



## **Russian River Biological Opinion Update – August 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).

### **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.

The Reach 13 sites are complete and the contractor, McCullough Construction, Inc. (McCullough) has constructed 8 of the 9 sites in Reach 10. McCullough constructed the upstream end of the remaining site (site 10A1) in 2023 and began constructing the remaining portion of this site on June 15, 2024.

Phase V of the Dry Creek Project consists of 1 site in Reach 4C and 2 in Reach 2A. The Corps advertised the project on March 14, 2023 and issued a notice to proceed to ROD Construction on June 8th. 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. ROD resumed construction on site 4C and began in-channel work on Site 2A the week of June 17<sup>th</sup>, 2024.

#### *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.

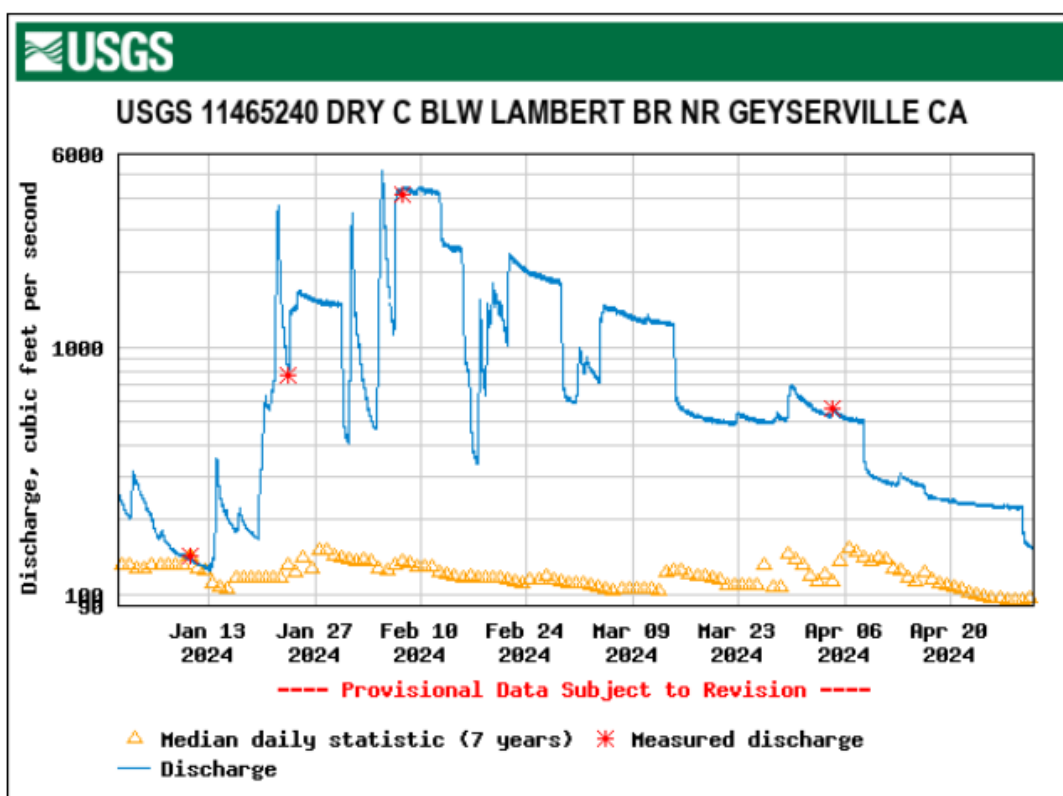
## **Habitat Monitoring and Maintenance**

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.

## **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**

The downstream migrant trapping season is coming to an end. Downstream migrant traps were operated on Dry, Mill, Mark West, Green Valley, Dutch Bill, Austin, and Willow creeks. Currently the Dry Creek trap is the only trap still fishing. Unfortunately, Sonoma Water was unable to operate the Mirabel trap on the Mainstem Russian River due to safety concerns related to the current configuration of the stream channel. These traps allow Sonoma Water to collect information on juvenile salmonids as they leave their natal streams and move downstream either to the Russian River estuary or out to sea. Minimum counts are collected at all trap sites (Table 1) and in some cases, population estimates for emigrating fish can be constructed for some streams.

Table 1. The number of juvenile and smolt steelhead, Chinook and Coho captured at fish traps in the Russian River basin in 2024. Counts are preliminary.

Tributary	Steelhead	Chinook	Coho
Dry Creek	2,091	6,100	460
Mill Creek	873		3
Mainstem Russian	-	-	-
Mark West Creek	59		
Green Valley Creek	1		158
Dutch Bill Creek	29	25	1,251
Austin Creek	127	12	6
Willow Creek	4	18	691

## **Russian River Estuary Management Project**

The mouth of the Russian River closed on June 21, 2024. This is the first closure of the year.

## **Interim Flow Changes**

On June 6, 2024, the Division of Water Rights 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.

## **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.