



Russian River Biological Opinion Update – September 9, 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).

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 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.

McCullough finished constructing the final site, Site 10A, in August. Sonoma Water monitoring staff are conducting the post-construction surveys.



Site 10A1 Side Channel looking upstream.



Site 10A1 Side Channel looking downstream from the inlet.

ROD Construction has completed the remaining 4 sites in Reach 2, and the post-construction walkthrough inspection is scheduled for September 3, 2024. This completes the construction of Phase V of the Dry Creek Habitat Projects



Stie 2A Side Channel on the south side of the Dry Creek mainstem.

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.

Habitat Monitoring and Maintenance

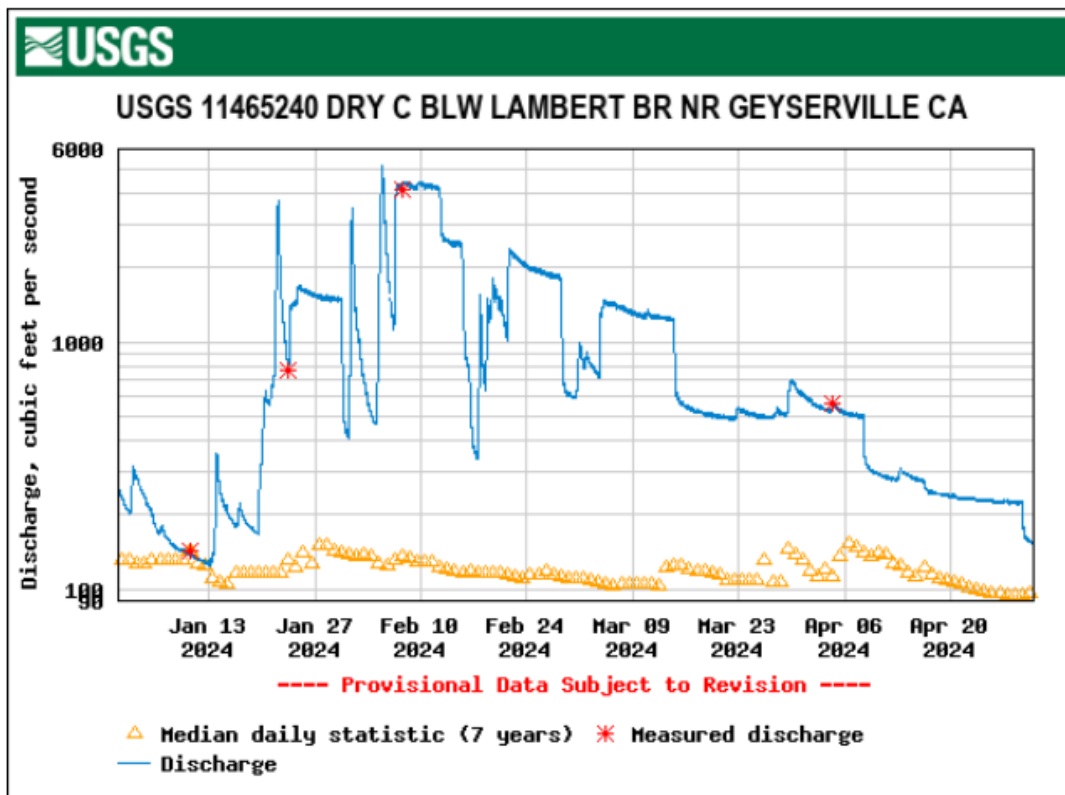
Sonoma Water environmental staff completed 2023 effectiveness monitoring in December to evaluate newly and previously constructed reaches, to quantify the habitat areas meeting desired conditions, and to identify maintenance needs. Staff also completed pre-project surveys of reaches to be constructed 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 enhancement reaches to monitor in 2024, 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. Habitat monitoring crews have started field work for the 2024 season. Sonoma Water Environmental staff are currently working to obtain long-term programmatic permits covering maintenance work and plan to conduct maintenance activities at certain sites in the Reach 5 and Reach 8 areas in 2024.

This past rainy season increased flows in Dry Creek to moderate levels and tested the recently constructed sites. The water level in Lake Sonoma reached the flood pool elevation, transferring control of the discharge from Warm Springs Dam from Sonoma Water to the Corps of Engineers. As illustrated in the graph below, flows in Dry Creek remained relatively high as the Corps managed releases to drain the flood pool and keep up with higher-than-normal inflow to the reservoir. Sonoma Water and the Corps of Engineers have been inspecting the newly constructed sites after Dry Creek flows receded to baseflow levels. The newly constructed sites had some minor erosion damage to the newly constructed habitat channel banks. Some of the new sites also suffered from sedimentation in them as a result of the high flow events. Sonoma Water and the Corps of Engineers are in the process of determining what needs to be done and what entity will do any remediation work at these sites.

