

Memorandum



Buckman Direct Diversion

Date: September 23, 2026

To: Buckman Direct Diversion Board

From: Kyle Harwood (BDD General Counsel)

Subject: San Juan Chama Project Contractors Association Annual Field Trip

The San Juan Chama Project Contractors Association (SJCPCA) organizes a yearly field trip/workshop for the Contractors, Bureau of Reclamation, New Mexico state agencies and others. This year, over 50 participants visited Pagosa Springs, Colorado and surrounding areas for 3 days in August. Numerous presenters discussed topics with attendees at various locations on the fieldtrip, including stops at 2 of the 3 intakes (Blanco and Oso), Azotea Tunnel Outlet, Heron Reservoir, and Ohkay Owingeh.

One of the primary themes of this field trip was to discuss the crucial work of fire mitigation above the project intake facilities. A second theme of this field trip was to review the planned reconstruction of the intake facilities, which are over 55 years old.

City of Santa Fe designees serve in a leadership role on the Contractors Association. Many of this year's participants were from the City of Santa Fe and Santa Fe County utility staff.

Handouts from the field trip are attached for the Board's reference.

2026 SJCPCA Field Trip and Infrastructure Tour



Day 1 (Tuesday, 08/25)

5:30 - 7:30 PM

Join us for an evening mixer at El Camino Lounge and introduction about the San Juan-Chama Project Contractors Association (SJCPCA) and watershed from SJCPCA Chair Mark Kelly.
651 W U.S. Hwy 160, Pagosa Springs, CO 81147

[Menu](#)

Appetizers courtesy of Harwood Pierpont Attorneys at Law

Day 2 (Wednesday, 08/26)

7:00 AM

Breakfast on your own

7:45 AM

Meet at Motel SoCo parking lot
651 W U.S. Hwy 160, Pagosa Springs, CO 81147

- We will carpool to reduce number of vehicles

8:45 - 10:00 AM

1. Blanco Diversion
37.204611, -106.810389

Fire Planning

Emma Metcalf, Bureau of Reclamation (BOR)

A Plan in Action - An example of SJCP Fire Planning Project

Josh Peck, United States Forest Service

11:00 AM - 2:15 PM

2. Banded Peaks Ranch Tour
37.077366, -106.693128

Banded Peaks Ranches Tour and Collaborative Forest Management Discussions

Steve Bassett, The Nature Conservancy (TNC); Natasha Kerr, TNC;

Tim Haarmann Ph.D, Banded Peaks Ranch; Nick Dolocek, Dolocek Enterprises Inc.

Lunch provided courtesy of The Nature Conservancy

3:00 - 4:00 PM

3. Oso Diversion
37.030306, -106.7355

Oso Diversion Dam Schedule Repairs

Cord Everetts, BOR

Agenda Continued

[Menu](#)

6:00 PM

Dinner and a Talk at Gustosos

117 Navajo Trail Dr, Pagosa Springs, CO 81147

SJCPCA Past, Present, and Future

Kyle Harwood, SJCPCA Administrator

Colorado River: Post-2026 Record of Decision and DROA Update

Diane Agnew, Albuquerque Bernalillo County Water Utility Authority

Day 3 (Thursday, 08/27)

7:00 AM

Breakfast on your own

- Check out of hotels
- Make sure to pack a lunch for the day

8:00 AM

Meet at Motel SoCo parking lot and head to Azotea Tunnel Outlet

651 W U.S. Hwy 160, Pagosa Springs, CO 81147

9:00 - 10:00 AM

4. Azotea Tunnel Outlet

36.850551, -106.671908

PPE REQUIRED (Hard Hat, Safety Vest, Close Toed Shoes)

Climate and Hydrology of San Juan River Basin: A Conversation on the Latest Climate Hydrology Modelling, Diversion Efficiencies of the SJCP, and What Do Past Super El Nino years tell us About What We May Expect This Winter

Bill Schneider, City of Santa Fe (CoSF), Steve Shultz (CoSF), and Levi Newell (CoSF)

10:30 AM - 12:30 PM

5. Heron Lake State Park

194 NM-95, Los Ojos, NM 87551

From Diversion to Recreation: The Role of Your State Parks in New Mexico's Water Story

Toby Velasquez, New Mexico State Parks

- **Note:** All entry fees have been waived
- **Lunch** will happen during this stop, please plan ahead to bring your own lunch!

2:00 - 3:00 PM

6. Ohkay Owingeh Lakes

2016 N Riverside Dr, Espanola, NM 87532 Ohkay Owingeh

Rio Chama Water Rights Settlement, Bosque Restoration, and How SJCP Water Supports These Efforts

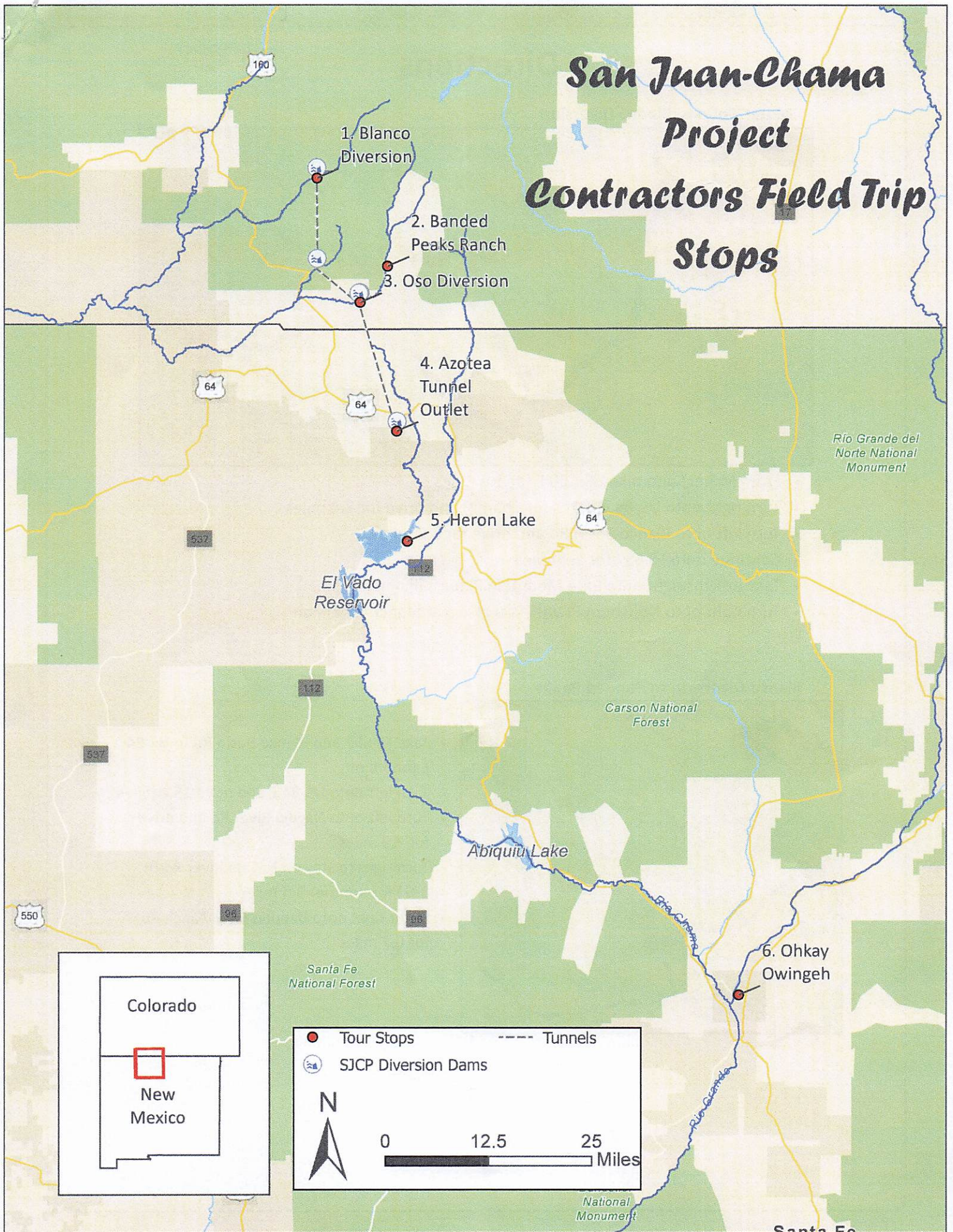
Tyler Lystash, Ohkay Owingeh

Contact Information

Willem Martin , SJCPCA Support Staff

505-322-7070

San Juan-Chama Project Contractors Field Trip Stops



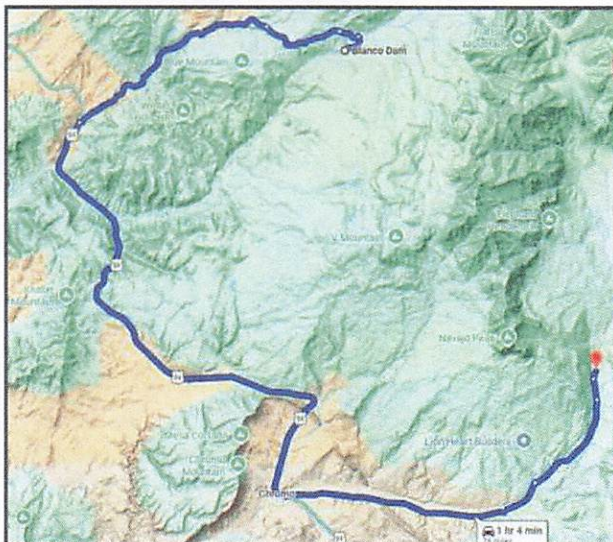
Directions

Motel SoCo to Blanco Diversion



- From Motel SoCo take US-160 E for 1.6 Miles
- Turn right onto US-84 E (signs for Chama) and drive for 8.4 miles
- Turn left onto Blanco Basin Rd and drive for 6.2 miles
- Continue onto FS 657 for 2.3 miles
- Take a slight right onto Blue Mountain Pl for half a mile
- Turn right onto Nofishum Pl until you arrive at Blanco Diversion

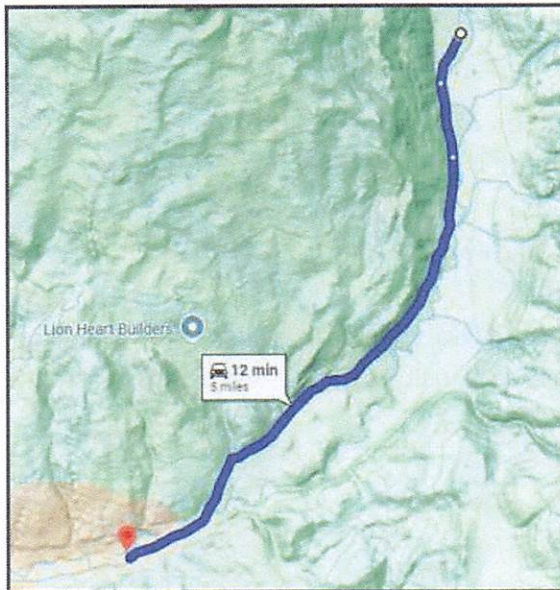
Blanco Diversion to Banded Peaks



- Take FS 657 and Blanco Basin Rd to US-84 E for 9.8 mi
- Turn left onto US-84 E and drive 15.4 miles
- Turn left onto Navajo River Rd and drive for 7.0 miles
- Turn right to stay on Navajo River Rd (R 382) for another 3.5 miles
- Slight right onto Banded Peak Ranch Rd for 0.2 miles

