



Solano Irrigation District

**2025 Water Allocations &
Long-Term Concerns**

February 5, 2025

First Off ...

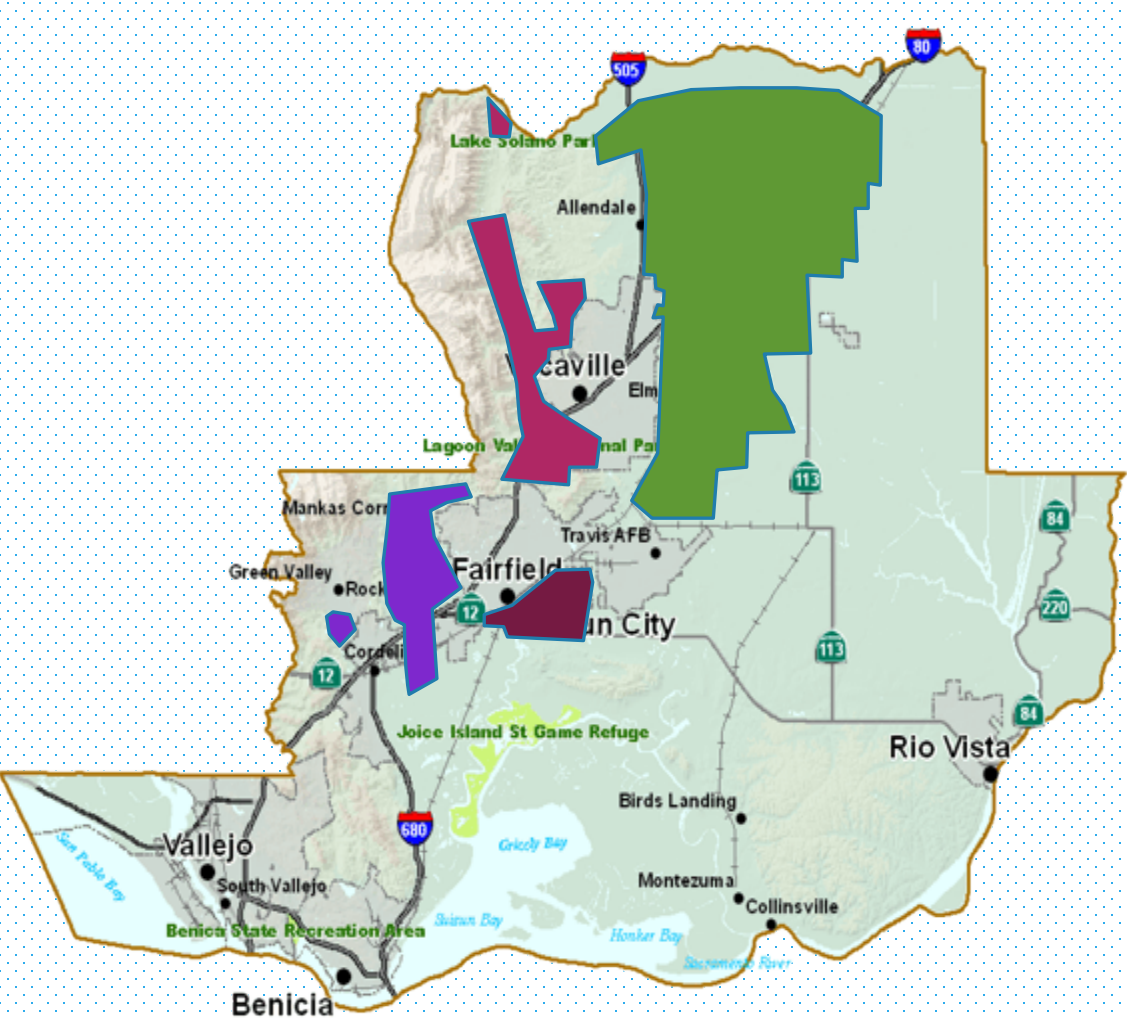
- As Vintners in Suisun Valley, **you're going to get all the water you need in 2025.**
- **But the future is less certain.**

Second ...

The Rest of the Presentation

- ✓ SID Overview
- ✓ Water Supply and Threats from the State
- ✓ Wrap Up with Great News!

