Russian River Biological Opinion Update – December 1, 2022

Sonoma Water is continually planning and implementing the Russian River Biological Opinion requirements. Below is a brief synopsis of current work. For more detailed information, please visit www.sonomacountywater.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 in 2023.

Dry Creek Habitat Enhancement Project

Construction

The Corps is in the process of constructing Phase IV of the Dry Creek Project, which consists of sites in Reaches 10 and 13 of Dry Creek. McCullough Construction completed both Reach 13 sites in 2022 by the October 15th in-stream work deadline, with the exception of the inlet to the 13B site, which will be constructed in 2023 by Sonoma Water. The Sonoma Water monitoring crew is in the process of conducting post-construction habitat monitoring including surveying the topography and bathymetry, and collecting drone photography of the sites. The nine Reach 10 sites will be constructed in 2023 and McCullough has cleared some vegetation and made access improvements in advance of the start of the 2023 in-stream work window on June 15th.

Looking upstream at the upstream end of the nearly completed Dry Creek Reach 13A Site. All that remains is installation of erosion prevention fabric in the areas outlined in blue.

Downstream end of the 13B site immediately after construction. There is no inflow to this feature yet. Sonoma Water will connect the upstream to the Dry Creek Mainstem in 2023.

Upstream end of the 13A site being hydroseeded on October 24th.

Habitat Monitoring and Maintenance

Sonoma Water environmental staff continue to conduct physical and biological surveys on previously constructed and maintained sites to quantify the habitat areas and identify changes or maintenance needs. This involves collecting topographic data and imagery with drones, surveying the topography and the underwater bathymetry, measuring the velocity and depth of the water, monitoring fish use using pit tags and fish surveys, and recording the location and extent of specific habitat structures such as log jams, pools, and riffles.

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 the Corps of Engineers covers 65% of the cost and implements the actual construction. Phase IV is currently under construction as described above.

The Corps completed their Biddability, Constructability, Operability, Environmental and Sustainability (BCOES) review on the 100% level bid documents and ESA is addressing the comments received. The Corps intends to advertise the project in early 2023 for 2023 construction. Right-of-way agreements for the easements necessary to construct and maintain the project have been executed with all except two of the property Owners for the properties where the Phase V sites are located. The remaining two property owners have reviewed and provided comments on their their compensation offers and agreements, and Sonoma Water is reviewing the comments. .

The Sonoma Water right-of-way staff and project manager continue to work with the Phase VI property owners to finalize the access routes and staging areas for these projects and prepare right-of-way compensation offers. Construction of Phase VI is planned to begin in 2024. Sonoma Water GIS and right-of-way staff have provided the maps and necessary information to the appraiser and they are appraising the value of the right-of-way compensation amounts.

The additional Phase V site in Reach 5B, immediately upstream of the Phase III site constructed in 2021 in Reach 5, is in the 60% design Phase. Sonoma Water right-of-way staff presented the right-of-way compensation offer and agreement to the property owner and are now addressing their comments and concerns.

Public Outreach

Sonoma Water held a tour of Dry Creek Habitat sites for west coast regional managers from the National Marine Fisheries Service (NMFS) on November 15th and a tour for Congressman Jared Huffman and his staff on October 12th.

Congressman Jared Huffman and his staff touring the Reach 13A site on October 12th.

Sonoma Water Environmental Specialist Eric McDermott instructing Congressman Jared Huffman on the finer points of operating a drone to monitor Dry Creek habitat. October 12, 2022.

Fish Monitoring

An underwater video camera was installed in Sonoma Water's Mirabel dam fish ladder on September 1, 2022. To date, 770 adult Chinook and 20 coho salmon have been observed. The Chinook migration is triggered by rainfall and increasing river flows. Figure 2 below shows environmental factors that contribute to the migration timing of salmon and steelhead in the lower Russian River. During times of drought, the migration is often delayed until storms arrive. Many Chinook entered the river prior to a lengthy closure of the estuary and responded to a rain event in early November. Coho typically return to the Russian River slightly later than Chinook salmon. Unlike Chinook coho are tributary spawners and are even more reliant on rainfall to access their habitat. Currently many of the lowest sections of the tributaries to the Russian river remain dry and much of the coho spawning habitat lies beyond these dry sections of stream in the tributaries.

