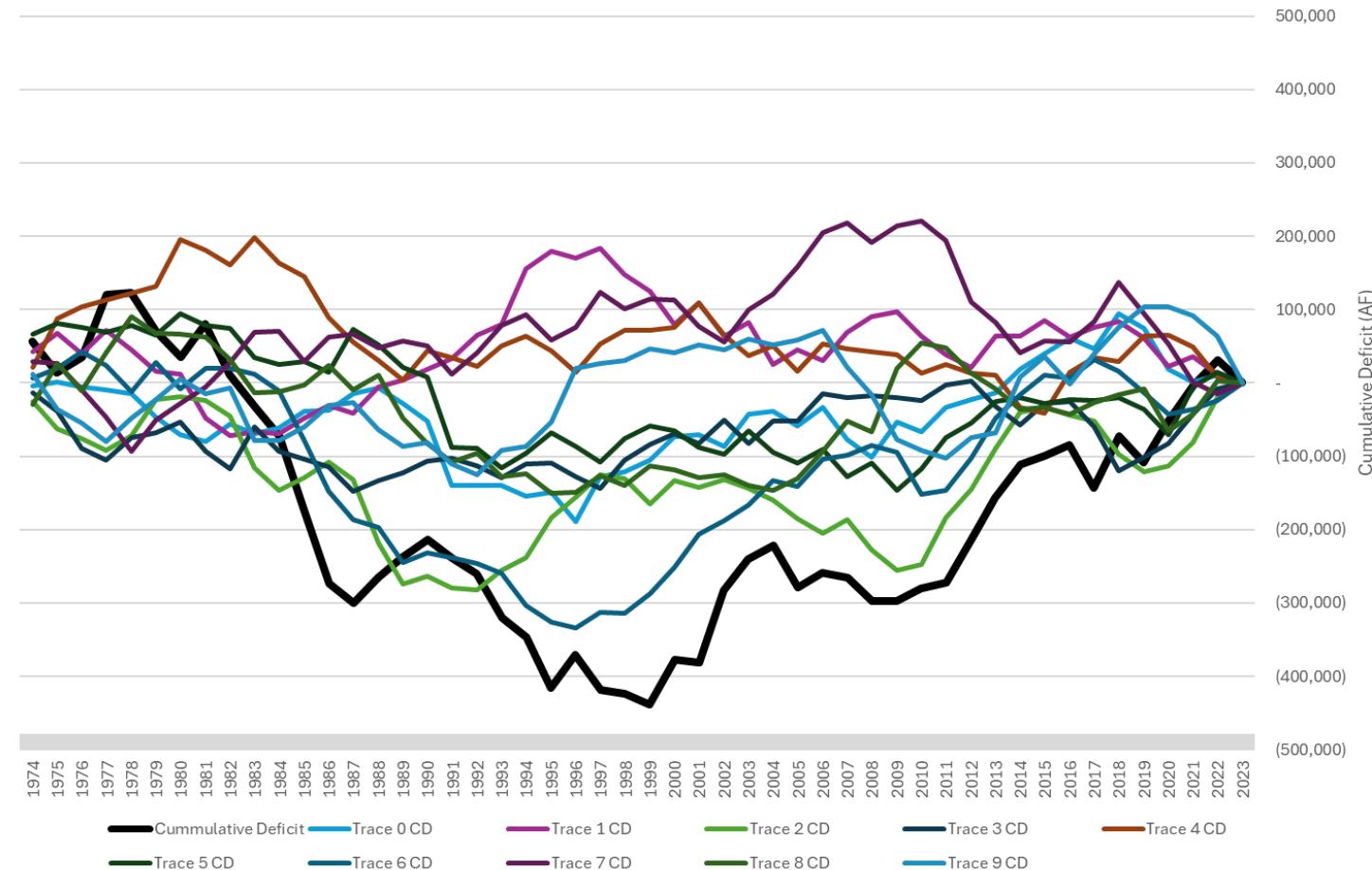
Panel C: Cumulative Distribution of Monthly Flows on the San Juan Chama (Validation Data)



Panel D: Storage-Yield Curves for Monthly Yields on the San Juan Chama (Validation Data)