We're the Solano Irrigation District



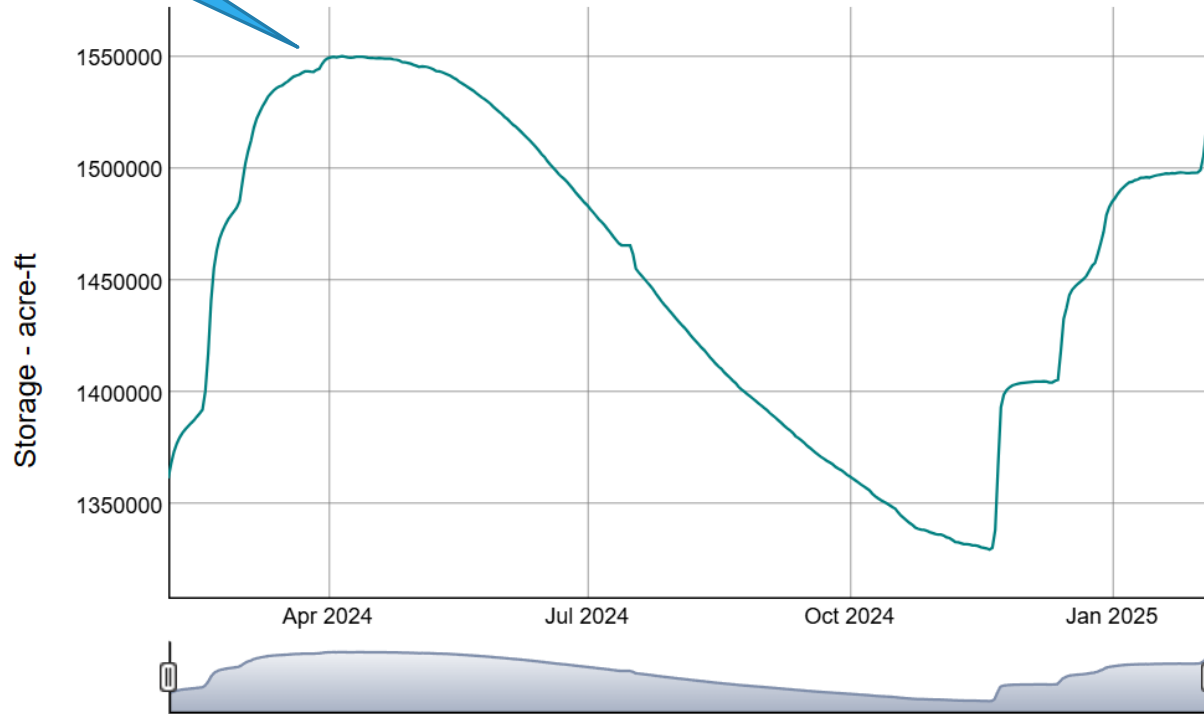
Surface Water

- Our supply is Lake Berryessa and its watershed
 - We call this “**The Solano Project**”.
- Built as a US Bureau of Reclamation project between 1953 and 1958.
- First delivered water in 1959.

1.55 MAF Max

Lake Berryessa - Storage - 1/2 Year
(1002.504)