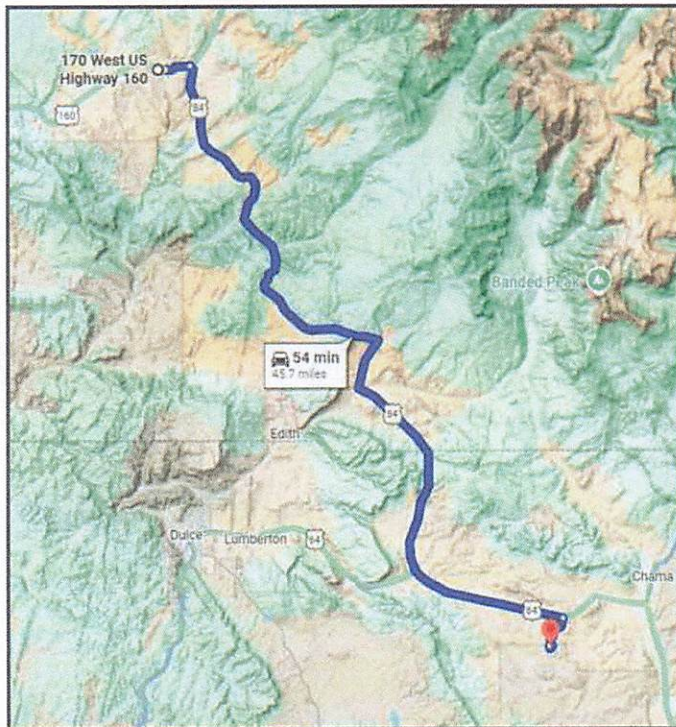
Directions

Banded Peaks to Oso Diversion



- Head south on Banded Peak Ranch Rd South
- Veer left onto Navajo River Rd and drive for 4 miles
- Oso Diversion will be on the right

Motel SoCo to Azotea Tunnel Outlet



- Head east on US-160 E
- Turn right onto US-84 E (signs for Chama) and drive for 42 miles
- Turn right onto Azotea Tunn Rd and drive for 2 miles

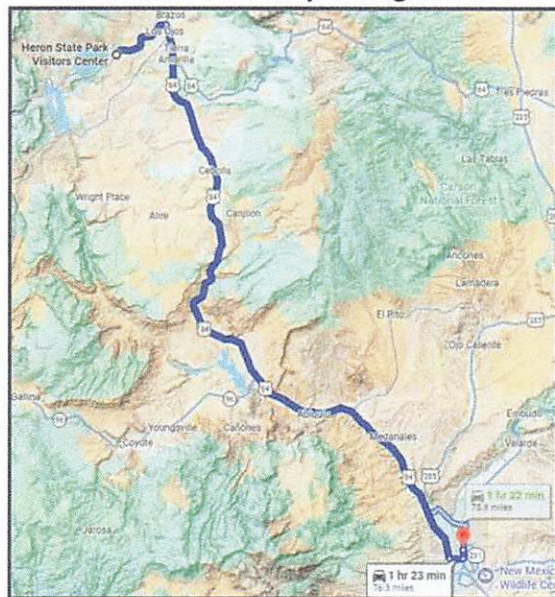
Directions

Azotea Tunnel Outlet to Heron Lake



- Head North on Azotea Tunnel Rd for 2 miles
- Take a right on US-64E/US-84E for 4.6 miles
- Turn right to stay on US-64E/US-84E for 10.5 miles
- Turn right onto NM-95 S for 6.3 miles
- Heron State Park Visitors Center will be on the right

Heron Lake to Ohkay Owingeh Lakes



- Exit the parking lot toward NM-95 N
- Turn left onto NM-95 N for 6.3 miles
- Turn right onto US-64 E/US-84 E
- Continue on US-84 for 67.7 miles
- Turn left onto Fairview Ln for 1.3 miles
- Turn left onto N Riverside Dr and continue for 0.9 miles
- Turn left and the destination will be on the left



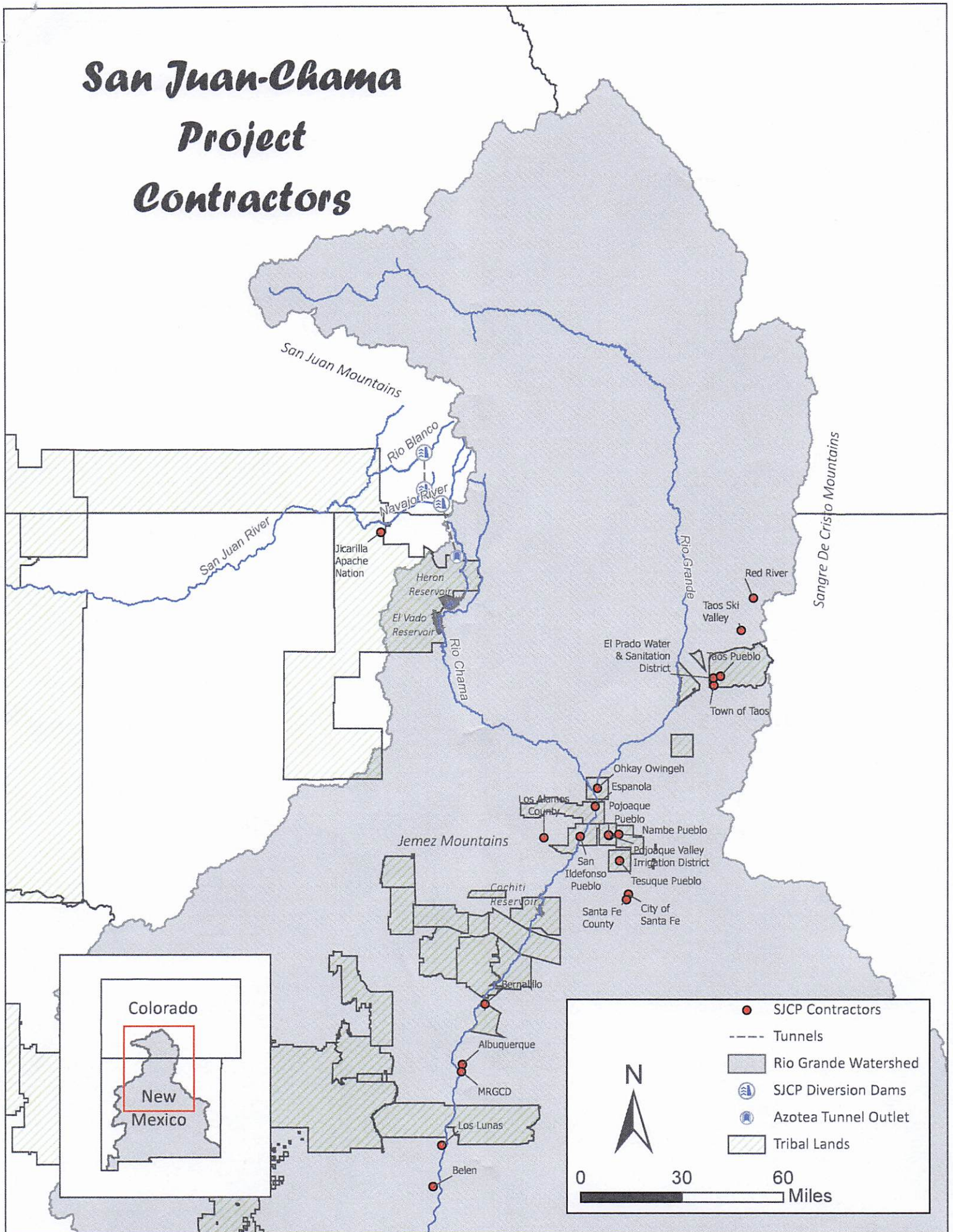
Albuquerque-Bernalillo County
Water Utility Authority,
Fiscal Agent

PO Box 568
ABQ, NM 87103

City of Belen
Town of Bernalillo
El Prado Water
& Sanitation District
Village of Los Lunas
Middle Rio Grande
Conservancy District

Ohkay Owingeh
Pojoaque Valley
Irrigation District
City of Santa Fe
Town of Taos
Village of Taos
Ski Valley

San Juan-Chama Project Contractors





— BUREAU OF —
RECLAMATION



San Juan – Chama Project Fire Planning

Location: San Juan–Chama Project headwaters in southern Colorado

Lead partners: The Nature Conservancy and the U.S. Bureau of Reclamation

Funding: \$341,738

Project start: 2025

Focus: Reduce wildfire risk and protect critical SJCP water supply

Background:

The San Juan–Chama Project moves water from three Colorado headwater basins—the Navajo River, Little Navajo River, and Rio Blanco—to the Rio Grande Basin to provide water to various Contractors in New Mexico. Wildfire poses a significant risk to the headwater forests that make up these basins. A severe fire could damage water infrastructure, reduce water supplies, and cause flooding, erosion, and debris flows that could disrupt the SJCP for years. This planning project's goal is to prepare now, before a major fire occurs.

Planning Project Details:

This planning initiative has brought together water managers, fire agencies, conservation partners, and landowners to develop a three-pronged wildfire plan. A Quantitative Wildfire Risk Assessment was performed to identify the threats and benefits of fire on the landscape, and three working groups were created to tackle the three pieces of the plan: pre-fire mitigation, immediate fire response, and post-fire rehabilitation.

1. Pre-Fire Mitigation

Working to identify:

- Where wildfire risk is highest
- Where forest and watershed treatments are most needed
- What treatments should be prioritized
- What those treatments may cost

More than \$40 million in risk-reduction treatments have been identified as needed, making this planning an important step toward securing future implementation funding.

2. Immediate Fire Response

Partners are developing a coordinated approach for responding when a fire starts.

This includes:

- Identifying roles and responsibilities
- Pre-positioning resources
- Improving communication and contact information
- Planning for difficult fire conditions

The goal is to help agencies act quickly and work together during the critical early stages of a fire.

3. Post-Fire Rehabilitation

The project also provides quantitative data on the impacts that can follow wildfire, including:

- Erosion and debris flows
- Damage to roads and water infrastructure
- Watershed and stream impacts
- Sediment and debris
- Restoration needs

Collaborative Partners

Wildfire does not stop at property or agency boundaries. The project brings together partners who manage forests, water, emergency response, and private lands. The work builds on years of forest and watershed restoration already underway in the region. Partners have completed treatments, but previously lacked one coordinated plan covering pre-fire mitigation, fire response, and post-fire recovery.