## Cumulative Deficits, Azotea Potential Diversion (Historical and Traces)



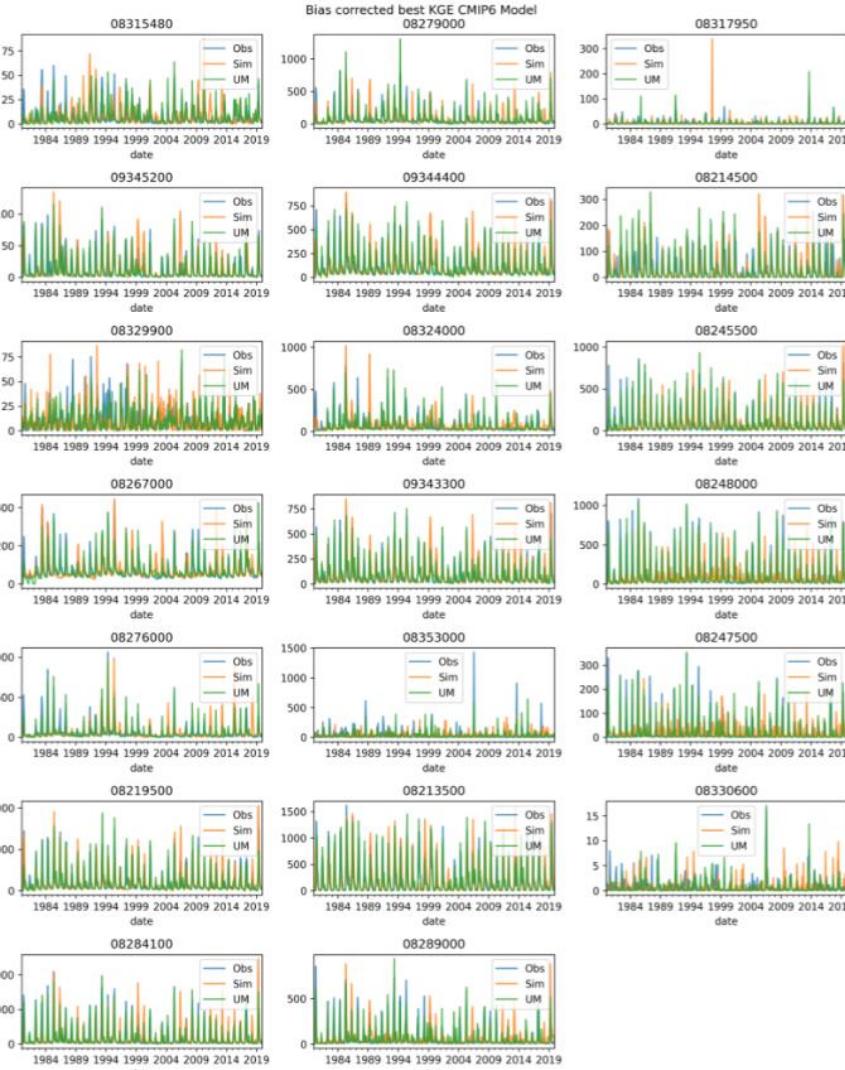
# CMIP 6



- Climatic response to global circulation models (GCM)
- ORNL 9505 – downscaled GCM data to allow for nationwide hydropower generation assessment
- Translated to runoff in two separate models, VIC and PRSM
- Physics and process-based simulations

# CMIP6

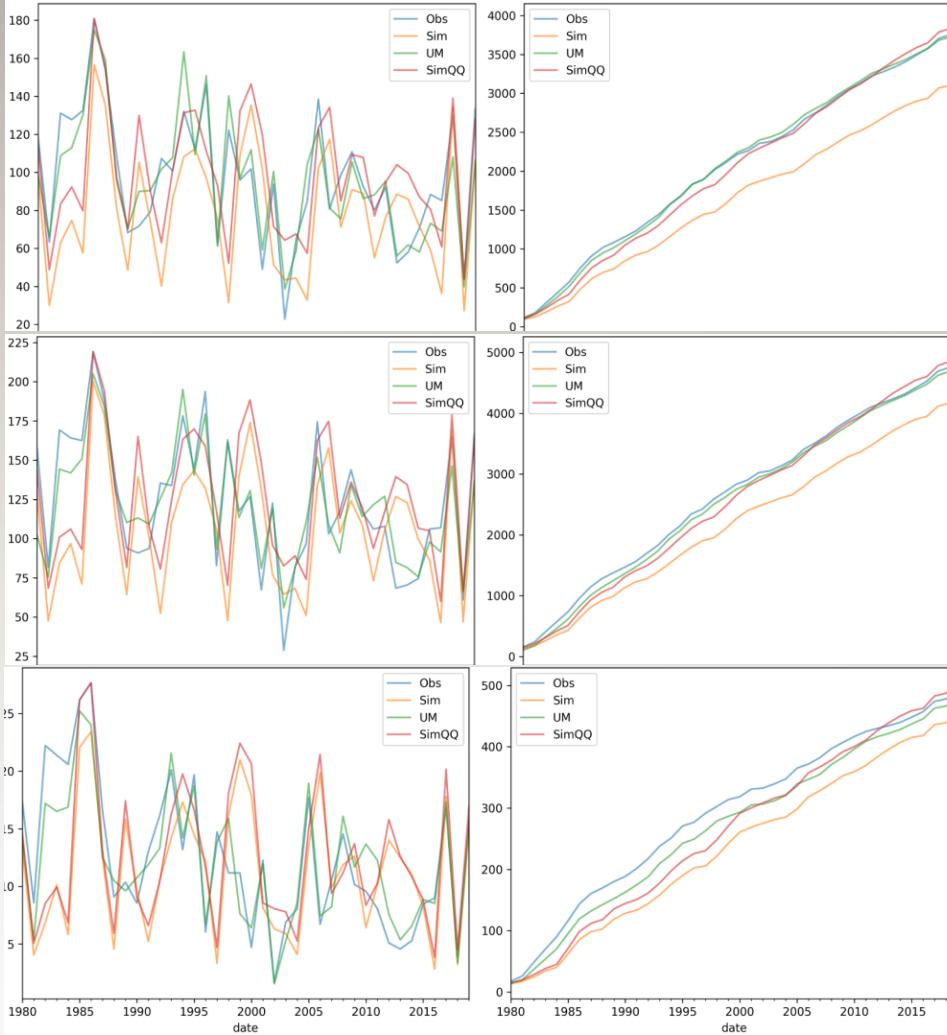
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# CMIP6