— 1Lake Berryessa Storage



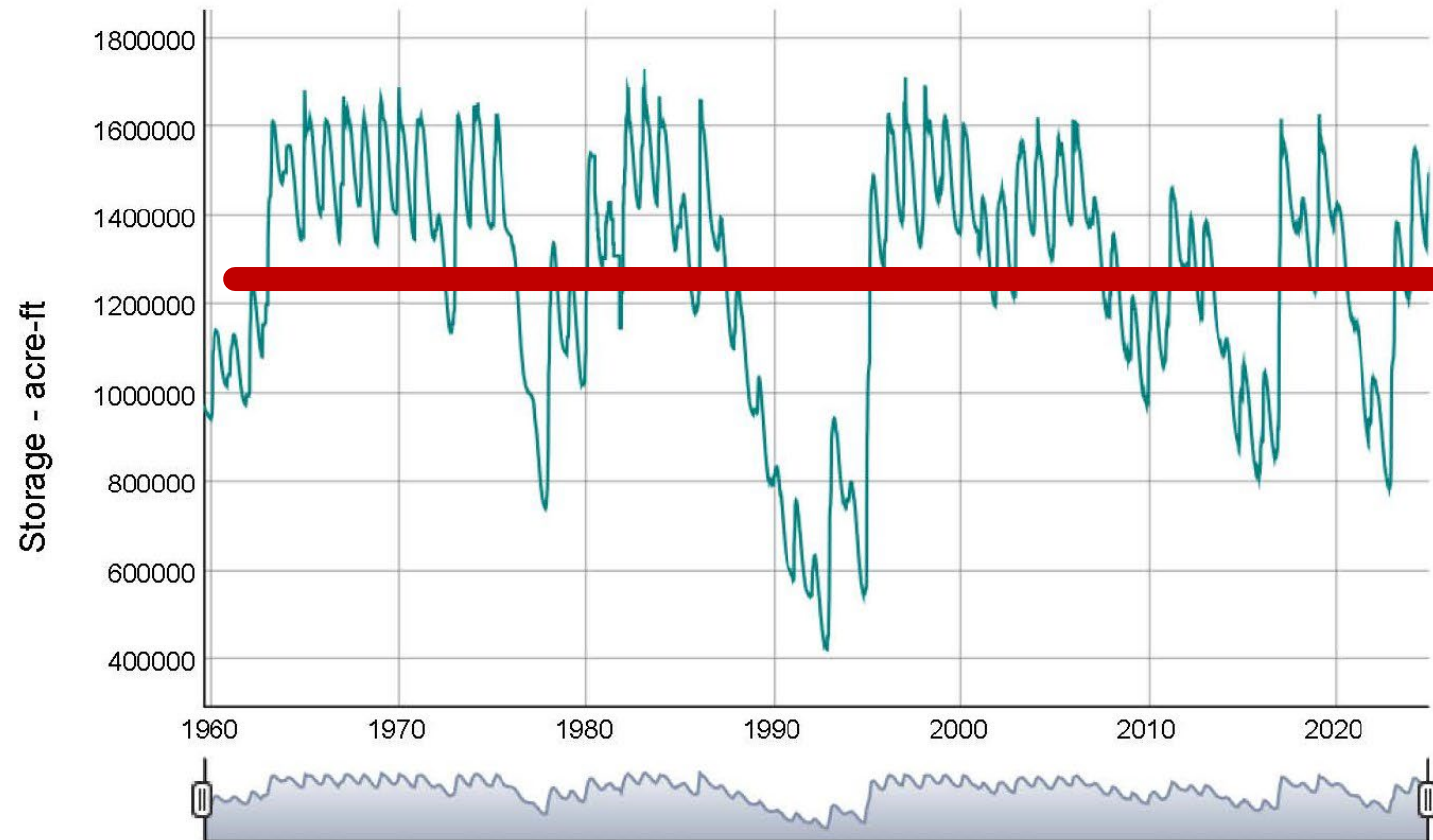
Lake Berryessa Today

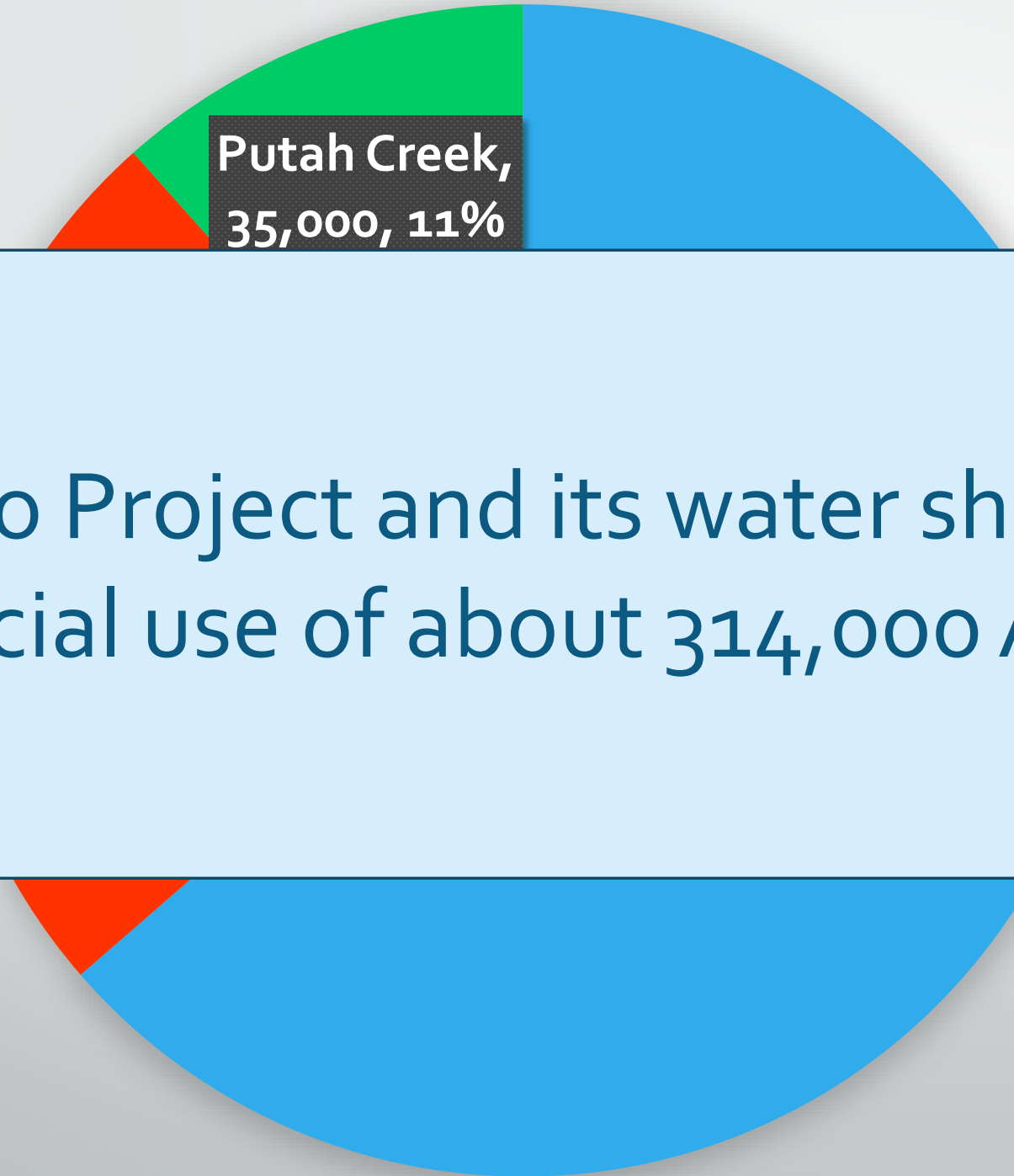
Yesterday at 1:00
pm it was 0.9' from
Spilling.