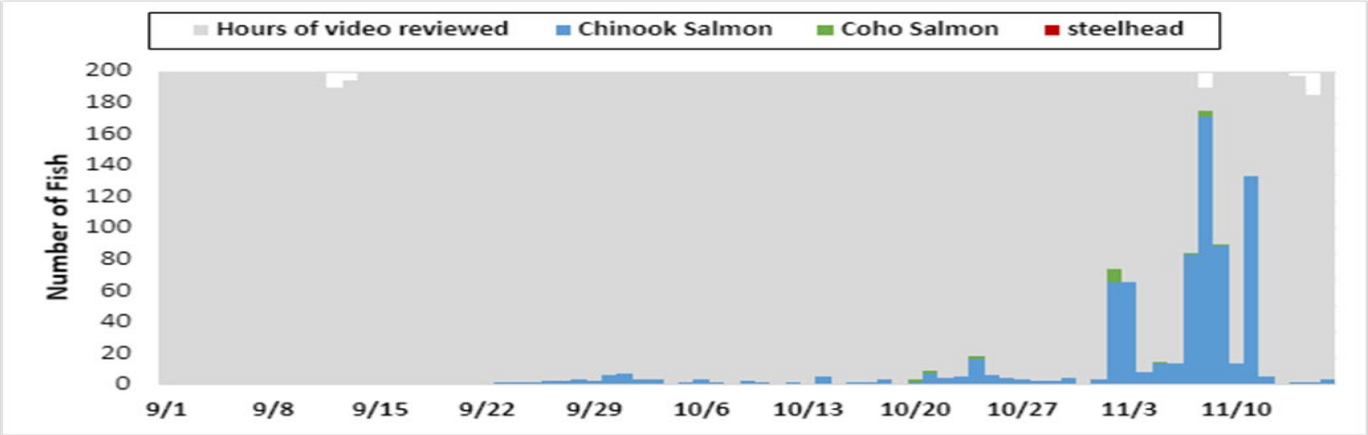

Figure 1. Number of adult salmonids observed passing the video monitoring system in the Mirabel Dam fish ladder.