# CMIP6



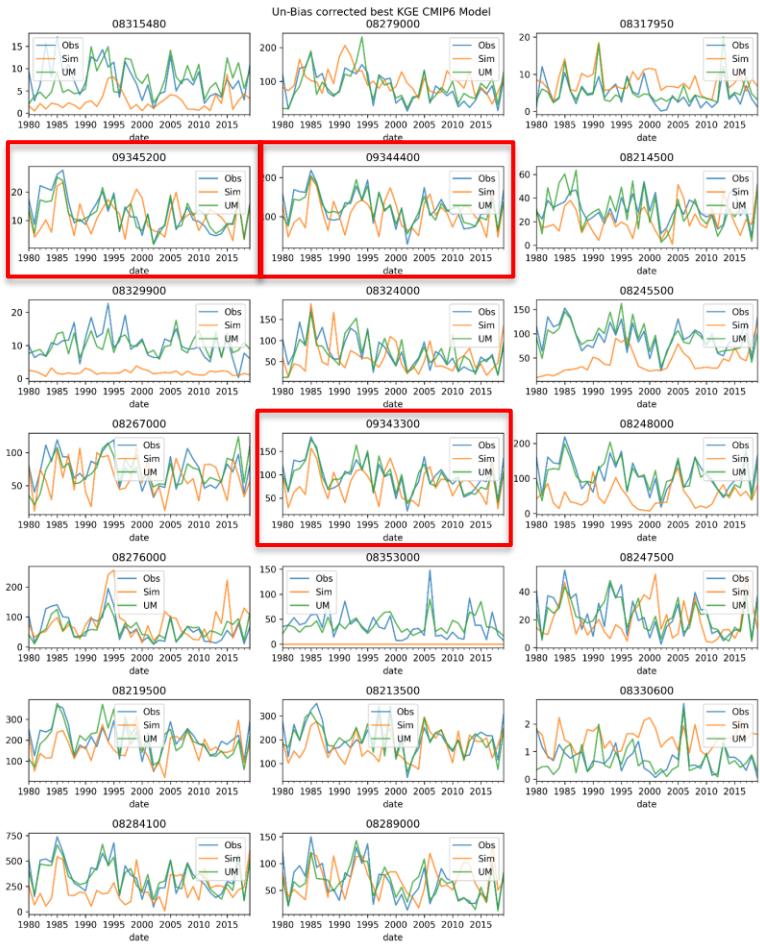
Albuquerque Bernalillo County  
Water Utility Authority

# Summary Comparison

	CMIP6	UMass
<b>Regulation</b>	Unregulated flow estimates; natural conditions.	Unregulated flow estimates; natural conditions.
<b>Calibration</b>	Hydrologic models (VIC and PRMS) are not calibrated	The models are trained, validated, and tested using flow records.
<b>Runoff (Historical)</b>	Based on downscaled climate model estimates	Based on observed historical records
<b>Runoff (Projected)</b>	Based on downscaled climate model estimates	Not explicitly modeled.
<b>Bias Correction</b>	Flows may be post-processed (external step to 9505 data)	No bias correction
<b>Stationarity</b>	Data changes over the record up to 2100	Data is stationary and represents a theoretical future state.
<b>Ensembles</b>	Multiple GCM traces and two modeling methods create an ensemble of future potential flows	Single trace yield per climate scenario (potential for perturbations and multiple yield estimates).

# Summary Comparison - Performance

- In general, UMASS matches the historical data better than CMIP6
- UMASS' approach assumes the same statistical future patterns (e.g. drought duration)
- CMIP6 modifies future patterns
- CMIP6 models could be calibrated locally for better performance



# Summary Comparison – Costs/timing

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UMASS product can be obtained, once complete – timing is uncertain but work is progressing

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CMIP6 product will require additional processing

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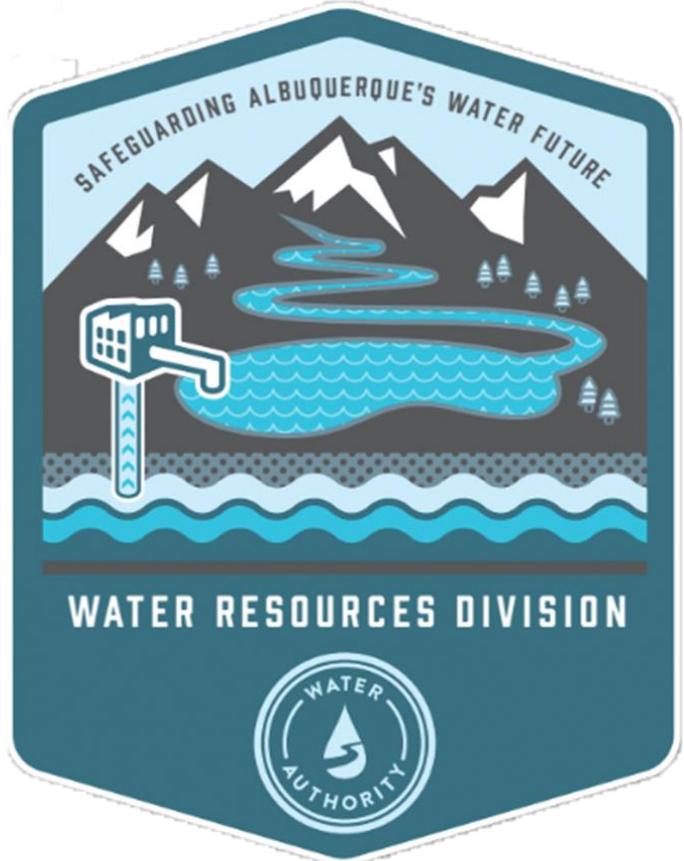
Either or both will require simulation with an operational model (i.e. URGWOM)

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Depending on overall direction UMASS product may be simulated by others

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The CMIP6 dataset will likely cost at least an additional \$50-100K to process – approximately 1- month to process