Reliability of Lake Berryessa

Lake Berryessa - Historic Storage

— 1Berryessa Storage

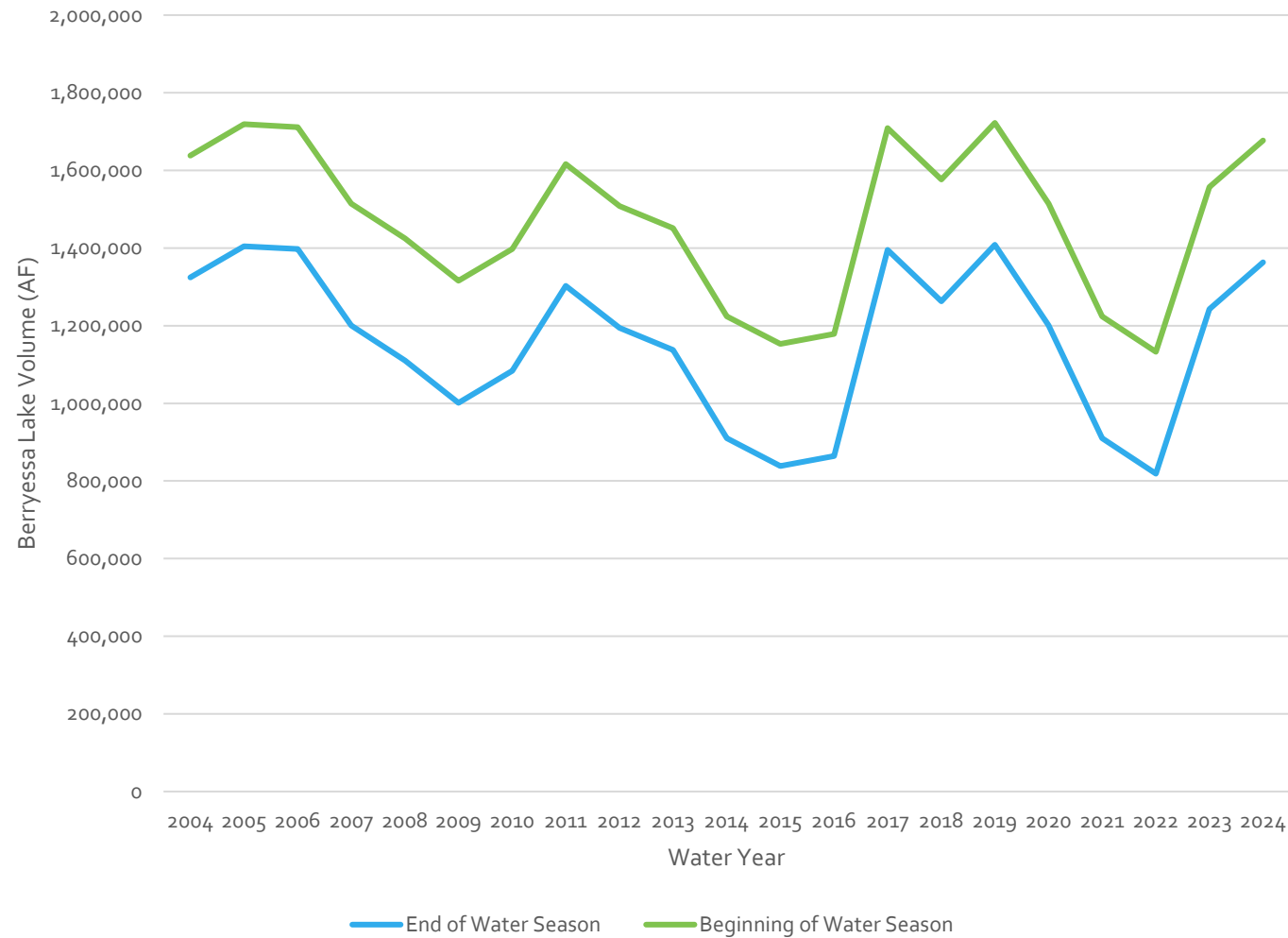




Putah Creek,
35,000, 11%

The Solano Project and its water shed allows for the beneficial use of about 314,000 AF each year.

Lake Berryessa Storage Volume Last 20 Years (AF)

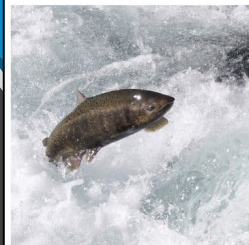


Lake
Berryessa
Lake Volume
Over the
Past 20-
Years Before
and After
Diversions



This Reliability Will Change Under the Draft Bay-Delta Plan

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DRAFT
Staff Report/Substitute E
Potential Updates to the
San Francisco Bay/Sacramento
River and its
Delta

September 2023



State Water Resources Control Board

ATTACHMENT A

SUMMARY OF DRAFT SACRAMENTO/DELTA UPDATES TO THE
WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO
BAY/SACRAMENTO-SAN JOAQUIN DELTA WATERSHED

Format of Draft Potential Updates to the Bay-Delta Plan

State Water Board staff has released a complete draft of the potential updates to the Bay-Delta Plan, including substantive Sacramento/Delta updates and other minor updates and edits to improve clarity and readability. Due to the extent of the draft updates to the Bay-Delta Plan and reorganization of information, a redline version (e.g., underline and strikeout) is not provided. Instead, staff is providing this summary to explain the options being considered for updating the Bay-Delta Plan.

