



Russian River Biological Opinion Update – February 5, 2024

Sonoma Water is continually planning and implementing the Russian River Biological Opinion requirements. Below is a brief synopsis of the current work. For more detailed information, please visit [SonomaWater.org](https://www.SonomaWater.org).

Fish Flow Project

The Fish Flow Habitat and Water Rights Project (Fish Flow) Draft Environmental Impact Report (Draft EIR) was released in 2016 for public comments. Submitted comments fall into a number of categories, but many comments fall into the following general issues:

- Water Quality (e.g., algae and biostimulatory conditions);
- Water Rights (e.g., illegal/unauthorized diversions along Russian River, minimum bypass flow terms in State Water Resources Control Board-issued water right permits);
- Recreation (e.g., lower Russian River recreation and tourism, quantity and quality of river flow for recreation);
- Independent Science Review Panel (ISRP) Report (e.g., consideration of results/recommendations of ISRP report in Draft EIR);
- Proposed Project description and alternatives (e.g., consideration of “adaptive management” in implementation of proposed project).

Sonoma Water staff are currently working on revisions in anticipation of recirculating the Draft EIR.

Dry Creek Habitat Enhancement Project

The Dry Creek Habitat Enhancement Project is creating 6 miles of rearing habitat for endangered or threatened juvenile salmonids and consists of 6 Phases (I – VI) spread throughout the 15 miles of Dry Creek between the Russian River and Warms Springs Dam. In order to track project locations, this portion of Dry Creek is divided into 15 Reaches that are numbered according to approximate distance in miles from the confluence with the Russian River.

Phases I – III

Phases I – III were completed in 2021 and included approximately 14 sites from 6 different reaches. These Phases were designed and constructed primarily by Sonoma Water, however, the U.S. Army Corps of Engineers (Corps) constructed 3 sites. Sonoma Water is now monitoring and maintaining these sites as described in the next section.

Phases IV – VI

Sonoma Water and the Corps of Engineers are implementing Phases IV – VI of the Dry Creek Habitat Enhancement Project under a cost-share partnership where Sonoma Water covers 35% of the cost, provides right-of-way, and manages the design contracts, and the Corps covers 65% of the cost and implements the construction. Phases IV and V are under construction and Phase VI is in final stages of design and planning, with construction tentatively planned for 2025 and 2026.

Construction of Phases IV and V

The Corps, with support from Sonoma Water staff and the Design Consultant, is in the process of constructing Phase IV and V of the Dry Creek Project. Phase IV consists of sites in Reaches 10 and 13 of Dry Creek, and Phase V includes sites in Reaches 4C and 2A.

The Reach 13 sites are complete and the contractor, McCullough Construction, Inc. (McCullough) has constructed 8 of the 9 sites in Reach 10. The design of the 9th site, Site 10A1, had to be revised to accommodate a new existing

condition following substantial erosion that occurred during the 2022/2023 wet season prior to construction. McCullough constructed the upstream end of the revised 10A1 site and plans to complete the site in 2024.

The recent rain events have increased flows to moderate levels and are testing the recently constructed sites. The water level in Lake Sonoma has also reached the flood pool elevation, transferring control of the discharge from Warm Springs Dam from Sonoma Water to the Corps of Engineers. The Corps will likely have to increase discharges from the baseflow level of 80 cfs to higher levels in the range of 1000 cfs in order to maintain flood storage capacity of the dam. The photographs below were taken on during the high flow event January 22nd, 2024 with discharges between 1,500 and 2000 cfs.



Photograph taken during the high flow event on January 22, 2024 of the upstream end of a completed Reach 10 biotechnical bank repair.



Photograph taken on January 22, 2024 of the Site 10B2 Side Channel.



Photograph taken on January 22, 2024 of the 10A0 bank repair and high-flow side channel.

The Corps advertised Phase V of the Dry Creek Project on March 14, 2023 and issued a notice to proceed on June 8th to ROD Construction. ROD mobilized on August 9th and completed most of the features in Reach 4C before having to stop due to the onset of wet weather in November. The ramp needed for site access off Dry Creek Road is complete along with the above-water portion of the new channel excavation, the inlets and outlets, and most of the log structures. ROD has winterized the banks of the unfinished portion of the side channel and will continue work starting in June 2024.