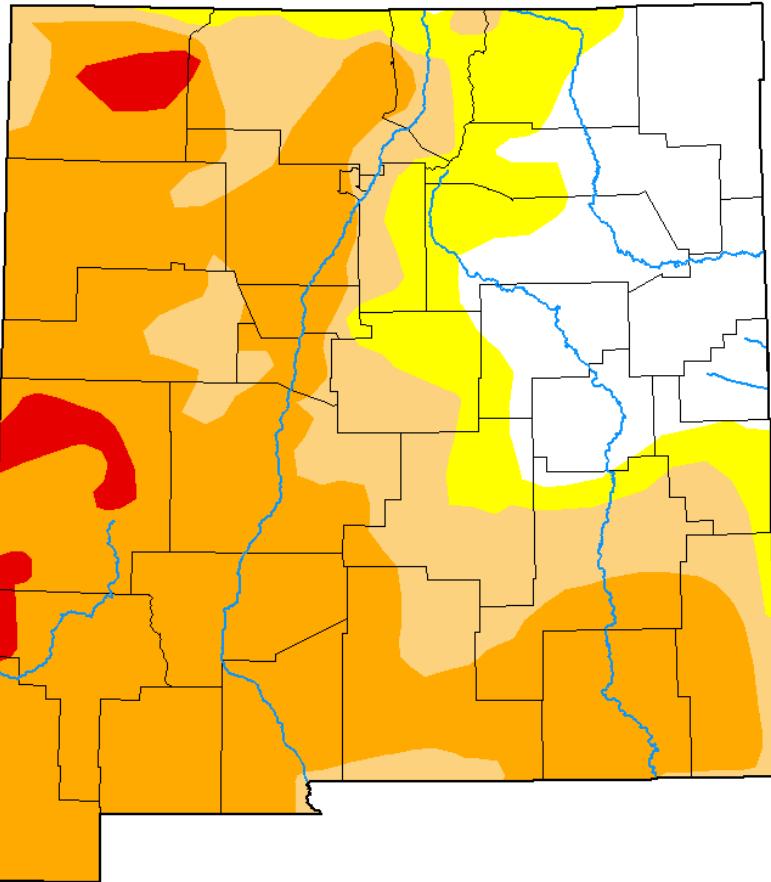


# Water Resources Division

**Water Report**

**Mark Kelly, PE  
Water Resources Manager**

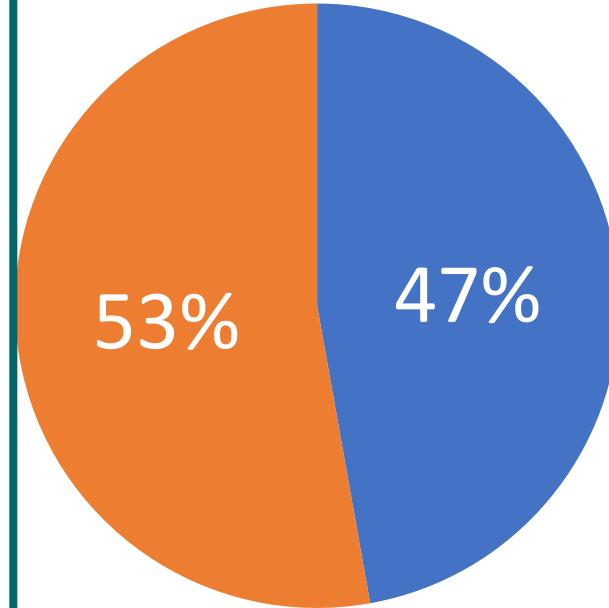
# SUPPLY METRICS SNAPSHOT



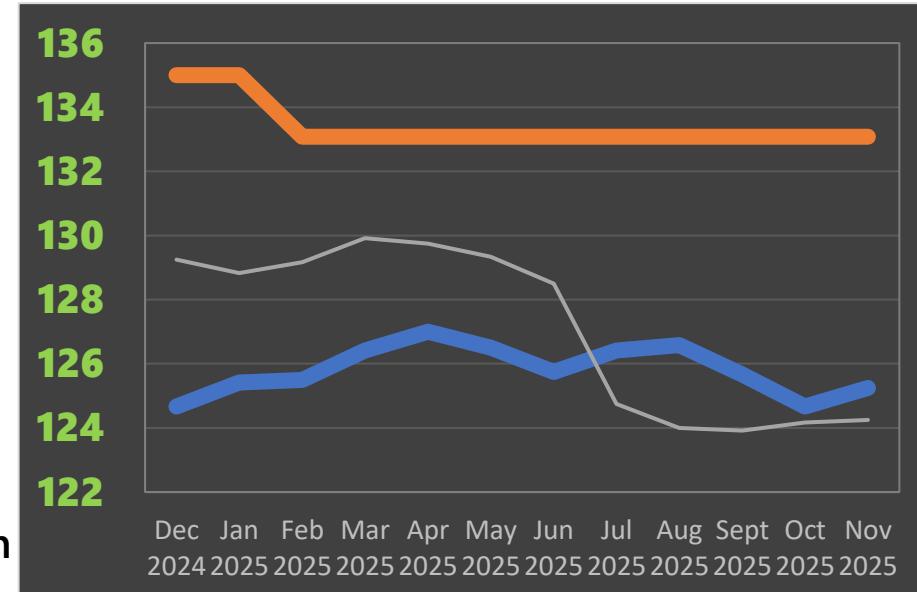
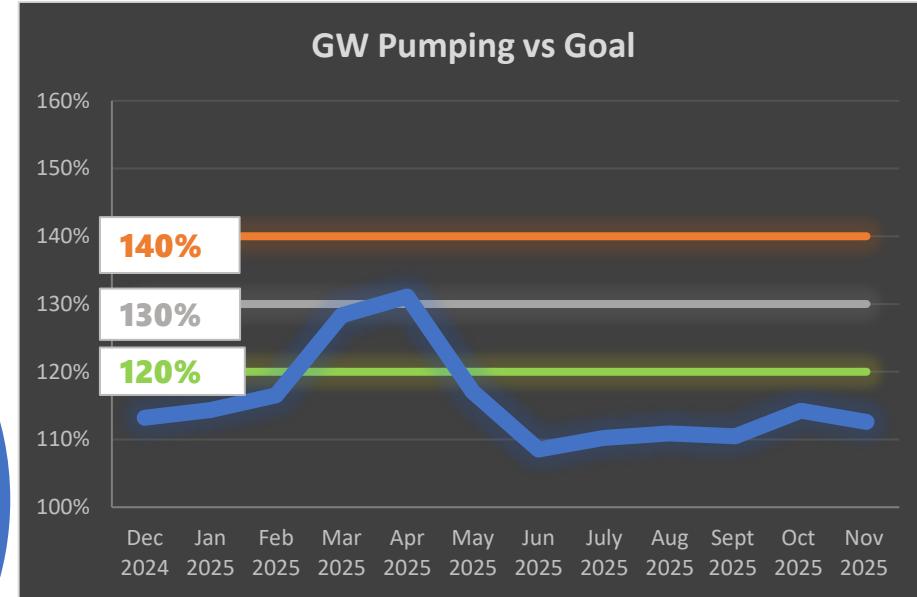
D0   D1   D2   D3   D4