This document and the draft plan amendments refer to a “regulatory pathway” that describes a suite of potential numeric and narrative requirements for tributary inflows, cold-water habitat, Delta outflows, interior Delta flows, and monitoring. It is important to note, however, that any amendments adopted by the State Water Board, including amendments that incorporate VAs, would constitute regulatory requirements.

Regulatory pathway provisions and VA pathway provisions under consideration are presented in a single document. The draft updates to the Bay-Delta Plan include “notes to reader” that explain options that are under consideration or provide context for some of the potential draft changes. These notes are depicted in bracketed italics labeled “note to reader” throughout the document. Additionally, the draft updates to the Bay-Delta Plan include boxes with specific optional program of implementation text with an accompanying note to reader explaining the option. Some of these options are based on regulatory provisions developed by staff, while others are based on VA proposals. The notes to reader and boxes are intended to explain options and other issues under consideration in the draft on which the Board is seeking input. That input and other input received during the planning process will inform the specific changes to the plan that are brought to the Board for consideration at a future date.

Summary of Draft Updates

There are no substantive changes to the water quality objectives for the protection of municipal and industrial uses (Table 1) or agricultural uses (Table 2) or associated program of implementation provisions from the current (2018) version of the Bay-Delta Plan. There are also no substantive changes to the fish and wildlife objectives and associated program of implementation provisions from the current version of the

E. JOAQUIN ESQUIVEL, CHAIR | ERIC OPPENHEIMER, EXECUTIVE DIRECTOR

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Who is the SWRCB?



State Water Resources Control Board (SWRCB)

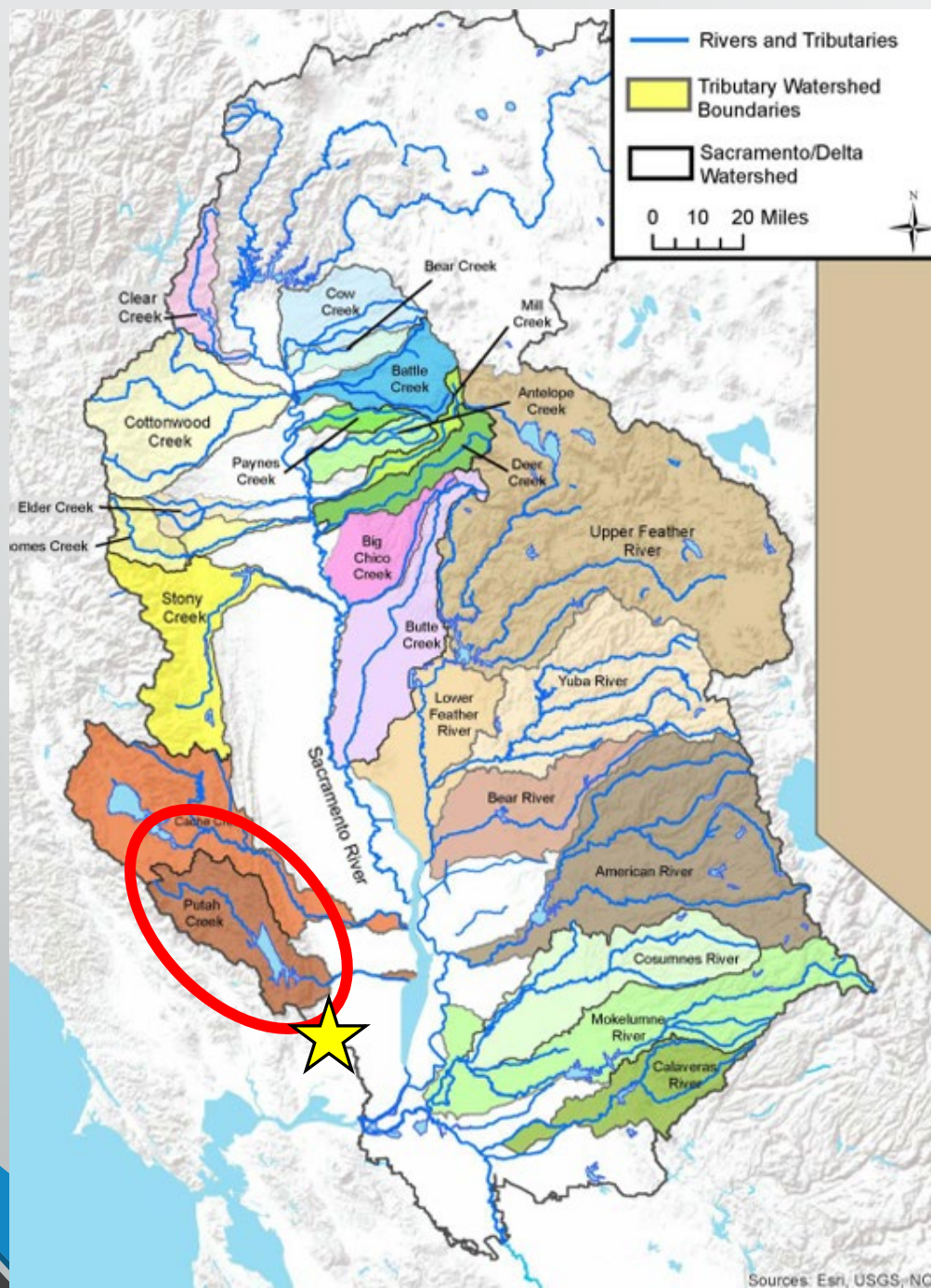
Protect Water Quality & Allocate Water Rights

Mission

The State Water Resources Control Board's mission is to **preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses**, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.