Photograph taken on January 23, 2024 showing one of the intermediate inlets to the new side-channel habitat feature at site 4C at a flow of approximately 800 cfs.



Photograph taken on January 23, 2024 showing one of the intermediate inlets to the new side-channel habitat feature at site 4C at a flow of approximately 800 cfs.

Phase VI Planning

Sonoma Water's right-of-way staff and project manager continue to work with the Phase VI property owners to obtain appraisals for the value of the right-of-way compensation amounts, prepare right-of-way compensation offers and easement agreements, present the documents to the owners, and address owner comments and concerns. Approximately half of the offers have been presented so far and Sonoma Water is waiting for comments. Sonoma Water is also beginning to reach out to landowners to evaluate the feasibility of a project to replace the remaining two grade control sills on Dry Creek with engineered riffles.

Habitat Monitoring and Maintenance

Sonoma Water environmental staff finished 2023 effectiveness monitoring in December to evaluate newly and previously constructed reaches, to quantify the habitat areas meeting desired conditions, and to identify maintenance needs. Staff also completed pre-project surveys of reaches to be constructed in 2024. Methods include collecting bathymetric data with survey equipment, measuring water depth and velocity, recording aquatic habitat types and characteristics, collecting topographic data and aerial photography with drones, and monitoring fish use using pit tags and fish surveys. In 2023, Sonoma Water crews completed effectiveness monitoring on 12 enhancement reaches (1 pre-enhancement, 4 post-enhancement, 7 post-effective flow). Information collected is also being used to prioritize and plan for maintenance activities such as invasive vegetation management, removal of nuisance sedimentation, and repair of flood damage or erosion that impairs project function.



Pre-construction drone photo of reach 10 enhancement reach , in Dry Creek. Photo taken June, 2022.



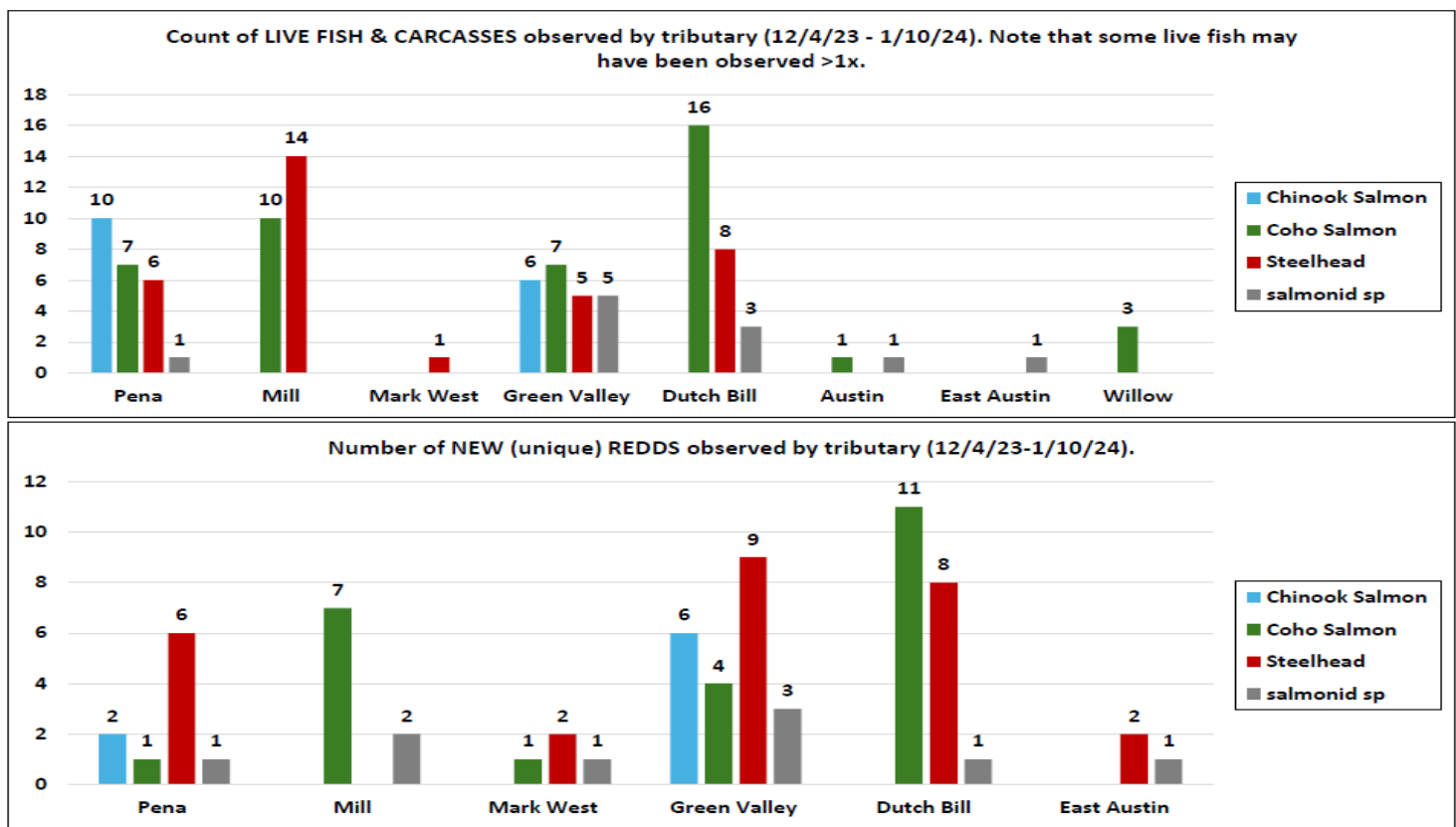
Post-construction drone photo of reach 10 enhancement reach in Dry Creek. Photo taken October 2023.