Water Authority  
Drought Stage:  
None

**January 2026**  
(November Supply Data)



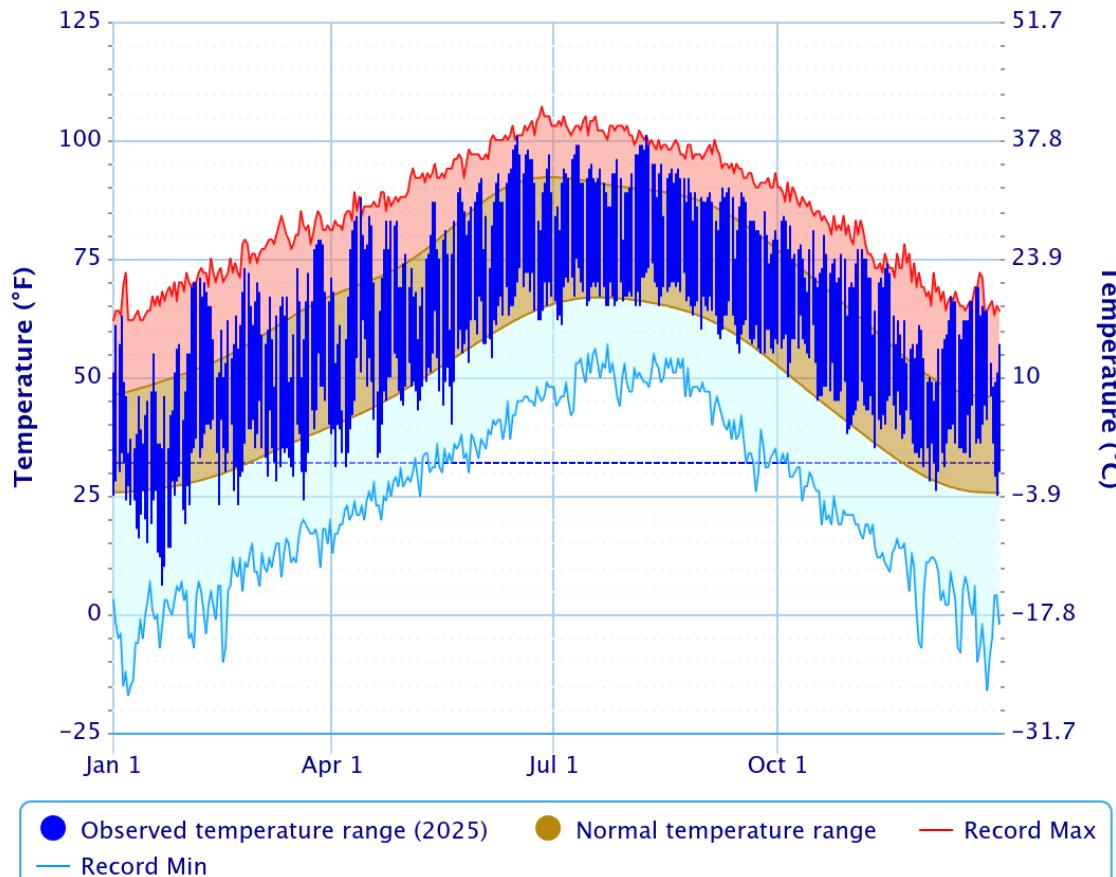
Groundwater Production  
 Surface Water Production