Bay Delta Plan

Protecting the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta) watershed and its many beneficial uses is one of the State Water Board's primary responsibilities and top priorities. **The State Water Board is responsible for adopting and updating the Bay-Delta Water Quality Control Plan (Bay-Delta Plan), which establishes water quality control measures and flow requirements needed to provide reasonable protection of beneficial uses in the watershed.**



Sac River Watersheds

- 24 Major Watersheds
- Putah Creek = 1%

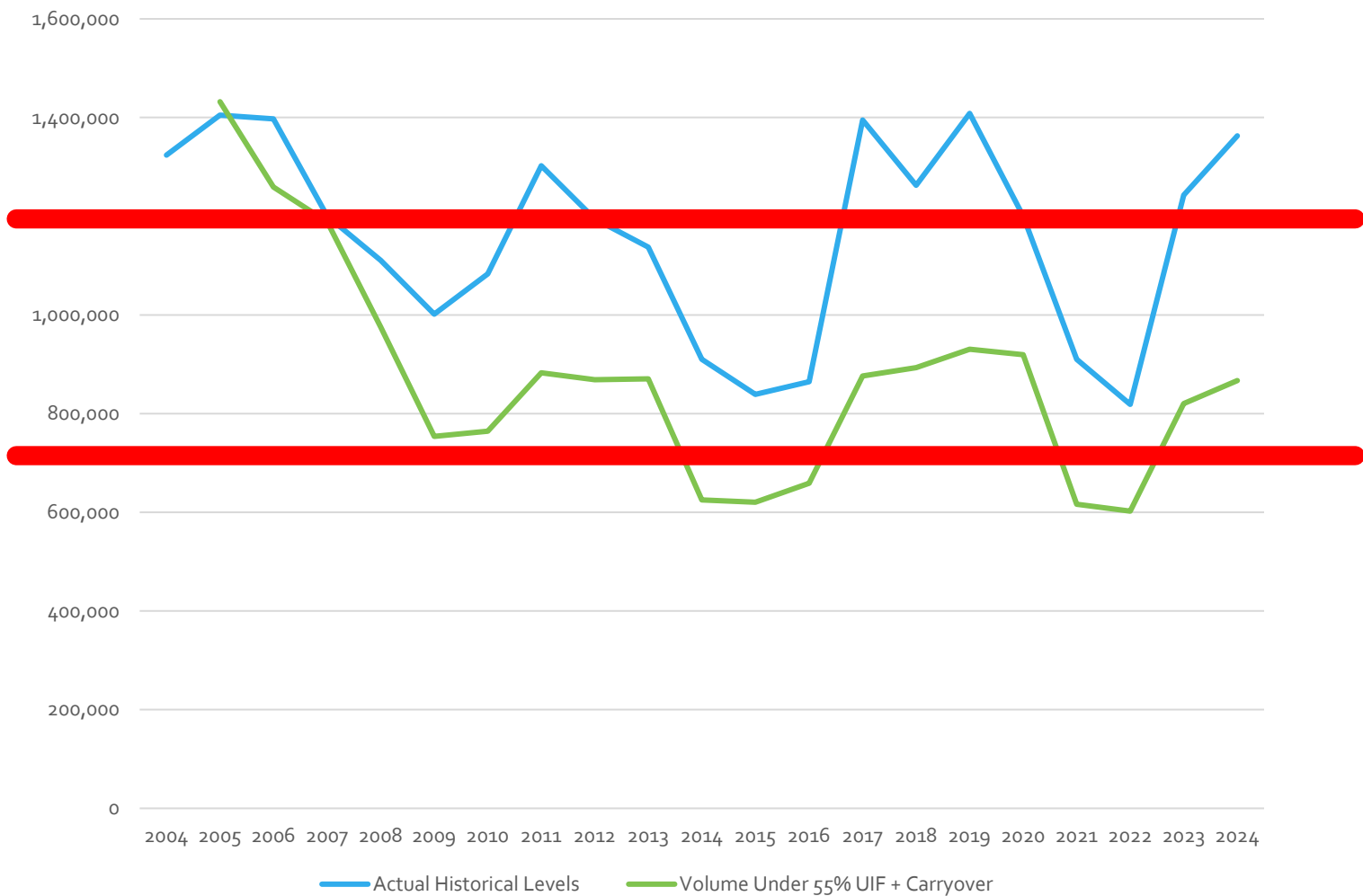
Specifics impacting us!

1. 55% Unpaired Flow Criteria (January 1 through June 31)
2. Carryover Storage Requirement in Lake Berryessa to ensure water delivered downstream is as cold as possible. Ranges from 700,000 AF to 1.2million AF.

Mathematical Model...

