

Farm Water Update

AT THE CROSSROADS OF WATER & GROWING FOOD



APRIL 2024

The Voluntary Agreements Aren't Voluntary

Analyzing the State Water Resources Control Board's Draft Staff Report on Bay-Delta WQCP Versus the "Healthy Rivers and Landscapes" Alternative



The State Water Resources Control Board (SWRCB) plays a crucial role in the area of water management, particularly concerning the delicate balance of California's Bay-Delta ecosystem.

Recently, the SWRCB released a draft Staff Report in support of updates to the Bay-Delta Water Quality Control Plan (Bay-Delta Plan or Plan) for the Sacramento River and Delta watersheds (Sacramento/Delta). The Plan will articulate how to balance all of the beneficial uses of the Bay-Delta with a particular emphasis on native fish. The SWRCB Staff proposal aims to address various environmental and water quality issues within the Bay-Delta region through the implementation of 'unimpaired flows.' However, alongside this proposal, there exists an alternative approach dubbed the "Voluntary Agreements," or more recently, "Agreements to Support Healthy Rivers and Landscapes." Water rights holders throughout the watershed will be required to comply with one of these alternatives. In this edition of Farm Water Update, we delve into a comparative analysis of the SWRCB staff proposal and the alternative proposal, examining their respective merits, shortcomings, and potential impacts on the ecosystem and stakeholders.

The SWRCB's Draft Staff Report on the Bay-Delta WQCP

The SWRCB's [Draft Staff Report](#) on the Bay-Delta WQCP provides an overview of the two paths ahead for the SWRCB; a [2018 Framework](#) based on a flow-only alternative and "Healthy Rivers and Landscapes," a path guided by a science-based combination of flow and habitat restoration to recreate ecosystem functions where they will have the most benefit for fish.

The flow-only alternative defined in the 2018 Framework sets new year-round inflow requirements for the Sacramento River, its tributaries and eastside tributaries to the Delta (Mokelumne, Calaveras, and Consumnes Rivers) of 55% of unimpaired flows, with an adaptive range of 45–65%; tributary inflows protected as Delta outflows; new requirements for cold water habitat in the Sacramento River and Delta eastside tributaries; new and modified interior Delta flow requirements for Delta exports; recommendations for complementary ecosystem protection actions that others should take; and adaptive management, monitoring, evaluation, special study, and reporting provisions.

The SWRCB does not have the authority to require habitat restoration, so must rely only on flow requirements to meet their objectives. Establishment primarily of flow objectives to ensure adequate freshwater inflows into the Bay-Delta ecosystem is believed by some to be crucial for maintaining ecological balance and supporting various species of fish and wildlife.

The Draft Staff Report also includes the proposed Voluntary Agreement alternative, or "Healthy Rivers and Landscapes," which presents a comprehensive plan aimed at improving water quality, dedicated habitat restoration, and improved ecosystem health within the Bay-Delta region. Because this plan was voluntarily developed by water rights holders and others, it can



*Sacramento-San Joaquin Delta
(Photo: DWR)*

include a broader range of actions, and be presented to the SWRCB as an alternative for consideration.

Another proposal, the Tuolumne River Voluntary Agreements, is being evaluated separately because the proposal, according to SWRCB staff, "...is not fully consistent with the 2018 Lower San Joaquin River and southern Delta amendments and will likely require changes to the existing Plan."

The "Healthy Rivers and Landscapes" Alternative

The Agreements to Support Healthy Rivers and Landscapes is an adaptive management proposal for the Delta Water Quality Control Plan that takes the next step beyond the SWRCB staff proposal by balancing other beneficial uses of water as part of the proposal (as required by law) and incorporating a mix of targeted instream flows with the implementation of habitat projects that together will provide more benefits to targeted species with fewer tradeoffs for other water uses, including the environment.

- Emphasizing the interconnectedness of land and water to promote ecosystem functions, and recognizing the impact of land-use activities on water quality and ecosystem health.
- Restoring habitat and sustainable land management practices to enhance ecosystem resilience and water quality.
- Promoting coordination across the watershed that empower all stakeholders- water rights holders, regulators, tribes, and environmental NGOs- to play a more active collaborative role in decision-making processes.
- Incorporating flexibility in how to deploy environmental water and implement habitat projects to ensure climate change adaptation in the Bay-Delta ecosystem.
- Reporting what we did and what we learned to create a clear record of activities that work and don't work to continually improve efficient management of resources.
- Series of legal agreements, including enforcement mechanisms, signed by water rights holders, SWRCB and others to ensure the commitment of water and restoration occurs.