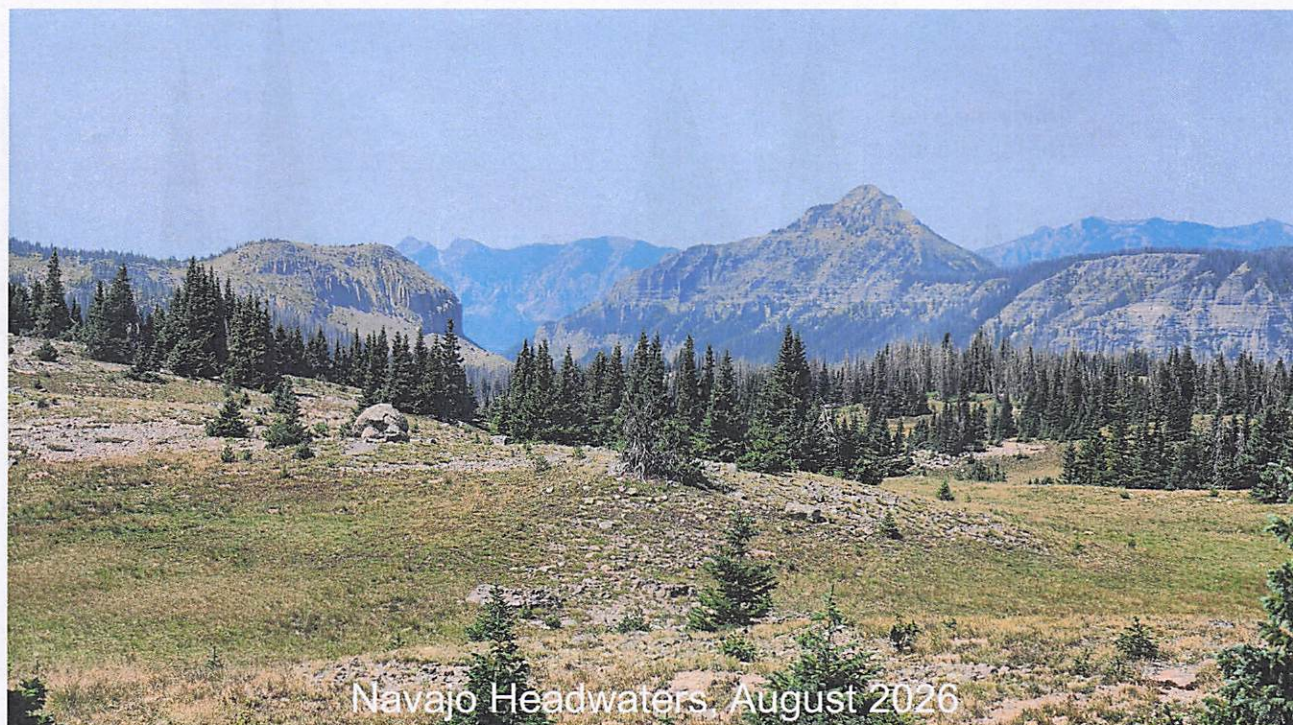
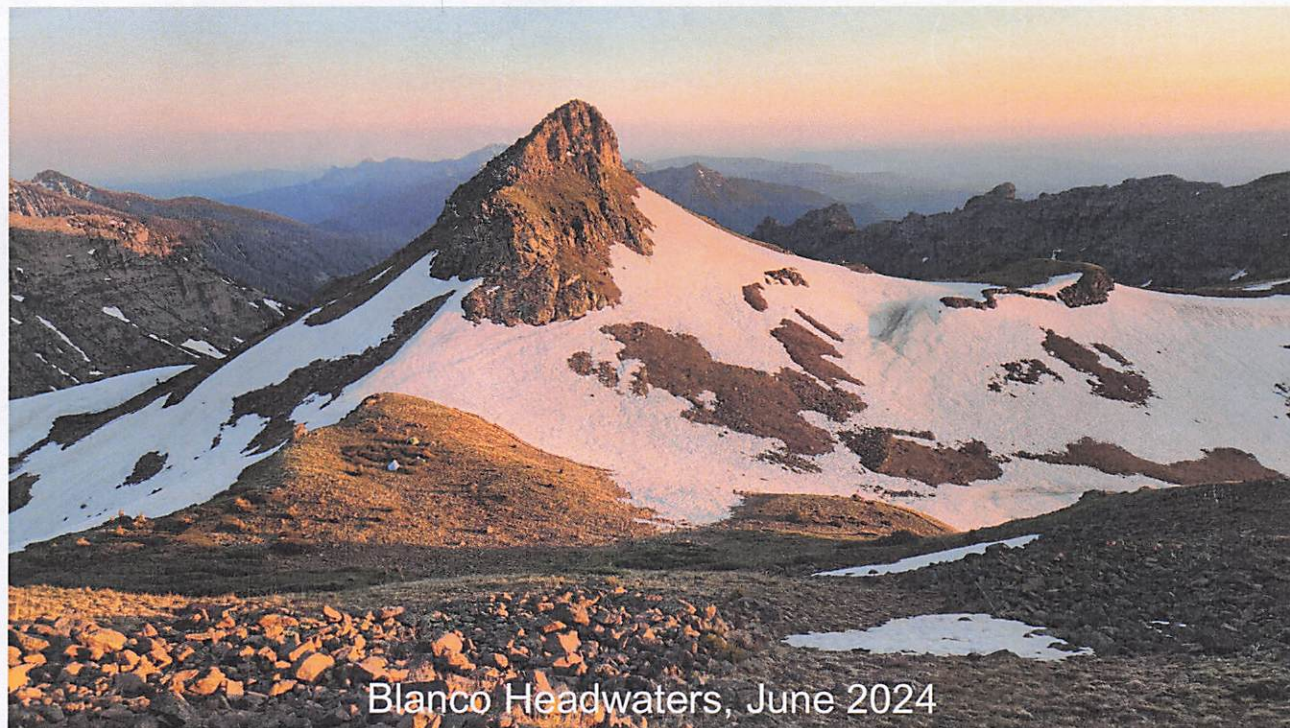
Anticipated Results

- Wildfire risk reduction: Identify and prioritize the most important mitigation projects.
- Water supply protection: Reduce the potential for wildfire to damage the San Juan–Chama Project and its source watersheds.
- Emergency response improvement: Ensure agencies know what to do and who to contact when a fire starts. Emphasize criticality of SJCP to local emergency response agencies.
- Post-fire recovery preparedness: Prepare for erosion, debris flows, infrastructure damage, and watershed restoration. Identify wetland restoration projects as opportunities to reduce impacts from post-fire events.
- Funding identification: Target funding opportunities for future implementation work.

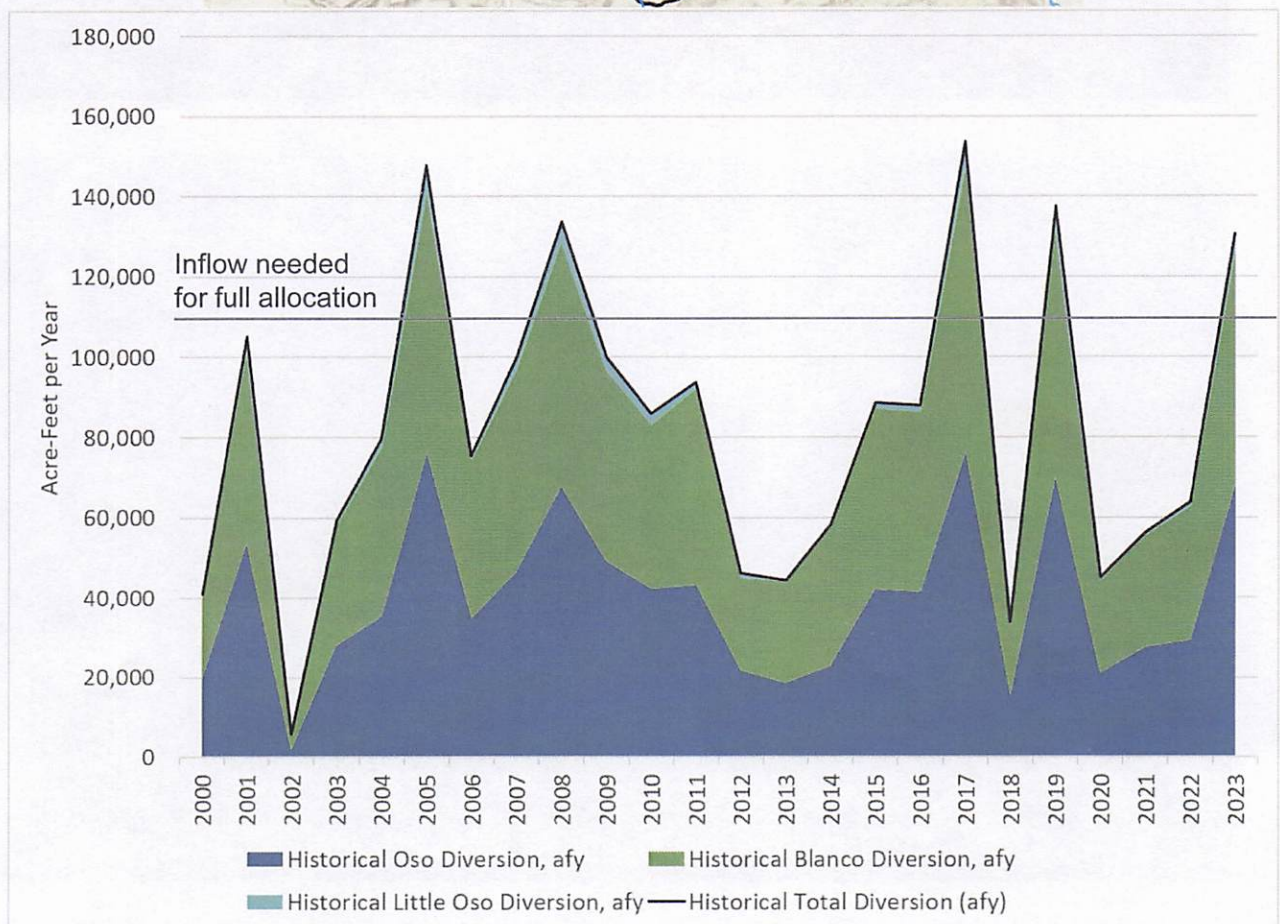
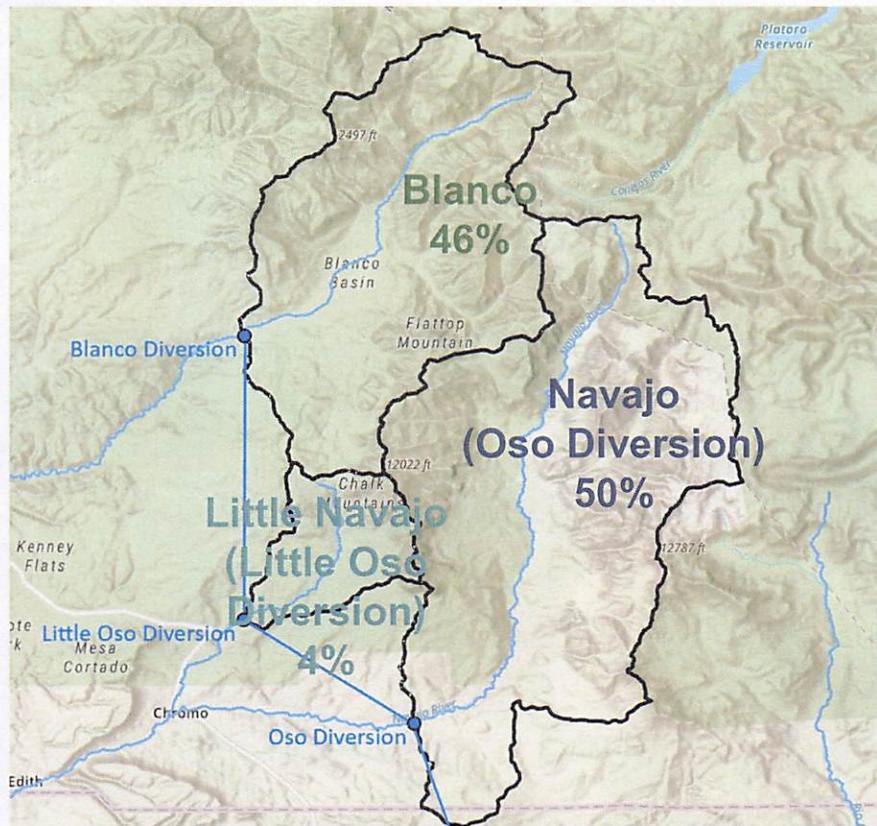
San Juan-Chama Project Hydrology