Environmental Resources staff have been conducting habitat monitoring at Dry Creek Habitat Enhancement sites for the last several months and are currently keeping up with an ambitious schedule. Staff are performing very well, collecting large amounts of high-quality data. As of August 19, post-effective flow surveys at 5 of the 12 enhancement sites have been completed and are currently midway through sites 6 and 7. In addition, Environmental Resources staff began the first 2024 post-construction survey at the reach 10A1 habitat enhancement site and are waiting for construction to finish at other reaches to begin post-construction surveys.

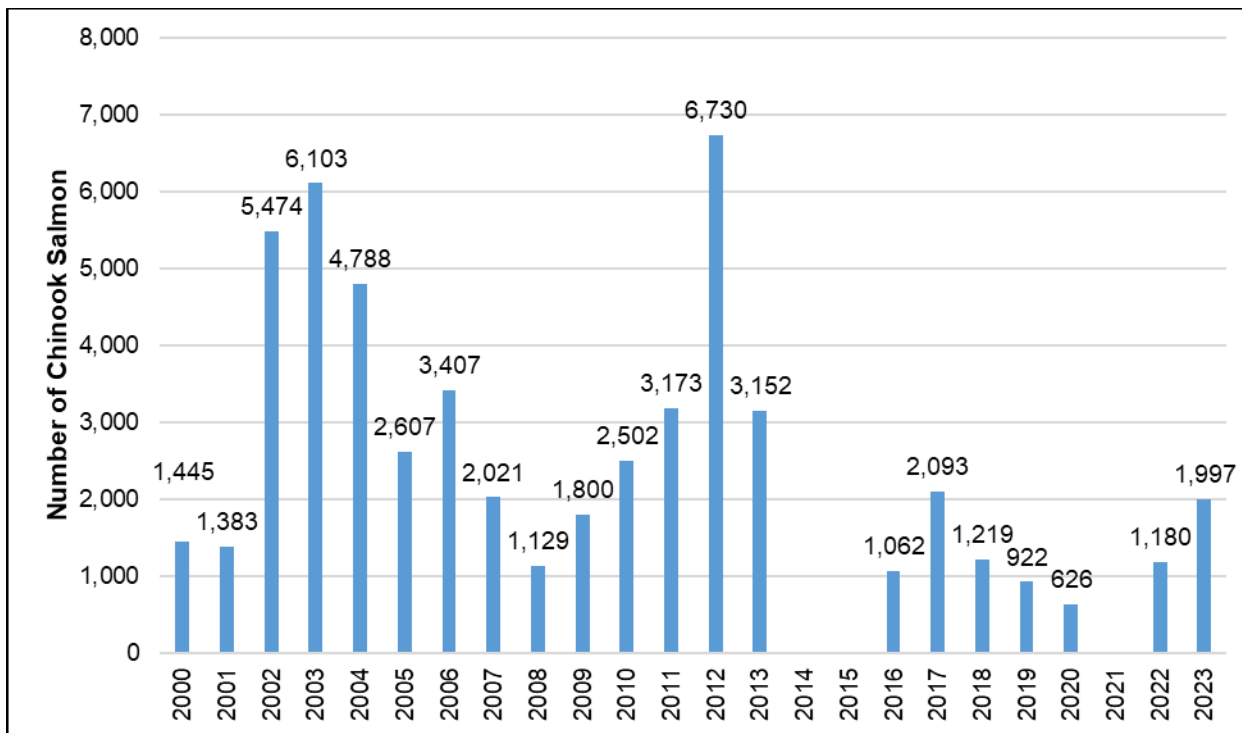
Public Outreach

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. The annual meeting on the Russian River Biological Opinion will be held after a new Biological Opinion is issued.



Fish Monitoring

On September 1, Sonoma Water began operating a video camera in the fish ladder at the Mirabel dam near Forestville, CA to count adult salmonids returning to the Russian River. This camera has been operated annually since the year 2000 with the exception of return years 2014 and 2015 when the dam was being replaced and 2021 when the river inundated the site in October. The average annual adult Chinook count is 2,610. We have not included annual counts for steelhead and coho. Steelhead return later in the year when the site is typically inundated and much of the coho spawning habitat is in tributaries that are downstream of this site.



Russian River Estuary Management Project

The mouth of the Russian River is open as of August 27, 2024. Water quality and pinniped monitoring is ongoing. Our next monthly seining will be in September.

Interim Flow Changes

On June 6, 2024, the Division of Water Rights (Division) issued an order approving Sonoma Water’s change petitions. As required by the 2008 Russian River Biological Opinion under *Normal* water supply conditions, the petitions requested to reduce the minimum instream flow requirement on the Upper Russian River from 185 cfs to 125 cfs and on the Lower Russian River from 125 cfs to 70 cfs. The order expires on October 15, 2024. On August 20, 2024, Sonoma Water filed new temporary urgency change petitions with the Division requesting that storage thresholds at Lake Mendocino be used as the hydrologic index for determining minimum instream flow requirements in the Russian River and Dry Creek starting November 1, 2024. Sonoma Water filed similar petitions in October of 2023, which the Division issued an order approving in December 2023. The Division publicly noticed Sonoma Water recently filed petitions on August 28, 2024, with a comment deadline of September 25, 2024.

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.