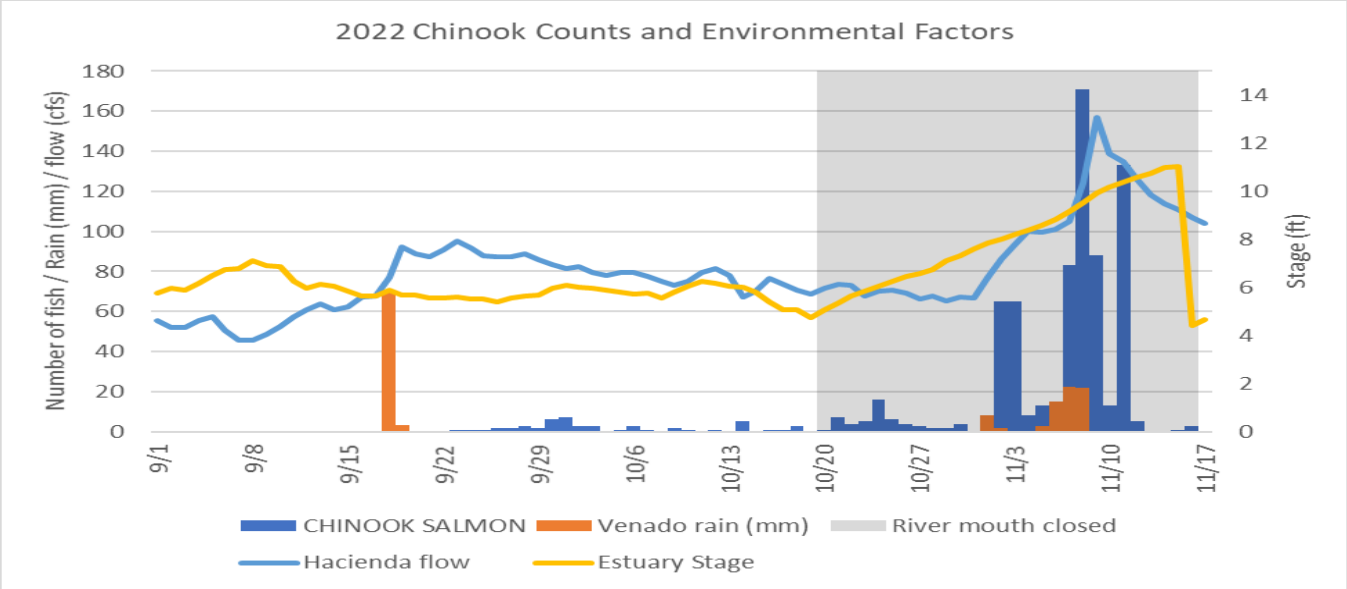

Figure 2. The daily number of adult salmonids observed at the Mirabel dam, flow from the USGS Hacienda gage (USGS gage number 11467000), rain fall from the Venado gage, estuary stage from the USGS Highway 1 gage (USGS gage number 11467270), and the period of time the river mouth was closed.

Russian River Estuary Management Project

The mouth of the Russian River closed on October 21, 2022. The barrier beach was artificially breached on November 15th. The maximum water surface elevation during this closure was 8.26 ft at the Jenner visitor center gage.

The mouth of the Russian River closed again on November 25, 2022. As of November 30th, an artificial breach event was scheduled for December 5th if the barrier beach did not self-breach before then.

Interim Flow Changes

On May 25, 2022 Sonoma Water filed Temporary Urgency Change Petitions with the Division of Water Rights (Division) requesting that the Russian River water supply condition be classified as *Critical*. Without the requested changes, the Russian River water supply condition would be classified as *Normal Dry-Spring II*, which would require the minimum instream flow requirement on the Upper Russian be 75 cfs and on the Lower Russian River be 125 cfs for the remainder of the year. Based on reservoir storage forecasts prepared by Sonoma Water engineering staff, reservoir releases to meet these minimum instream flow requirements would severely deplete storage in both Lake Mendocino and Lake Sonoma; and result in releases from Lake Sonoma that would violate the Incidental Take Statement in the 2008 Russian River Biological Opinion. The Petitions include commitments for monitoring and reporting, and a 20 percent reduction in diversions (compared to 2020) from the Russian River from July 1 through October 31, 2022 or until flows at the US Geological Survey gage at Hacienda Bridge are at or above 125 cfs. On June 17, 2022, the Division issued an order approving the requested changes. The order expires on December 13, 2022.

On October 28, 2022, Sonoma Water filed Temporary Urgency Change Petitions with the Division requesting that the water supply condition, which determines the minimum instream flow requirements, be changed from cumulative inflow into Lake Pillsbury (in the Eel River watershed) to storage thresholds at Lake Mendocino starting December 14, 2022. This is in response to the ongoing reduced transfer of Eel River water into the Russian River watershed due to the transformer bank failure at the Potter Valley Project powerhouse.

Biological Assessment for New Biological Opinion

In anticipation of the expiration of the 2008 Biological Opinion (BO) in September 2023, Sonoma Water is working with National Marine Fisheries Service (NMFS), the U.S. Army Corps of Engineers (USACE), and California Department of Fish

and Wildlife (CDFW) to reinitiate consultation and develop a Biological Assessment (BA) for continuation of the USACE and Sonoma Water operations in the Russian River watershed. A summary of work completed to date was provided in the August 2022 update.

ESA is preparing the administrative draft Biological Assessment and a draft Biological Assessment will submitted to NMFS and CDFW on December 9.