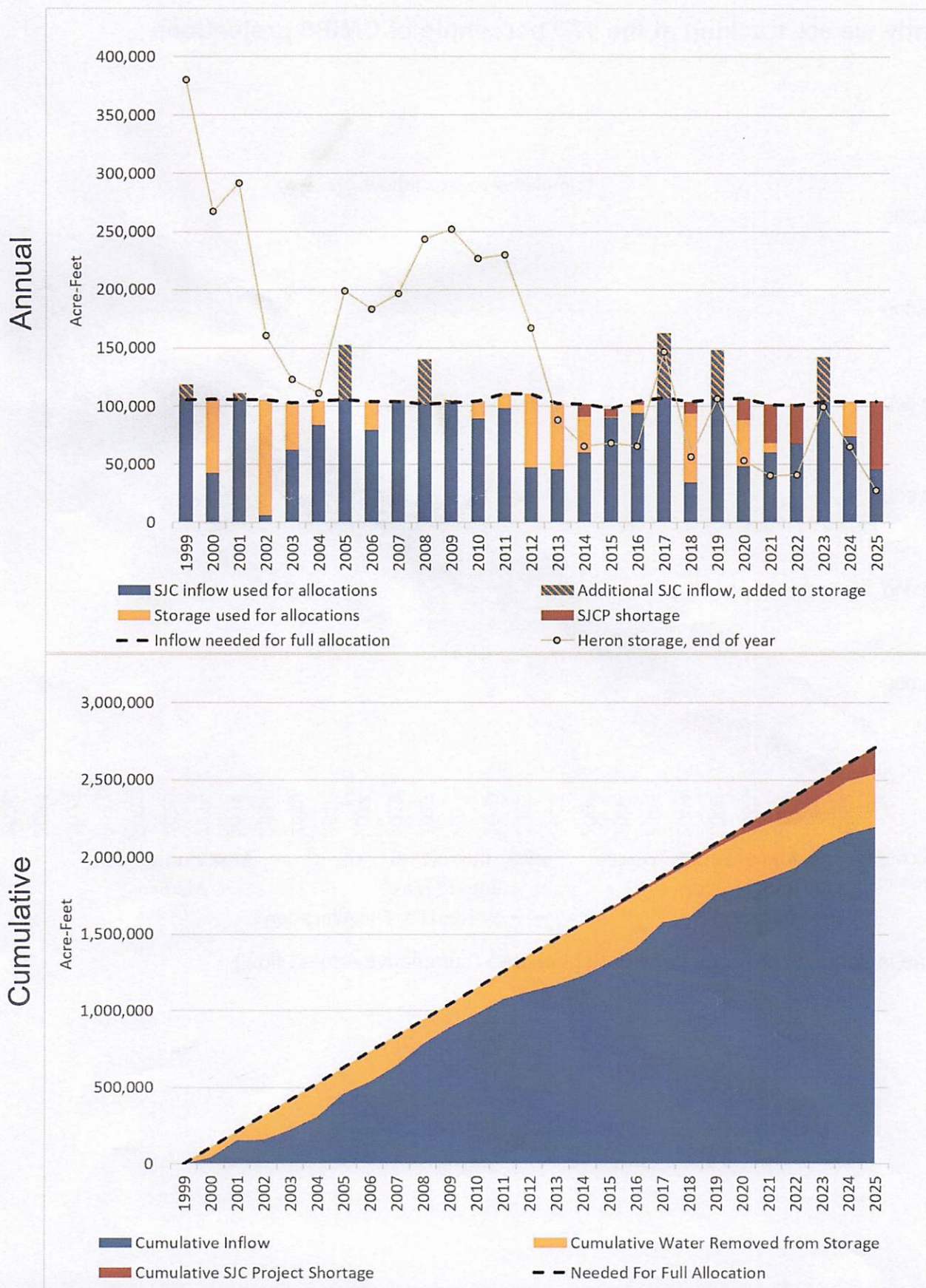
San Juan-Chama Project Contractors Association Field Trip, August 2026



Azotea Source of Water, by Tributary

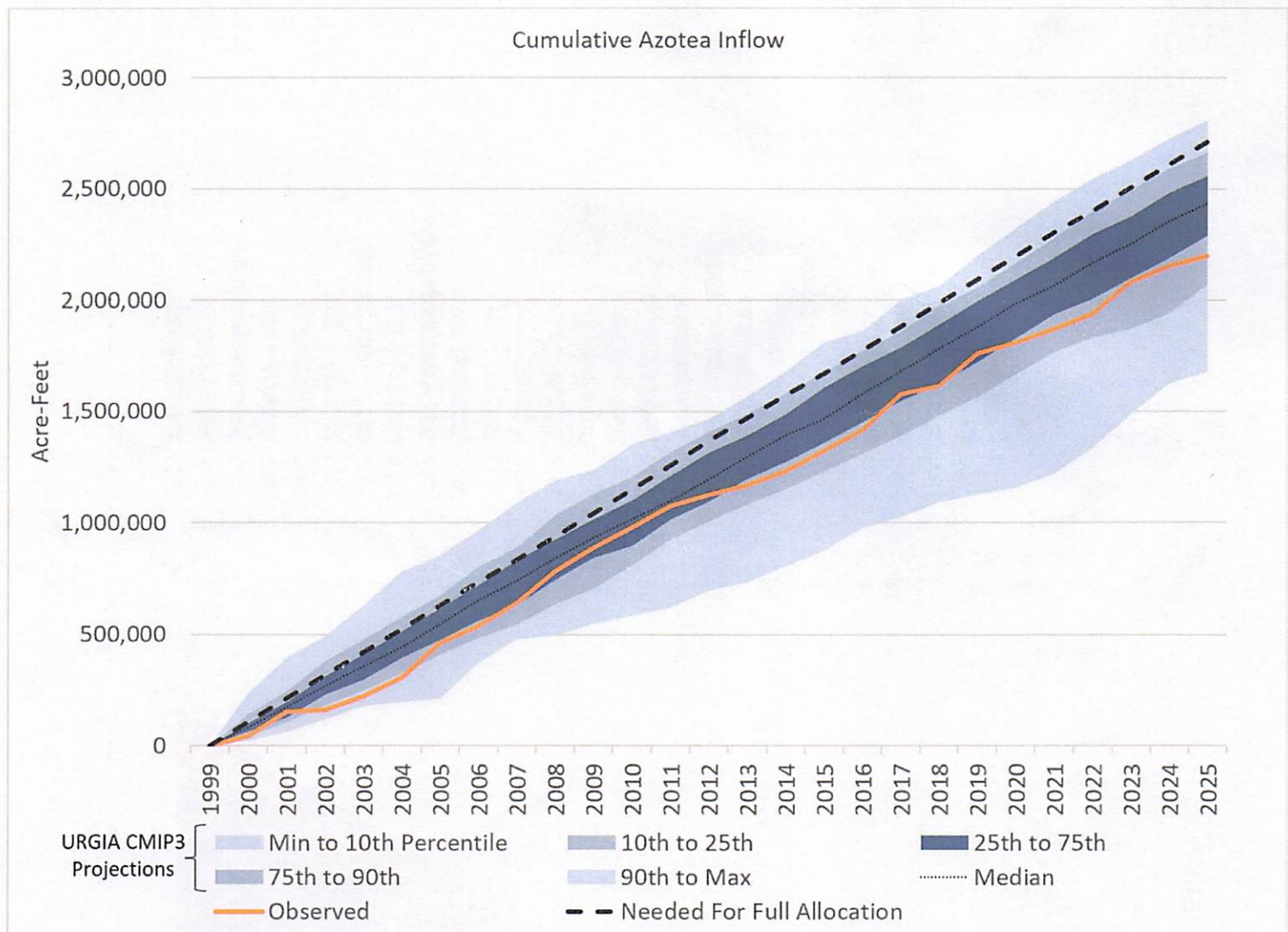


Recent San Juan-Chama Diversions and Allocations



How are our most recent planning projections holding up?

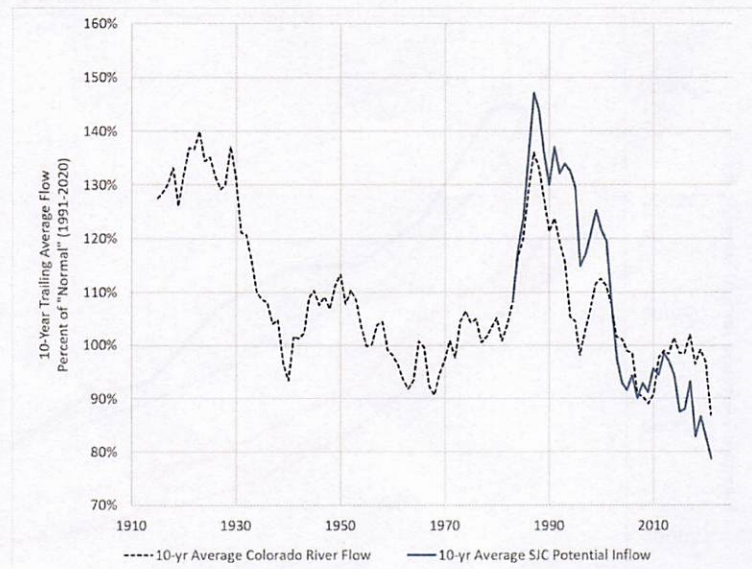
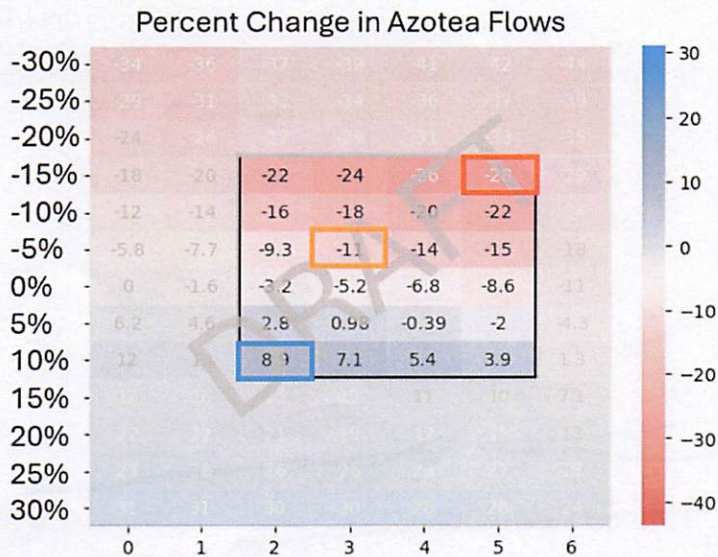
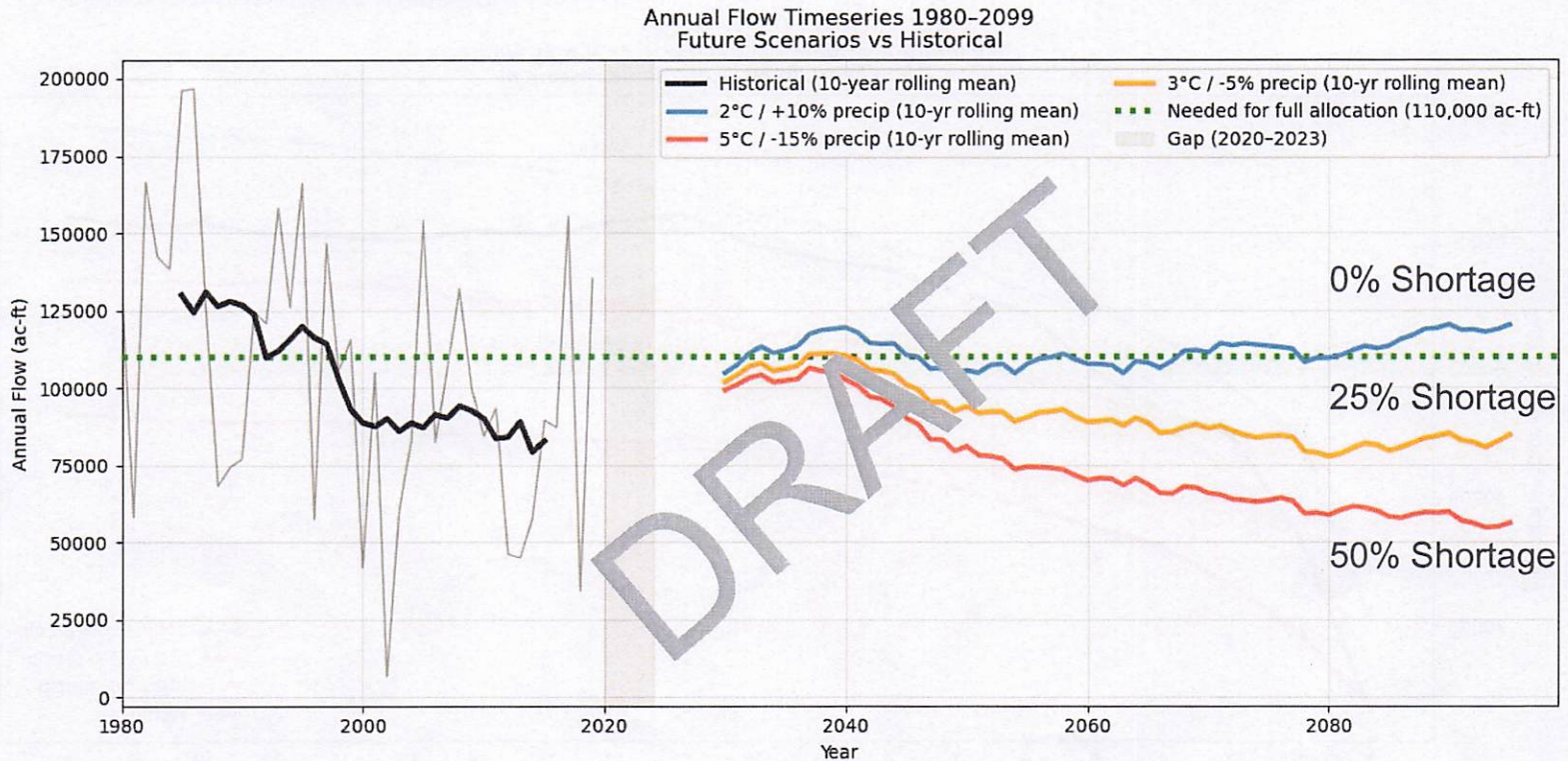
Currently we are tracking at the 17th percentile of CMIP3 projections