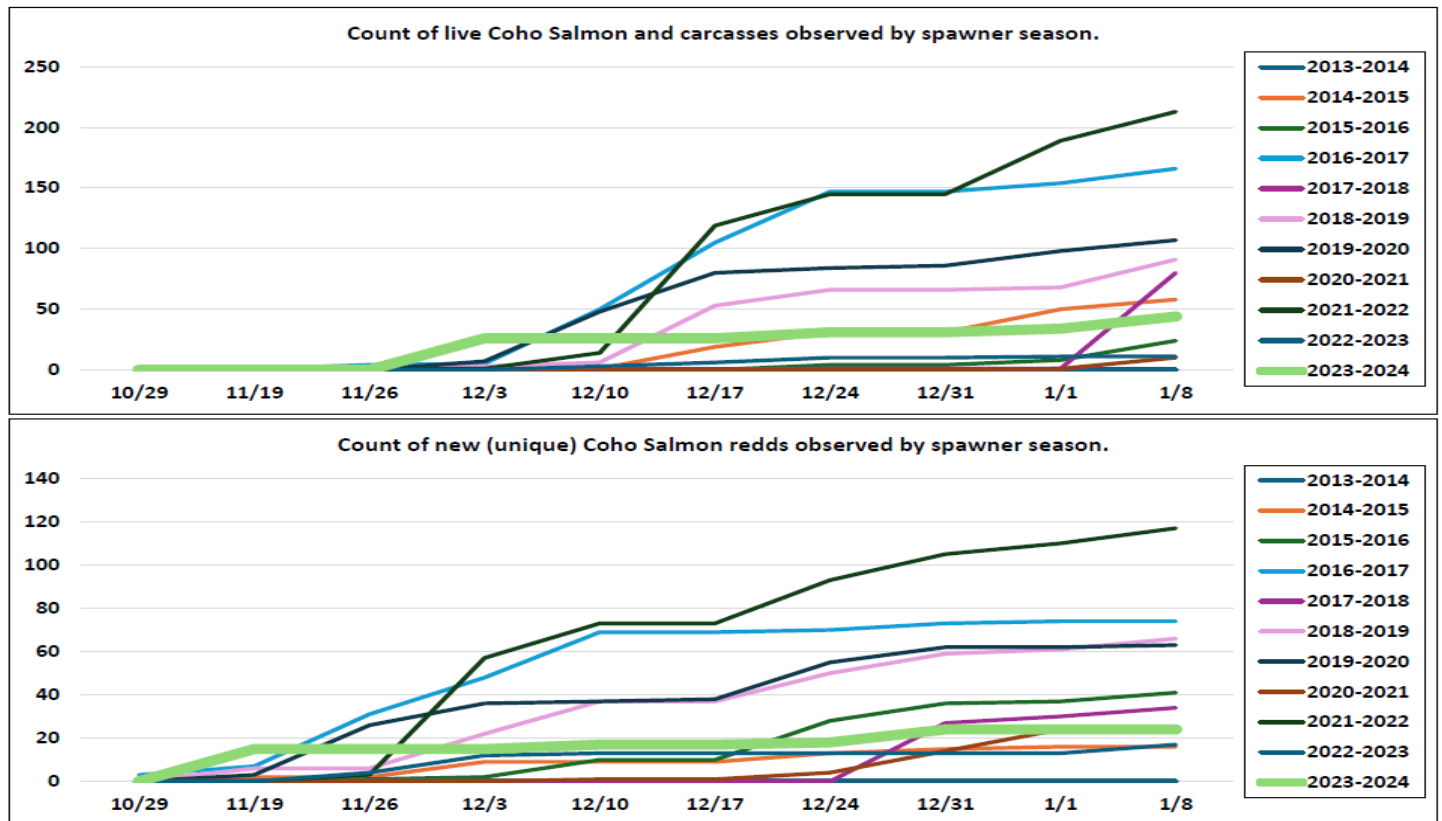
Public Outreach

Sonoma Water Right-of-Way and Engineering staff are reaching out to landowners involved in Phase VI in order to advance the process of obtaining easements and evaluate feasibility of grade control sill replacement. In the lower reaches of Phase VI (Reach 1 and the downstream end of Reach 2), Sonoma Water staff are addressing property owner questions and concerns associated with the right-of-way agreements and compensation packages, which involves refining easement areas and access routes and finalizing the agreement. Sonoma Water staff hope to begin reaching out in February to property owners in the vicinity of the grade control sills.

Fish Monitoring

With the deflation of Mirabel Dam, fish ladder video counted ended in late December. Sonoma Water field crews have turned their attention to spawning ground surveys in tributary streams as part of the California Department of Fish and Wildlife funded Coastal Monitoring Program and U.S. Army Corps of Engineers funded Coho monitoring program. Unlike the video system that seeks to count all fish returning to the river upstream of Mirabel, tributary counts of fish and redds (nests) are conducted on short reaches of streams and provide an index of abundance – not a total count. The graphs below illustrate indices of abundance. Frequent storms have made survey conditions challenging but reports from the field indicate that the steelhead and Coho spawning seasons are off to a slow start in December and January.