In a September 28, 2023 [letter](#) submitted to the SWRCB, 28 public water agencies and organizations offered between 500,000 and 700,000 acre-feet of water dedicated to environmental purposes in many water years. Their proposal also included restoration of over 27,000 acres of floodplain habitat, 434 acres of instream habitat, and 291 acres of spawning habitat. In total, there is a commitment for over \$2.5 billion in funding to support water purchases, crop idling, and a robust science program, including monitoring to ensure performance, collaborative and adaptive management of flow and non-flow measures, and a program that brings people from different backgrounds and disciplines together.

Once implemented, the Agreements to Support Healthy Rivers and Landscapes, or Voluntary Agreements, are anything but voluntary. They are a series of commitments to implement the flow, habitat and science actions outlined in the plan, with enforcement and compliance provisions.

North Cypress Bridge Project



North Cypress Bridge Project: Glenn-Colusa Irrigation District with local, state and federal partners, restored side channel salmon rearing habitat on the Sacramento River. (Photo: Northern California Water Association)

"This project is another example of the important work being made possible by collaborative partnerships in the Sacramento Valley. Working together we are completing projects up and down the Sacramento River that address all stages of the fish life cycle, helping to improve their chances of survival."

Don Bransford, GCID Board of Directors

<https://www.gcid.net/wp-content/uploads/2022/05/Cypress-Project-Fact-Sheet.pdf>

Technical Review

A recently released technical [report](#) by MBK Engineers showed measurable benefits from the Healthy Rivers and Landscapes alternative

The report is a technical review of the Draft Staff Report/Substitute Environmental Document (DSR/SED) in support of potential updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. It discusses the impacts of implementing unimpaired flow (UIF) requirements in California's water system, specifically focusing on the Sacramento River Basin and the Sacramento-San Joaquin Delta. The report highlights deficiencies in the DSR, inconsistencies in the implementation of proposed plan amendments, and inadequate modeling of modular alternatives.

"The Healthy Rivers and Landscapes (HRL) alternative offers environmental benefits like improved habitat for salmonoid spawning and rearing on the American, Feather, Sacramento, and Yuba Rivers compared to the 55% Unimpaired Flow (UIF) scenario. Notably, spawning habitat more than doubles on the American River and triples on the Sacramento River compared to the UIF scenario.

The HRL alternative provides more salmonid benefits on the tributaries than the 55% UIF scenario, increases habitat to address limiting factors, and provides benefits across all water year types by making efficient use of existing flows and the VA flow assets.



An aerial view of a channelized slough (left) and the Lookout Slough Tidal Habitat Restoration and Flood Improvement Project (lower right) in Solano County, a multi-benefit effort to restore the site to a tidal wetland and create habitat that produces food for Delta Smelt and other fish species. (Photo: DWR)

The report further details profound challenges associated with UIF requirements, highlighting their potential to disrupt water infrastructure functionality and supply management principles statewide, including the Central Valley Project and State Water Project.

The report goes on to state that in the 55% unimpaired flow (UIF) scenario, Shasta Lake storage is approximately

178 TAF lower in May compared to the Sacramento Water Allocation Model (SacWAM) Baseline. The reduction in storage is due to the more aggressive implementation of the cold water habitat objective at Shasta, which results in reductions in diversions to the Sacramento River Settlement Contractors (SRSC) to maintain water in storage while meeting the UIF requirements downstream of Shasta and Keswick.

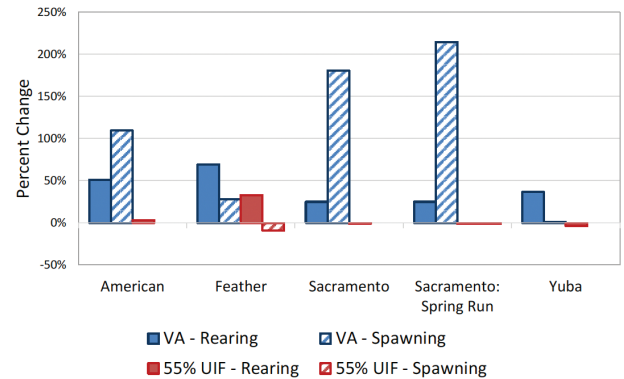


Figure 1. Change in Median Salmonid Spawning and Rearing Habitat with VA and 55% UIF Alternatives

Results in Figure 1 show a larger percentage change in suitable salmonid spawning and rearing habitat on the American, Feather, Sacramento, and Yuba rivers with the VA Alternative as compared to the 55% UIF scenario.