Orange line is same as previous page dark blue area (cumulative Azotea flow)

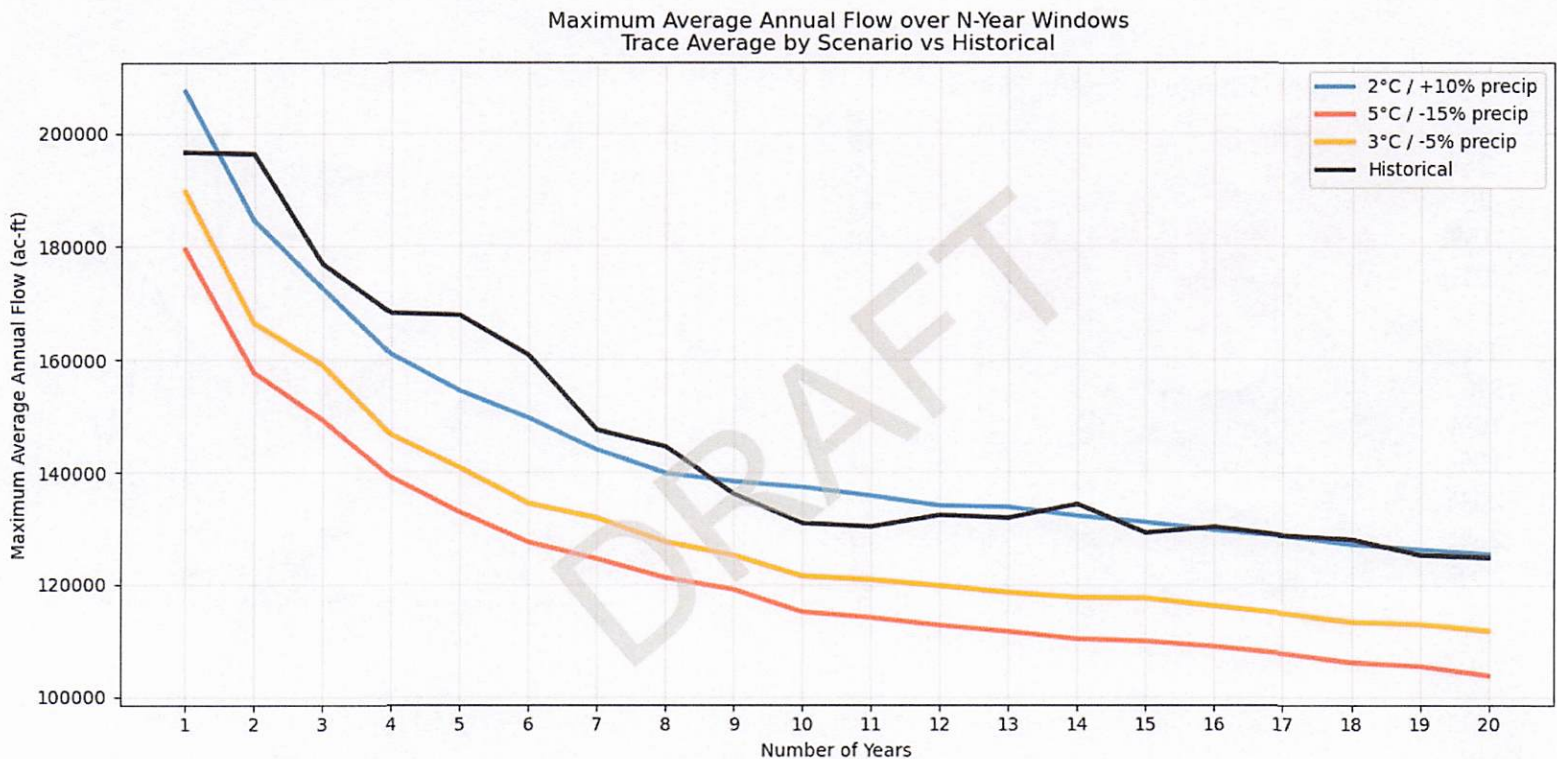
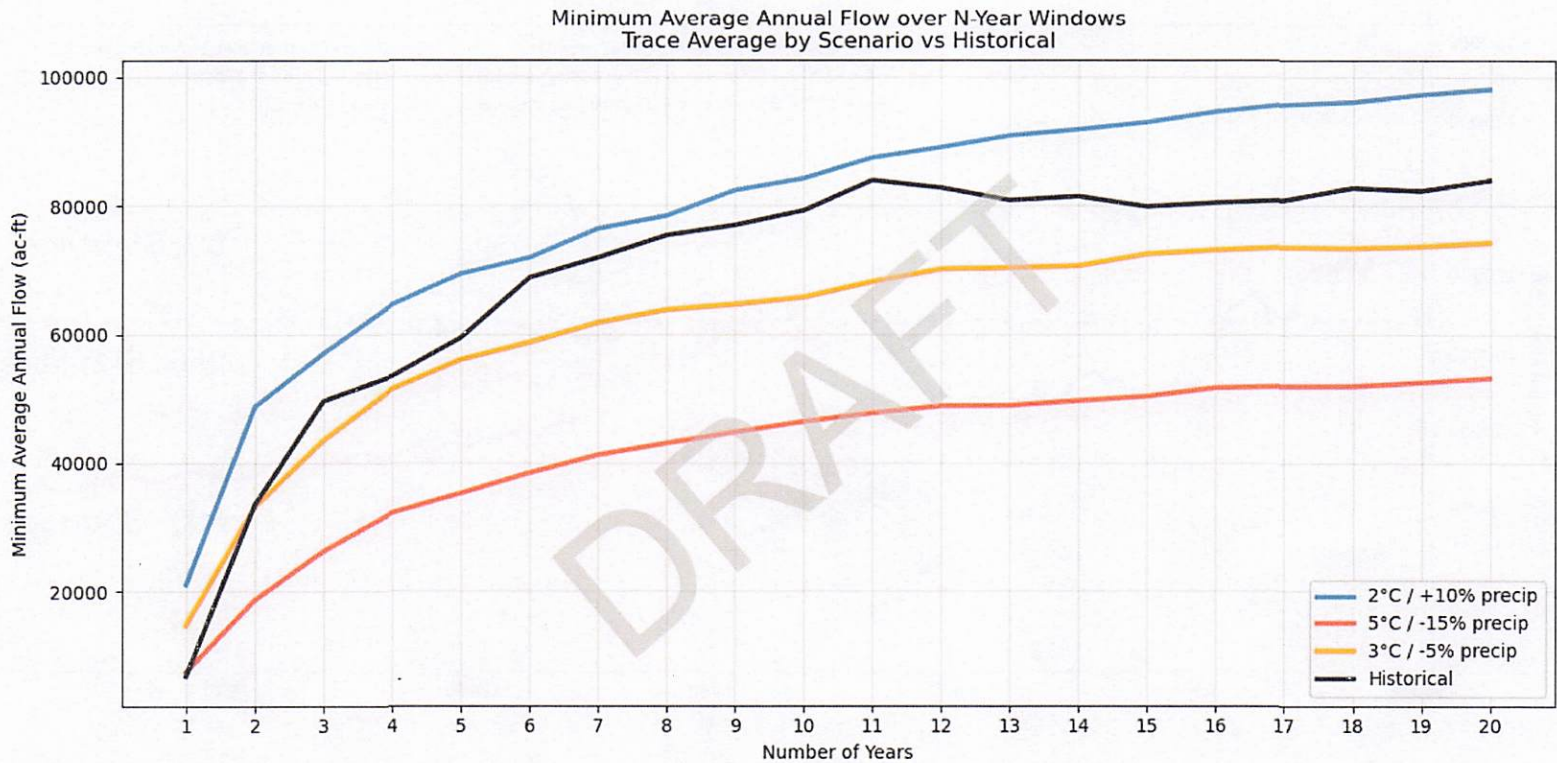
Current projections and planning ranges

What are the bounds we are considering given the wide range of potential scenarios?



Climate Hydrology Modeling as part of RGBS

A key component of our focus is comparing projections to historical wet and dry periods of different lengths.



SJC Diversion Efficiency

What are the limits on diversions?

- Minimum bypass requirements
 - Downstream flow first priority
 - Enforced daily
 - Rates vary by month

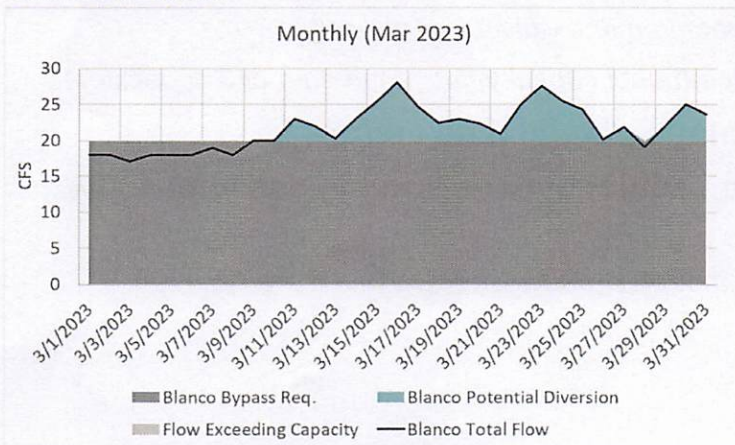
	BYPASS FLOW (cfs)		
Month	Blanco	Oso	Little Oso
Jan	15	30	4
Feb	15	34	4
Mar	20	37	4
Apr	20	37	4
May	40	88	27
Jun	20	55	27
Jul	20	55	27
Aug	20	55	27
Sep	20	55	27
Oct	20	37	4
Nov	20	37	4
Dec	15	37	4

- Diversion and tunnel capacities

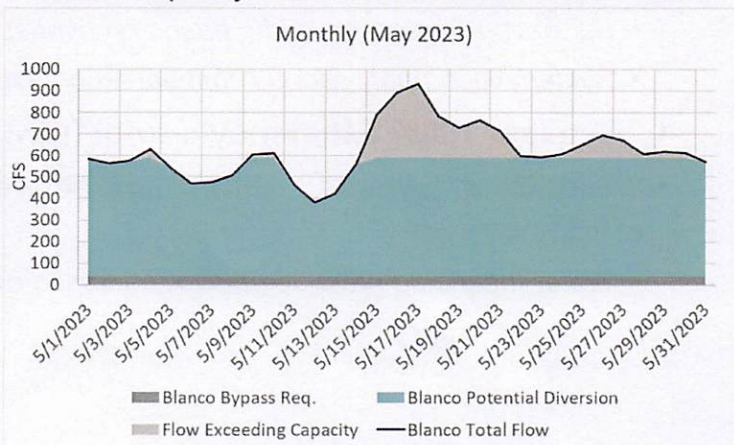
Max Diversion (capacity), cfs			
Blanco	Oso	Little Oso	Azotea
550	650	150	950

- Examples, “potential diversion”