We prepared a 20-year model for the water years 2004 through 2024 to analyze the impacts of Flow Reductions and Cold-Water Storage requirements on the Solano Project deliveries and concluded the following...

Lake Berryessa Volume Under 55% UIF and Carryover



Historical
vs. 55%
UIF +
Carryover

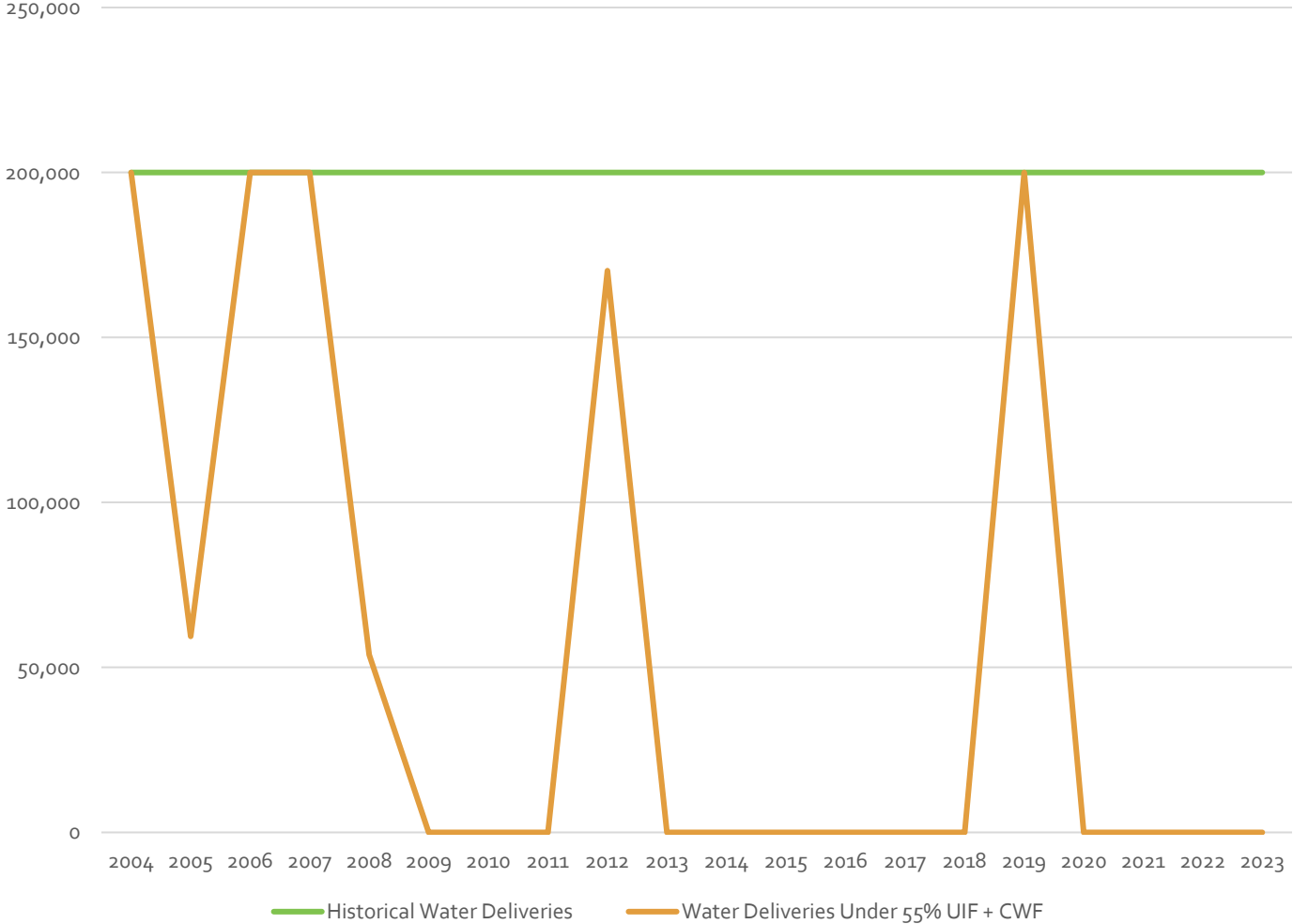
Under 55%
UIF +
Carryover

65% of the Years, the Solano Project gets zero water allocation ... for the whole year.

35% of the Years, the Solano Project gets a variable allocation ranging 0% to 100%.

In only 13% of Future Water Years will the Solano Project receive water.

Solano Project Water Deliveries



Solano Project Water Deliveries Under Bay-Delta Plan - As Currently Written

What does that mean for SID and the County?

- Causes **immediate building moratorium**, and more...
- The county's homes, livelihoods, and food supply depend on solutions. For instance, Economic Forensics & Analysis recently estimated **Solano County could initially face a loss of \$3 billion to \$5 billion from its \$30 billion economy.**
- **No water supply to meet our drought planning** requirements in our UWMPs.
- Sets us up for **long-term groundwater sustainability concerns.**
- Etc.