# Temperature

## Daily Temperature Data – Albuquerque Area, NM (ThreadEx)

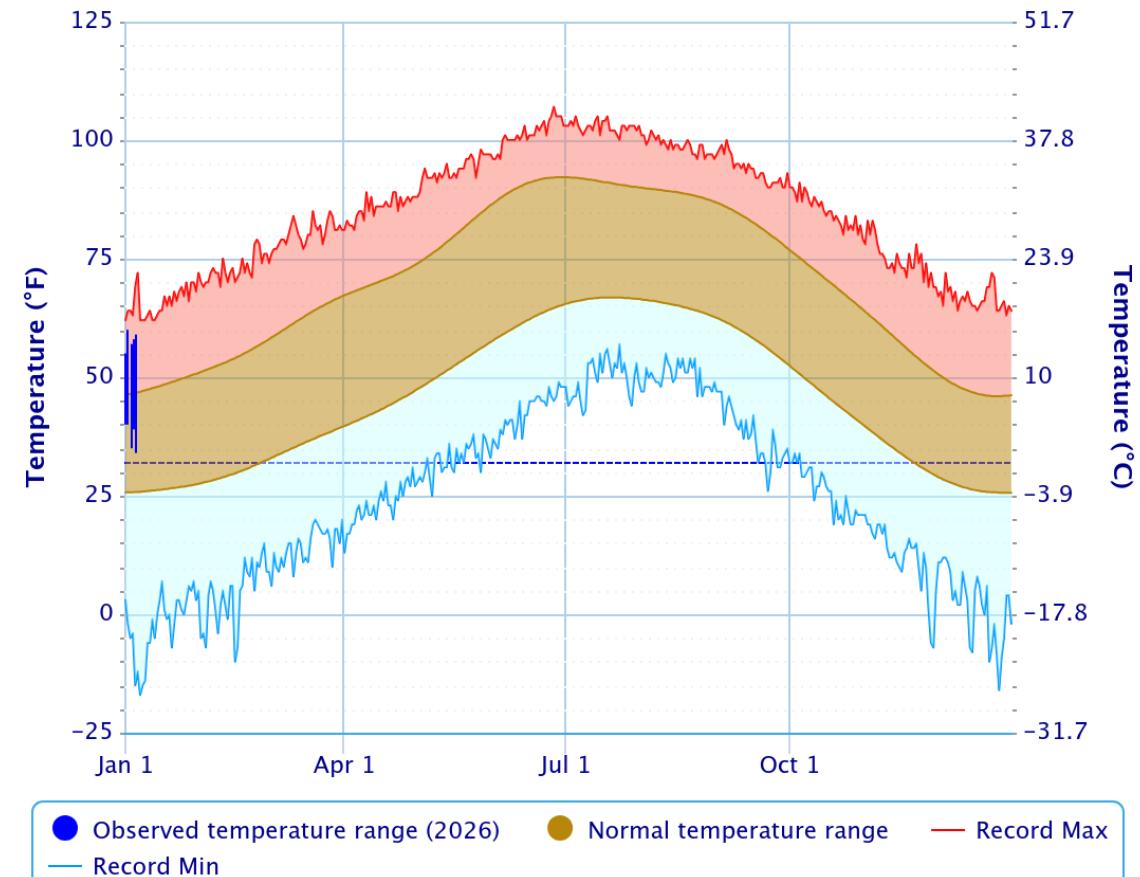
Period of Record – 1891-12-01 to 2026-01-05. Normals period: 1991-2020. Click and drag to zoom chart.



2025

## Daily Temperature Data – Albuquerque Area, NM (ThreadEx)

Period of Record – 1891-12-01 to 2026-01-05. Normals period: 1991-2020. Click and drag to zoom chart.