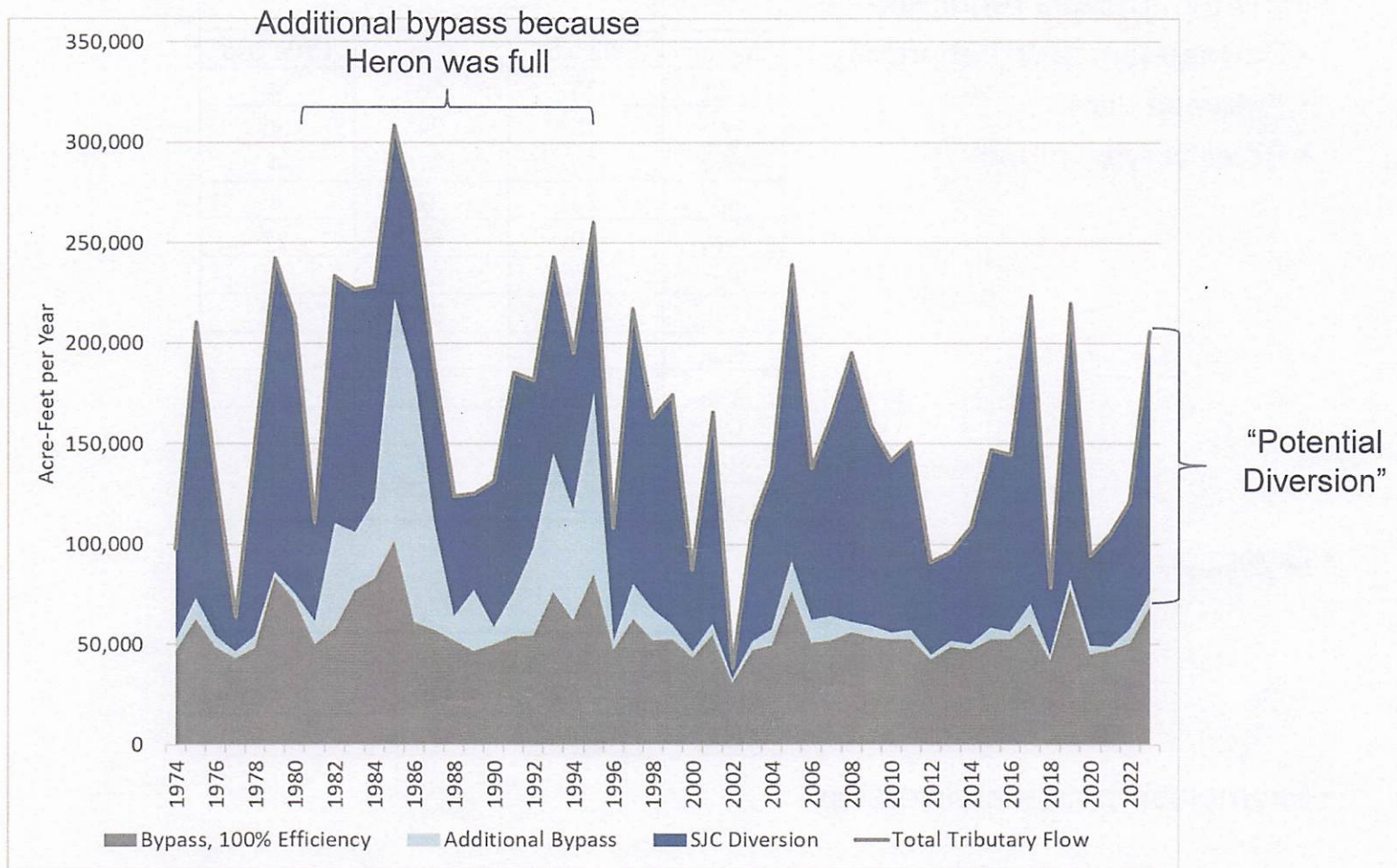
Bottom end limit: bypass requirement for Blanco in March = 20 cfs, anything above that can be diverted.



Top end limit: cannot exceed diversion capacity.
Note that sum of diversion capacities is greater than Azotea capacity, which can then become the limit



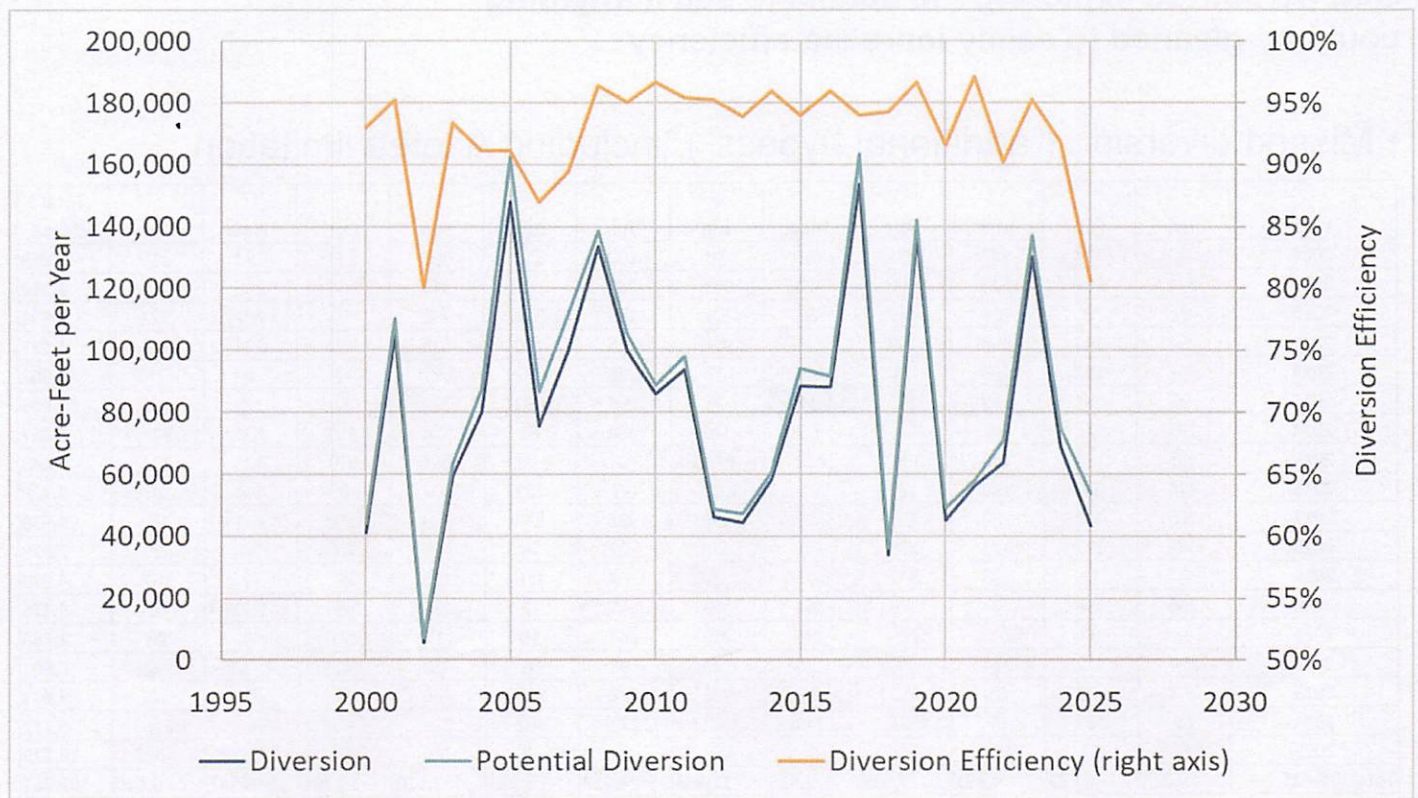
Historical Tributary Flows, Apportioned to SJC and Bypass



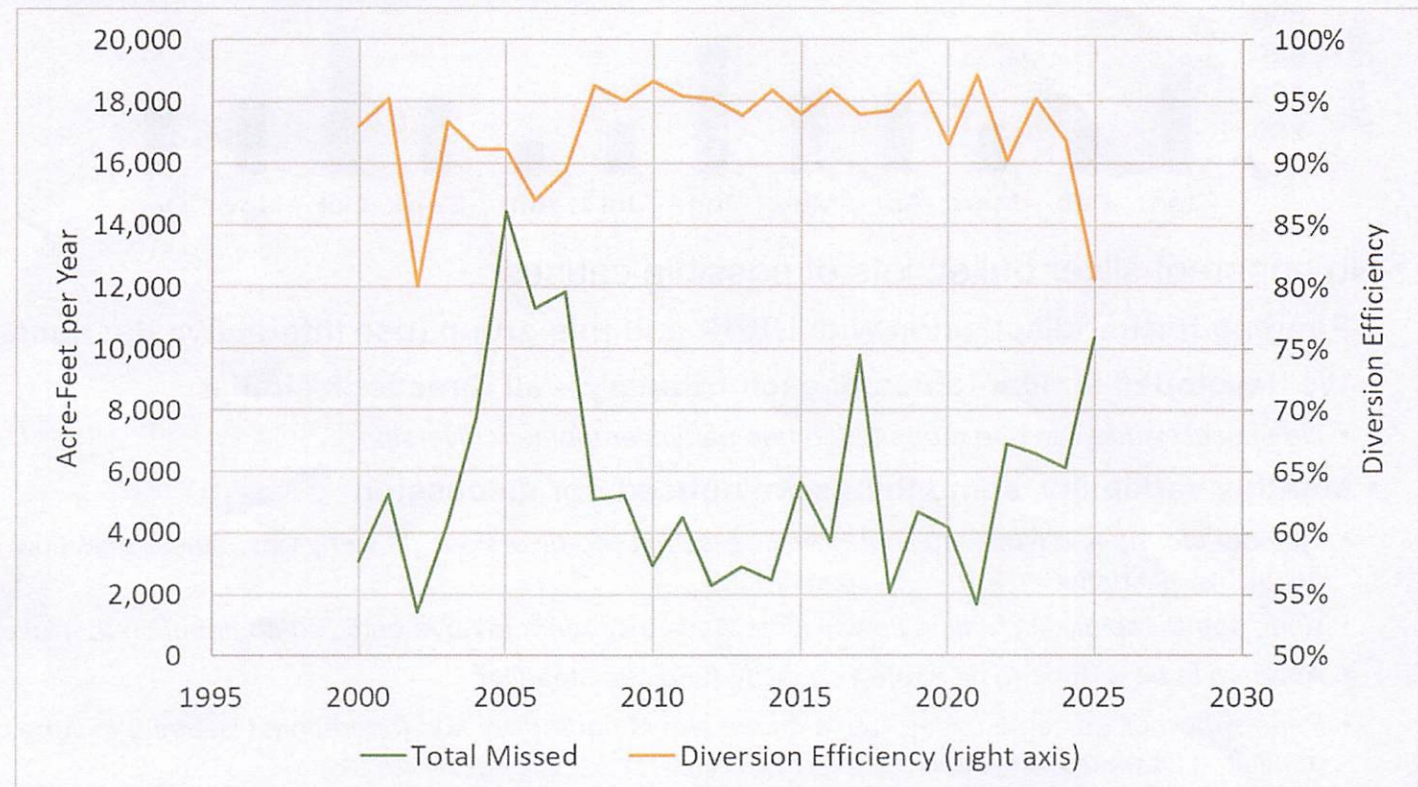
• Definitions

- **"Potential Diversion":** calculated as per previous page, rolled up annually
 - For each tributary, calculate based on bypass requirement + diversion capacity
 - System-wide apply second limit based on Azotea tunnel capacity (less than sum of 3 capacities)
- **"Bypass, 100% Efficiency":** total flow minus potential diversion
- **"Additional Bypass":** difference between actual bypass and bypass with 100% efficiency
 - Water that could have been diverted based on the rules, but wasn't

Diversion Efficiency (actual diversion / potential diversion)



Missed Diversion Volumes



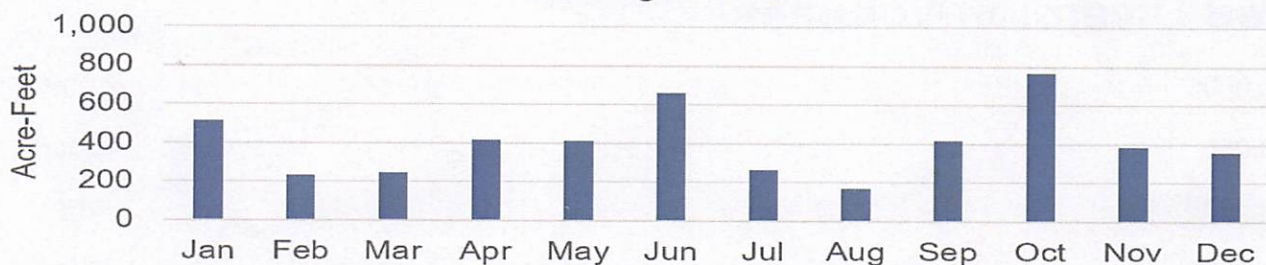
95 percent / ~4,000 AFY missed is impressive!