Overall, the report highlights that the modeled reservoir operations and water supply impacts in the SacWAM scenarios are inconsistent with actual system operations and do not meet current Reclamation policies and contract obligations.

Oroville storage in the 55% UIF scenario is approximately 615 TAF lower in May than the current baseline, while Shasta storage in the 55% UIF scenario is approximately 178 TAF lower in May than the SacWAM baseline. The water supply impacts under the 55% UIF scenario exceed those under the VA Alternative by more than 2.1 million acre-feet (MAF) in critical and dry years, 1.8 MAF in below normal years, 1 MAF in above normal years, and 700 TAF in wet years.

Major Takeaways

1. The VA Alternative provides more benefits with less impacts than the Proposed Plan Amendments.
2. The VA Alternative increases salmonid habitat on tributaries and provides benefits across all water year types.
3. The VA Alternative has less impact on water temperature management below reservoirs compared to the 55% UIF scenario.
4. The VA Alternative has less impact on rice acres in production in the Sacramento River Basin and no impact on wildlife refuge water supplies, unlike the 55% UIF scenario.

5. The VA Alternative better maintains the ability of reservoirs to provide multiple benefits compared to the 55% UIF scenario.

The report also highlights the adverse impacts of implementing UIF requirements, the lack of an implementation plan and wide range of proposed plan amendments, inconsistent implementation of proposed plan amendments on different rivers, inconsistencies between SacWAM operations and policies/contracts, and inadequate analysis for modular alternatives.

Comparative Analysis

While both the SWRCB's draft staff report-supported 2018 Framework and the "Healthy Rivers and Landscapes" alternative share the common goal of improving the health and sustainability of the Bay-Delta ecosystem, they differ significantly in their approaches and priorities.

The 2018 Framework places greater emphasis on a top-down, regulatory approach, centralized management, and prescribed water quality objectives. It seeks to address water quality issues primarily through regulatory measures, such as setting flow requirements and imposing limits on pollutant discharges. While this approach offers familiar enforceability, critics argue that



Great Blue Heron (Photo: DWR)

it may overlook the importance of holistic ecosystem management and fail to adequately account for the dynamic interactions between water, land, and climate.

In contrast, the "Healthy Rivers and Landscapes" alternative adopts a more holistic and nature-based approach to ecosystem management. By prioritizing the

connection between habitat restoration and flows, this alternative seeks to harness the inherent resilience of natural systems and promote long-term sustainability. Proponents of this approach argue that it offers greater flexibility, adaptability, and community involvement, thereby enhancing the overall effectiveness and legitimacy of water management efforts.

Conclusion

The comparison between the 2018 Framework and the "Healthy Rivers and Landscapes" alternative underscores the complexity and diversity of perspectives surrounding water management in the Bay-Delta region. While the staff proposal leans towards traditional regulatory approaches, the alternative approach advocates for a shift towards more holistic and nature-based solutions. Ultimately, the choice between these two approaches will depend on scientific evidence, stakeholder preferences, and the ability to reconcile competing interests in the pursuit of a healthier and more resilient Bay-Delta ecosystem.

Voluntary Agreements Workshop

The SWRCB will hold a multiday [public workshop](#) on April 24-26 to discuss the "Healthy Rivers and Landscapes" alternative proposed by water users and state and federal agencies currently being considered in the process to update the Sacramento River and Delta components of the Water Quality Control Plan. The purpose of the workshop is for proponents of "Healthy Rivers and Landscapes" to provide a detailed overview of the proposal, receive input and answer questions from SWRCB members, and receive input from the public.

April 24–26, 2024, beginning at 9:00 am
Joe Serna Jr. CalEPA Building
Coastal Hearing Room
1001 I Street, Second Floor
Sacramento, CA 95814

And via Video and Teleconference

https://www.waterboards.ca.gov/board_info/calendar/docs/2024/mar/notice_vaworkshop_030824.pdf

Valley Ag Water Coalition | Bob Reeb bobr@water-warrior.com

The mission of the Valley Ag Water Coalition is to represent the collective interests of its San Joaquin Valley member agricultural water companies and agencies in California legislative and regulatory matters by providing leadership and advocacy on issues relating to the development and delivery of a reliable farm water supply.

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CFWC is a non-profit, educational organization that provides fact-based information on farm water issues to the public.