Russian River Estuary Management Project

The mouth of the Russian River is open. The lagoon management season begins on May 15 and ends on October 15. The annual Pinniped Monitoring Volunteer Training hosted with Stewards of the Coast and Redwoods will be held on February 23, 2024, from 11 am to 1 pm. This is a virtual meeting, with several in field trainings sessions for new volunteers to follow. Visit <https://stewardscr.org/events/2024-pinniped-monitoring-volunteer-training-zoom/> for details.

Interim Flow Changes

On December 27, the Division of Water Rights issued an order approving Sonoma Water's change petitions. The petitions requested to temporarily change the hydrologic index for determining the Russian River water supply condition from cumulative inflow into Lake Pillsbury to storage thresholds at Lake Mendocino developed by engineering staff at Sonoma Water. Based on those thresholds, the water supply condition for the Russian River changed from *Dry* to *Normal* on February 1. This increased the minimum instream flow requirement on the Upper Russian River from 75 cfs to 150 cfs and on the Lower Russian River from 85 cfs to 125 cfs. The water supply condition will be reassessed on March 1.

New Biological Opinion

Sonoma Water and the U.S. Army Corps of Engineers (USACE) are in consultation with the National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW) for the next Biological Opinion (BO). Implementation of projects and monitoring required by the 2008 BO will continue until a new BO is issued.