But, we started exploring the details to see if anything could be gleaned to easily increase efficiency

- Missed diversion (“additional bypass”), including Azotea limitation

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Missed
2008	1,107	774	627	351	250	30	109	356	396	637	182	250	5,069
2009	831	462	523	696	424	716	260	5	312	664	296	22	5,212
2010	97	6	228	419	333	222	133	372	291	425	202	222	2,951
2011	294	147	398	159	549	420	125	110	615	522	224	964	4,527
2012	958	198	263	74	-46	27	286	56	487	-2	0	0	2,302
2013	50	10	198	197	-245	76	294	692	735	87	111	700	2,905
2014	173	93	79	195	85	111	288	69	574	310	206	272	2,457
2015	555	133	196	89	422	2,193	-54	-25	884	629	401	224	5,648
2016	444	630	162	123	21	1,029	-22	203	107	189	444	397	3,728
2017	750	462	139	463	1,111	950	381	234	999	3,312	932	98	9,830
2018	343	172	121	276	80	178	302	-8	-13	570	54	2	2,078
2019	0	12	198	872	633	2,306	264	116	113	20	-7	167	4,693
2020	206	158	36	540	161	313	1,451	-7	236	69	950	61	4,175
2021	36	87	205	629	18	212	184	16	-15	271	-4	26	1,665
2022	894	417	774	692	126	322	198	95	410	1,029	1,011	933	6,901
2023	367	228	85	653	3,160	960	278	390	426	48	0	10	6,603
2024	69	153	69	558	370	1,472	272	357	213	1,038	951	615	6,137
2025	2,062	88	191	548	-35	350	3	-8	748	3,961	993	1,477	10,379
Total '08-'25	9,235	4,229	4,491	7,535	7,416	11,888	4,752	3,025	7,520	13,781	6,947	6,440	87,261
Average '08-'25	513	235	250	419	412	660	264	168	418	766	386	358	

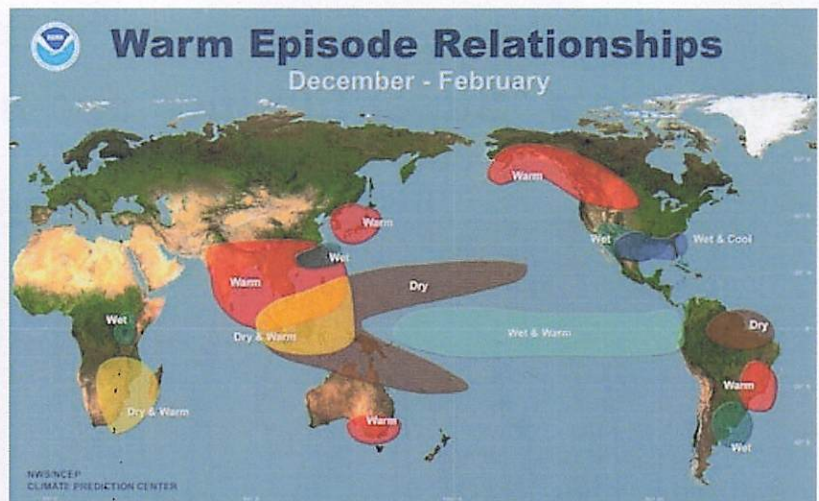
Average '08-'25



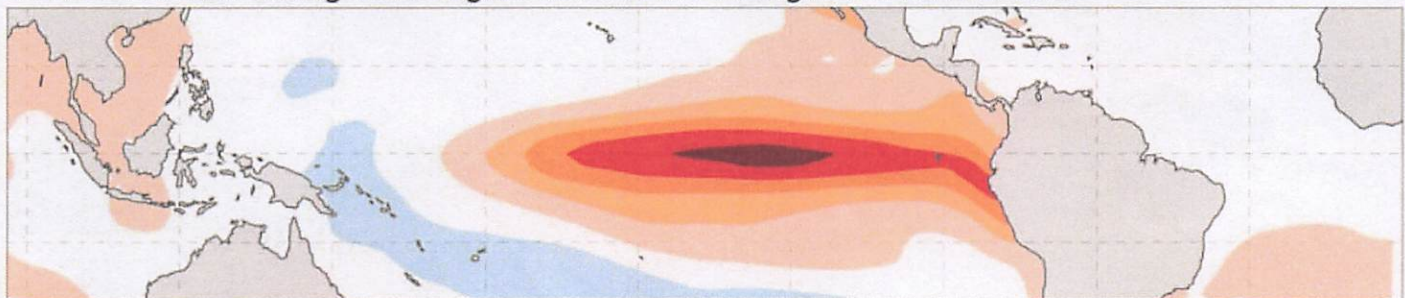
- No apparent silver bullet: lots of possible causes
 - Pending further discussion with USBR and this group (use interactive dashboard)
 - We developed similar tables of each tributary – all three look similar
 - No spatial trend / can't be attributed to one particular tributary diversion
 - Monthly variability, some things we noticed, for discussion
 - October storms and Nov-Dec shutdowns cause missed diversions (in wet years; other years flow is below bypass requirement)
 - April: due to rapidly fluctuating flows? Little Navajo appears to have outsized contribution to missed
 - Appears to be difficult to hit Azotea capacity (950 cfs) steadily?
 - Peak snowmelt: in some cases, just a day or two of underdiversion (operational issues?) in June can result in a lot of missed water

What is El Niño

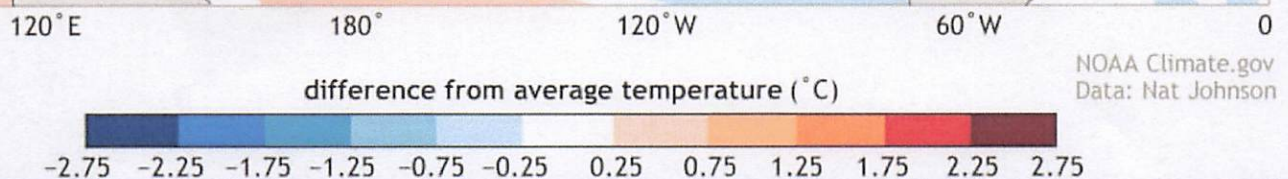
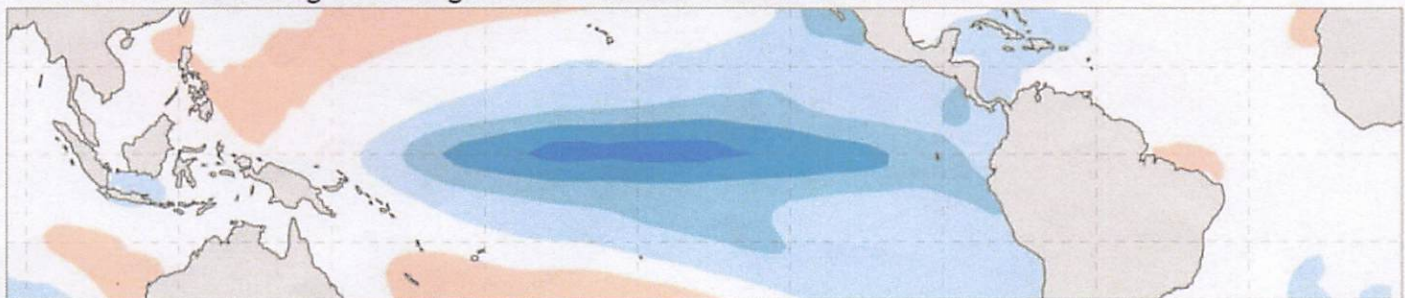
El Niño is the warmer half of a climate pattern that can affect weather worldwide. It is measured by examining the ocean temperature anomalies in the Pacific.



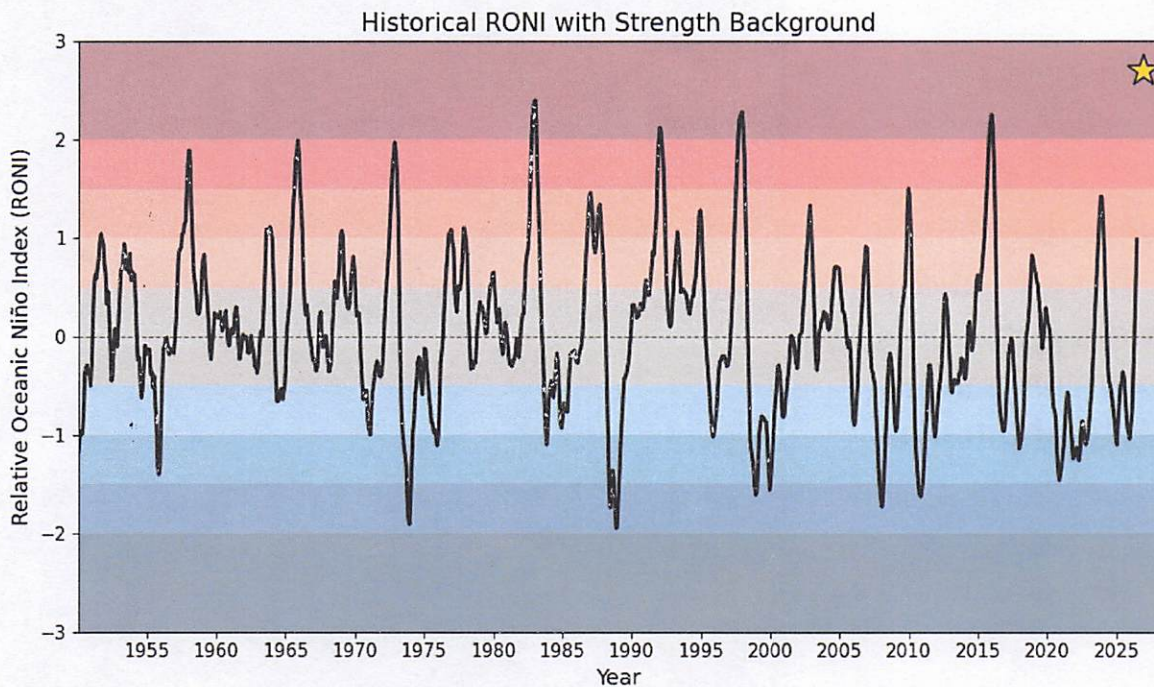
Warm anomalies during 10 strongest El Niños are stronger and farther east