Flaws and Concerns with the Bay-Delta Plan

- ✓ **The lake is rainfall fed ... not fed by snowpack** like “rim reservoirs”.
- ✓ The reservoir was designed for a 14-year hydrologic cycle. This led to its larger size at about 1.6 million AF. **But it only has an annual sustainable yield of 314,000 AF** which includes evaporation, instream flow commitments and water delivery commitments.
- ✓ In the 66-year history of Lake Berryessa’s hydrologic cycle, if five (5) extreme rain events are taken out, the average inflow to the lake is slightly over 200,000 AF... **it’s a slow filling reservoir.**
- ✓ **If used at the proposed Bay-Delta Plan suggests, it does not recover.**
- ✓ The Solano Project is a **small watershed making up less than 1% of the Sacramento Valley Delta outflows. Other than a one-time flow contribution that would cause a multi-year recovery cycle, it wouldn’t help the Bay-Delta’s temperature management.**
- ✓ **For about 50 miles, the conveyance is a creek or toe drain.** While it does convey seasonal floodwaters, **it does not convey flows of the order of magnitude suggested in the proposed Bay-Delta Plan.**
- ✓ Also, the Lake Berryessa discharge structure at the bottom of Monticello Dam has a physical capacity limitation. **Since there is no flood gate that can be opened, the likely maximum capacity for water delivery during non-spilling events is around 172,000 AF per year... or less.**

Fairness and/or Taking Concern

- ✓ There is a Fairness and/or Taking Concern... **it requires the Solano Project to release cold water storage for the benefit of the Bay-Delta so that the SWP and CVP do not have to release the water themselves.**
- ✓ **Unlike the CVP or the SWP, Lake Berryessa is a locally funded reservoir and water delivery system for customers in Solano County.**
- ✓ The members of the Solano Project, including SID, Vacaville, Fairfield, Suisun City, Vallejo, Benicia and Maine Prairie Water District have a **fundamental right to fair treatment under law and principle...** with regard to “takings”.
- ✓ **With the taking of Solano Project water for the benefit of the CVP and SWP, however, there is no fairness, proportionality or no proposed “just compensation”.**



Is there a path forward?

Short-Term Agreements & Long-Term Challenges

- To delay the imposition of the Bay-Delta Plan, Solano County and other Sacramento watershed agencies are seeking to enter into short-term **Agreements for Healthy Rivers and Landscapes (HRL)**.
- These agreements **provide an 8-year window to implement measures aimed at increasing salmon populations**. Plus, they are not scheduled to kick in for 8 years. Therefore, **this is a temporary 16-year reprieve**.
- BUT, there will be a regulation on the books of 55% UIF + Carryover that will automatically kick in in 16 years.
- In the long-term, **core challenges lie in addressing not only technical/logical water management but, in underlying social dynamics driving the State's policy decisions**.

Water Issues as Social Problems

- The State Water Board’s mission is to “...**preserve, enhance, and restore ... water ... for the protection of the environment, public health, and all beneficial uses...**”
- Currently, **its focus seems to be on prioritizing environmental objectives with implications based in social issues.** For example:
 - ✓ **Climate Change Priorities:** The proposed Bay-Delta Plan centers on increasing water flow into the Bay-Delta as a climate change strategy.
 - ✓ **Personal Missions and Values:** Many policymakers and staff are driven by personal missions and values that align with environmental objectives, sometimes to the detriment of urban and agricultural users. For example, **a staff member recently suggested Lake Berryessa could supply Solano Cities only if agricultural uses were eliminated.**
 - ✓ **Partisan Politics:** Climate change has become a deeply polarizing political issues. **Unfortunately, we force individuals to “choose a side” ... regardless of their intent ... leading to unintended polarization.**

Path Forward?

- Again, California’s water policy challenges are as much social as they are technical. While temporary solutions may be achieved, **long-term success will require addressing the broader social and political dynamics.** Who’s going to do that?
- For Solano County, the stakes are high... **face a loss of \$3 billion to \$5 billion from its \$30 billion economy.**
- There is a glimmer of hope on the horizon. **Governor Gavin Newsom has emerged as a rare advocate within his administration for a balanced approach** to implementing the Bay-Delta Plan.
- Additionally, the Water Board’s **Executive Director and Assistant Director have publicly expressed interest in supporting Solano.** While the specifics of their support remain unclear, any move toward exploring alternative temperature control scenarios—ones that preserve Lake Berryessa’s water supply—would be a positive development. **For example, we may get traction on a counterproposal similar to:**
 - **15% UIF + 300,000 to 450,000 AF of Carryover + Additional Flow Commitments during Spawning Season.**
 - **This would be a big change in their position... and very good for us!**
- However, the long-term outlook remains uncertain. Without a strong, unifying leader to navigate California through this “mess” **confounding risks persist.**

Ending on Good News!

- Despite the shenanigans of the State Water Board... the last couple years has been good for SID. We are poised for string positive performance metrics.
 - We met our Budget and continue to have substantial reserves.
 - We've backfilled key positions from retirements and departures.
 - We re-organized our management team assigning 2 new AGMs positions to focus on water policy and succession planning.
- Of, note is that we recently approved a funding agreement with the Federal Government to receive up to \$29M in USDA funding for our Ag system upgrades. This is coupled with another \$25M in essentially NRCS funding over the next 10 years. In total **\$29M + \$25M = \$54M!**