2026

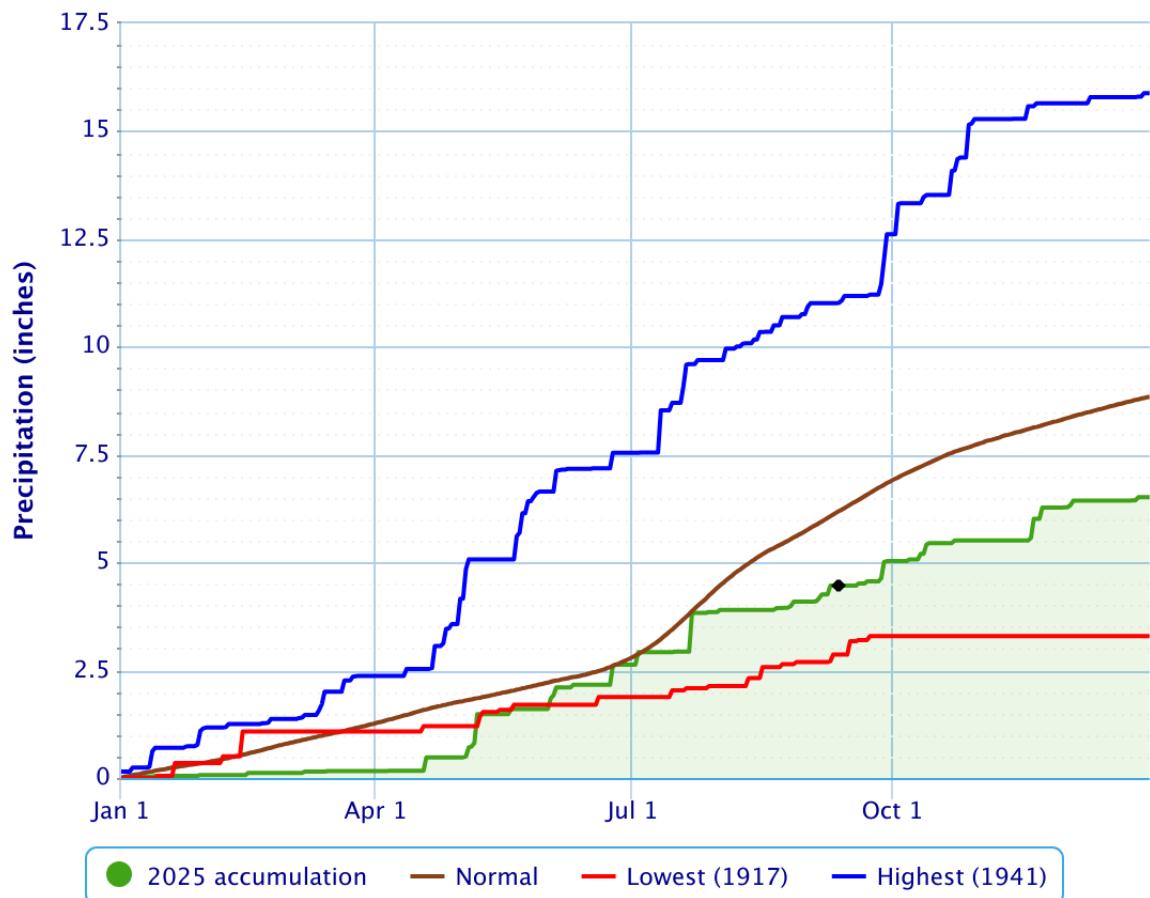
Powered by ACIS

Powered by ACIS

# Precipitation

## Accumulated Precipitation – Albuquerque Area, NM (ThreadEx)

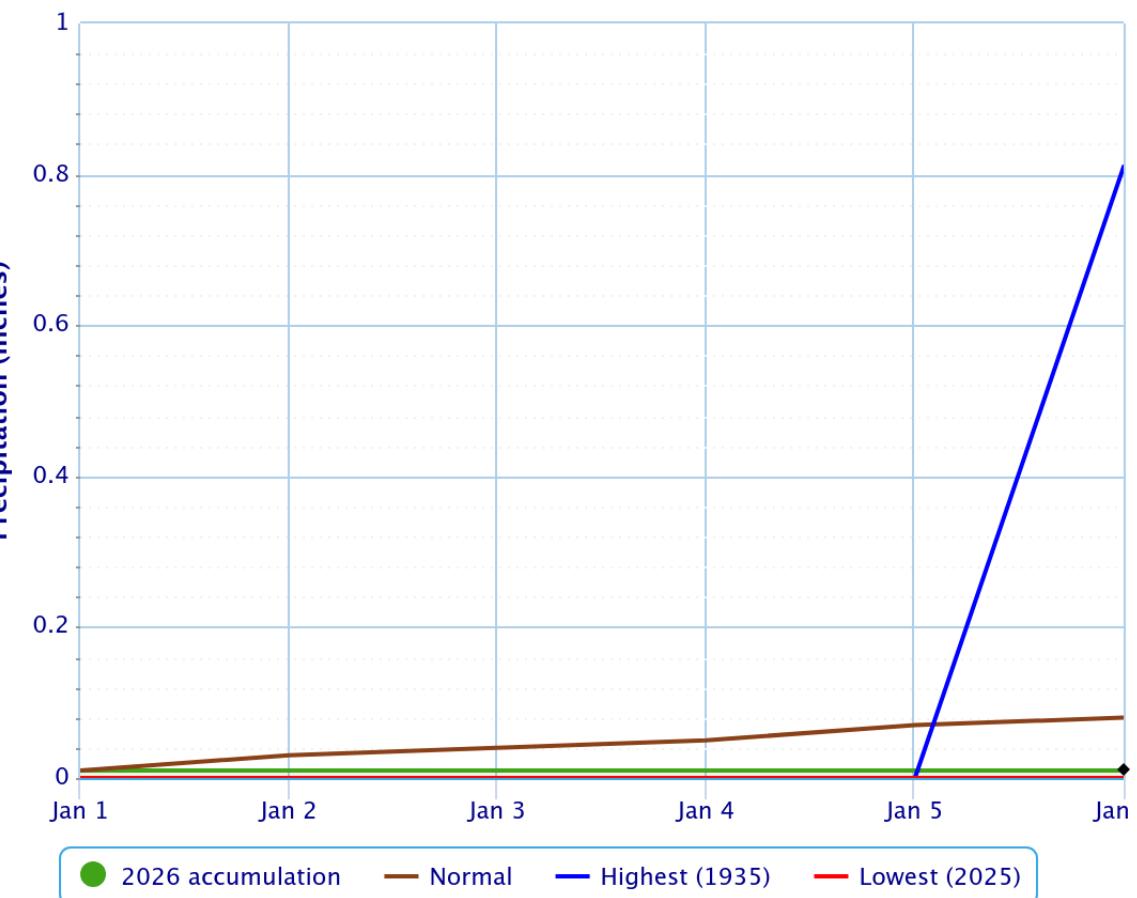
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