Cool anomalies during 10 strongest La Niñas are weaker and farther west



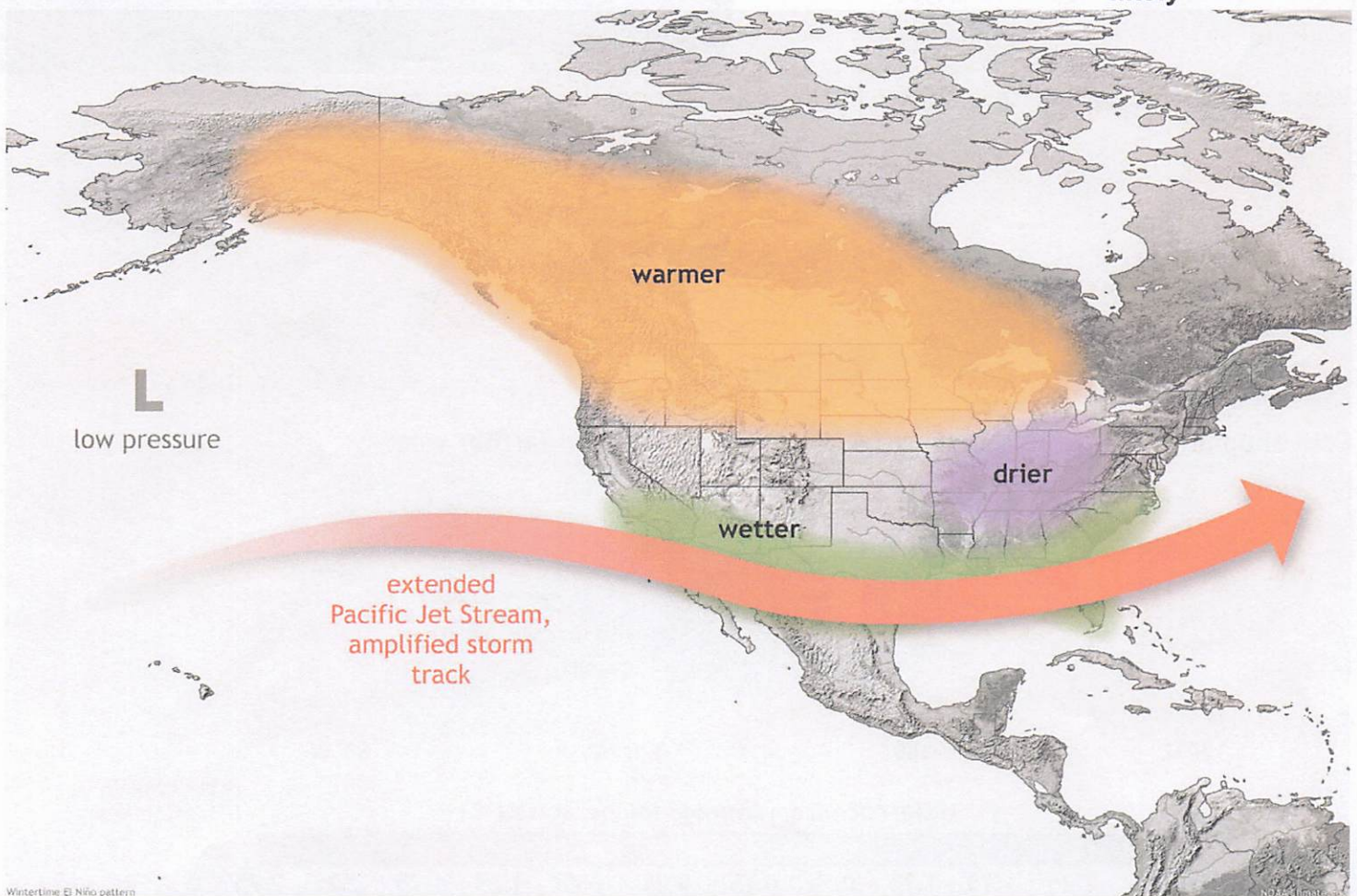
What is a "Super El Niño" and how does it affect us?



Current RONI forecast peak, strongest since at least 1950

Strength	
Very Strong El Niño	
Strong El Niño	
Moderate El Niño	
Weak El Niño	
Neutral	
Weak La Niña	
Moderate La Niña	
Strong La Niña	
Very Strong La Niña	

Note: Stronger El Niño's do not always correspond to stronger impacts, they just make the impacts more likely



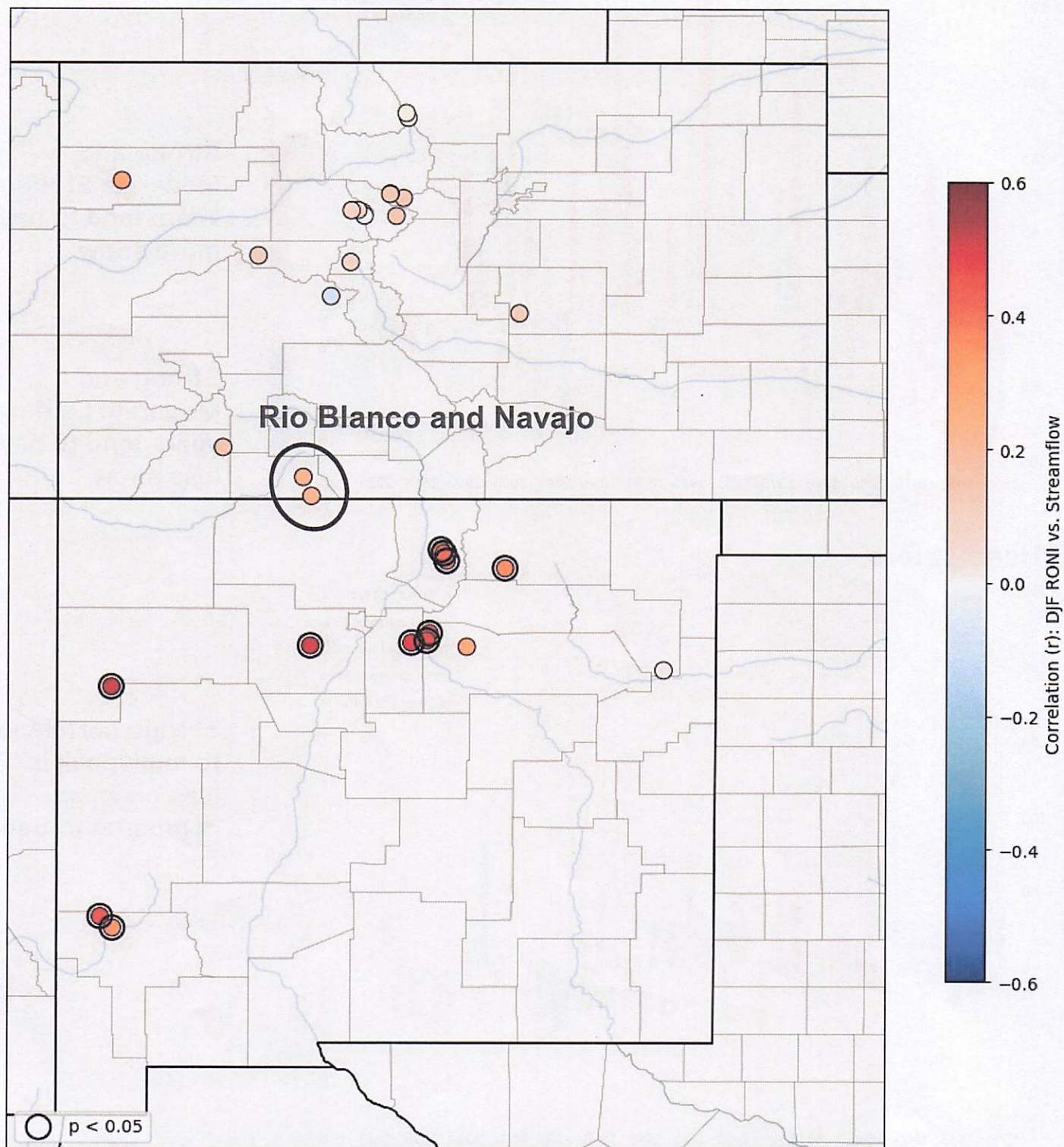
Wintertime El Niño pattern



Correlation of wintertime RONI and Streamflow

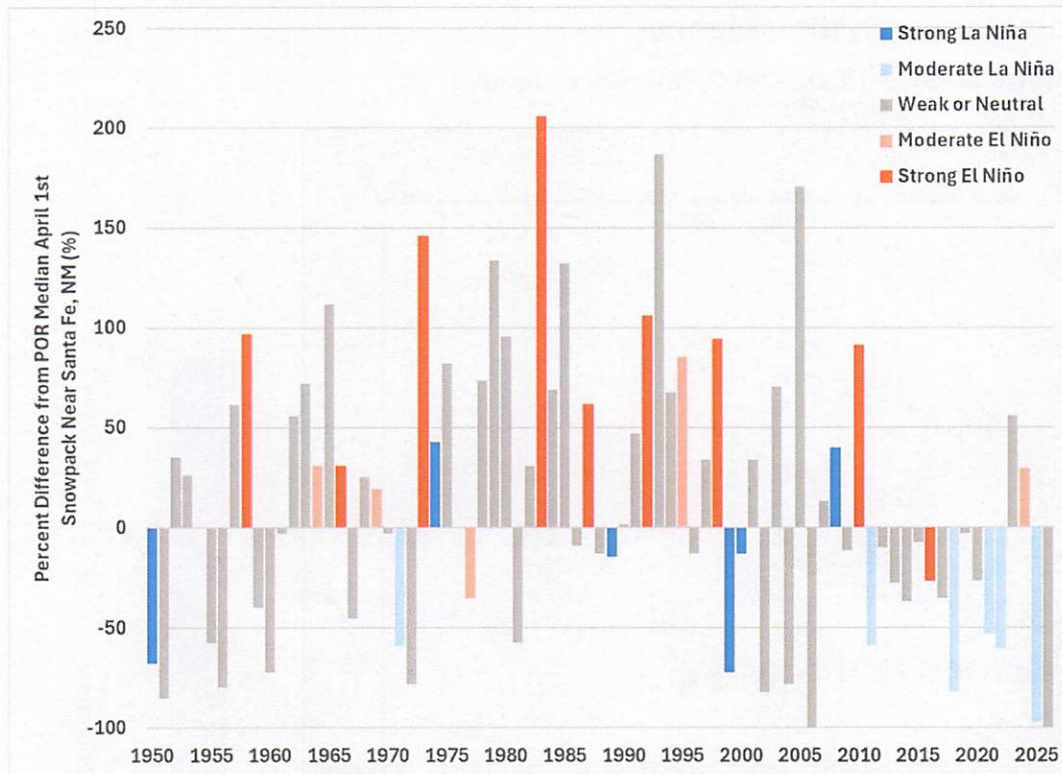
Statistically significant moderate to strong correlations are limited to New Mexico. Colorado shows very little correlation, which is consistent with the science.

ENSO-Streamflow Correlation at HCDN-2009 Reference Gauges
Colorado / New Mexico



Correlation of wintertime RONI and Snowpack

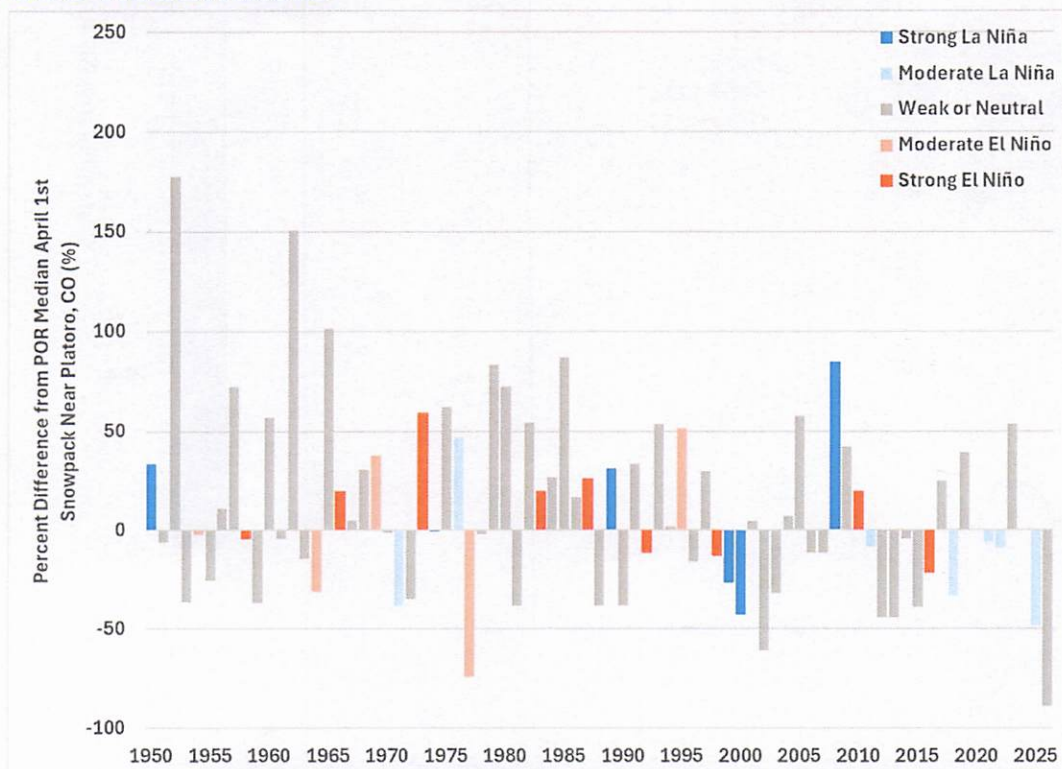
Santa Fe Watershed



↑ Strong and Moderate El Niño years tend to have more snow

↓ Strong and Moderate La Niña years tend to have less snow

SJC Headwaters



El Niño correlation to snowpack is less clear, as compared to Santa Fe