2025

## Accumulated Precipitation – Albuquerque Area, NM (ThreadEx)

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



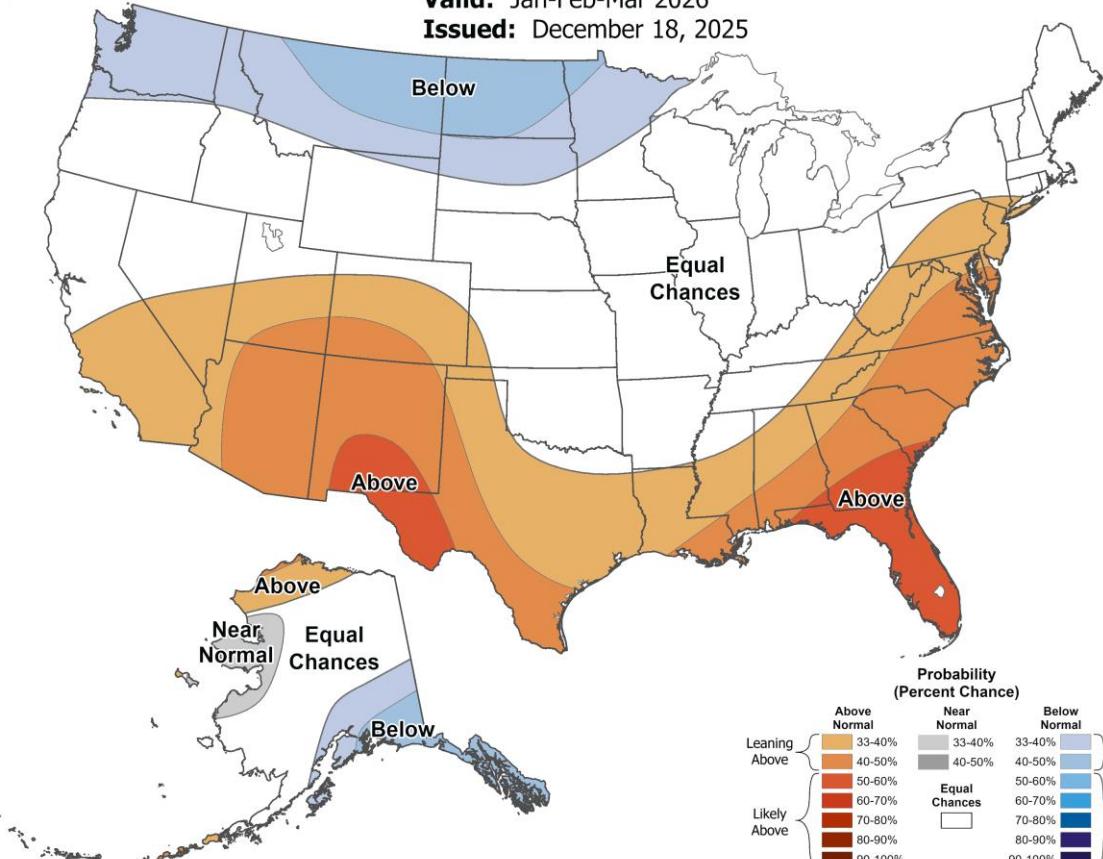
2026

# Seasonal Outlook



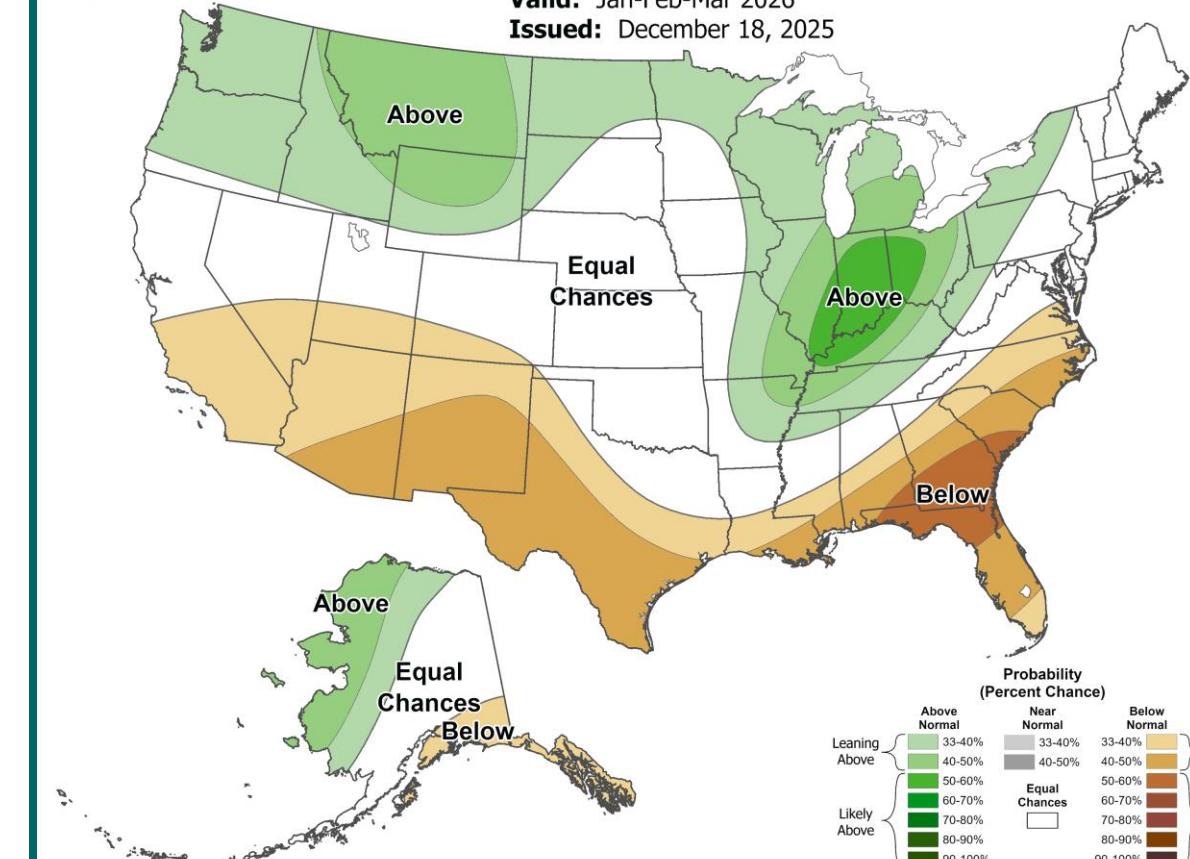
## Seasonal Temperature Outlook

Valid: Jan-Feb-Mar 2026  
Issued: December 18, 2025



## Seasonal Precipitation Outlook

Valid: Jan-Feb-Mar 2026  
Issued: December 18, 2025



La Niña is favored to continue for the next month or two, with a transition to ENSO-neutral most likely in January-March 2026 (68% chance).

### Official NOAA CPC ENSO Probabilities (issued December 2025)

based on  $-0.5^{\circ}/+0.5^{\circ}\text{C}$  thresholds in ERSSTv5 Niño-3.4 index

