Russian River Biological Opinion Update – June 7, 2021

The Sonoma County Water Agency (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 2021.

Dry Creek Habitat Enhancement Project

Construction

Hanford and the Sonoma Water Construction Management staff are preparing to construct the two remaining Phase III project elements during the 2021 in-stream work window from June 15 to October 15. Nesting bird surveys were conducted by Sonoma Water biologists on June 1 to identify any active bird nests in the construction areas that need to be avoided. The results were expected by June 2nd. Hanford submitted their master schedule and weekly construction planning meetings have begun. Sonoma Water is in the process of reviewing Hanford's dewatering plans, which will be forwarded to the Resource Agencies for approval, and placing survey stakes to indicate work limits and grading. The week of June 7, Hanford will begin staging equipment for the in-stream work and start construction on upland areas and access routes that are outside of the buffer areas surrounding active bird nests.

Habitat Monitoring and Maintenance

Sonoma Water environmental staff conducted physical and biological surveys on newly constructed and maintained sites over summer and fall 2020 to verify they were built according to the plans and to quantify the habitat created. This involves surveying the topography at the site, the bathymetry in the creek channel and habitat features, the velocity and depth of the water, and the location and extent of specific habitat structures such as log jams, pools, and riffles. Sonoma Water staff are finalizing data processing by analyzing and rating habitat quality and quantity, identifying physical changes, and making maps to illustrate results. Habitat monitoring during 2020 found that the greatest amount of optimal habitat occurred in off-channel enhancement sites and in alcove habitat units.

This photo taken on 5.21.21 shows the bank repair work that was completed last season along Dry Creek on the Boaz Property.

Sonoma Water Engineering and Environmental staff visited the Phase III sites below Westside Road Bridge that were impaired by sediment deposition during the high flows of 2019 to observe site conditions and develop conceptual design options for maintaining the features. The tentative plan is to remove some of the deposited sediments and to reopen the side channels and reconnect them to the mainstem of the creek in a configuration that will discourage sediment entrainment. The team will now refine the concepts, model the hydraulics, estimate excavation volumes and potential cost, and determine whether to do the work this year or in 2022. Maintenance work on the Phase III project will use the same source of funds used for Phase II and III construction.

Phases IV - VI

Inter-Fluve has completed the bid documents for Phase IV and it will be the first phase to be constructed. The Corps is currently reviewing changes to the Right-Of-Way agreement that were requested by some of the property owners participating in Phase IV. Due to the time required to conduct this review and obtain approval the start of construction may be delayed. Logs and large wood materials that SW has purchased to construct the habitat structures in the Phase IV project are being delivered to the Corps yard at Warm Springs Dam .

ESA has completed the 99% design submittal for Phase V and construction is scheduled to begin in 2023. Sonoma Water continues advance the right-of-way agreements with Phase V property owners, which involves appraising the value of the easements, meeting with property owner, and addressing property owner questions and concerns. Sonoma Water and Cardno, the design consultant, are addressing final comments from the Corps of Engineers on the 99% design plans and specifications for Phase VI, which is planned to start construction in 2024. The Sonoma Water right-of-way staff and project manager are also working with ESA and Cardno to review the access routes and staging areas for these projects and refine them, if necessary, in time for appraisals.

ESA, the design consultant for Phases III and V, has completed field studies on an additional site immediately upstream of the Phase III site currently under construction in Reach 5. They submitted an initial draft of the 30% design and expect to deliver the full 30% design submittal the week of June 1. Once received, Sonoma Water will review the design

and discuss it with the property owners for their input. Sonoma Water is advancing this work independently of the work being cost-shared with the Corps using the same source of funds as Phases I, II, and III. It builds on a relationship developed with a property owner during the Phase III project and will provide habitat that may be needed to fully meet the 6 miles required by the Biological Opinion in the event that any planned projects fall through.

Fish Monitoring

Each spring, Sonoma Water and California Sea Grant operate downstream migrant fish traps near the mouths of seven tributaries to the Russian River (Dry, Mill, Mark West, Green Valley, Dutch Bill, Austin, and Willow creeks) as well as on the mainstem Russian River at our Mirabel inflatable dam in Forestville. These efforts are largely aimed at assessing the population status and trends of salmon and steelhead smolts (see figure below) as they migrate to the ocean. Fish traps on the six smaller tributaries (i.e., Dry Creek not included) are operated until stream flow becomes disconnected which typically occurs in mid- to late-June. Because of the extremely dry winter of 2020/21, however, fish trapping has ended on all six tributaries marking the earliest end to the trapping season since monitoring began in the early 2000s. These conditions do not portend well for young coho and steelhead that must now face the extremely dry conditions already setting in.

A silver lining to this year's trapping season are robust numbers of Chinook salmon smolts captured in both the Dry Creek and Mirabel traps. As of late May, catches at these two sites, combined, were the second highest of any other year since we began implementing the Biological Opinion in 2009. We speculate that the mild (dry) winter led to flow conditions that were very favorable for egg to smolt survival for newly hatched-Chinook.

Target species for downstream migrant fish trapping conducted by Sonoma Water.

Russian River Estuary Management Project

The mouth of the Russian River closed on April 21, 2021, and it ended in a self-breach on May 6, 2021. It was the sixth closure in 2021. The mouth closed again, for the seventh time to date in 2021, on May 10 and ended in a self-breach on May 18. Sonoma Water submitted a draft of the 2021 Adaptive Management Plan to resource agencies for review in March and staff plan to finalize it in June 2021. Baseline, weekly pinniped monitoring is ongoing and water quality and biological monitoring is under way.

Interim Flow Changes

On January 7, 2021, Sonoma Water filed a Temporary Urgency Change Petition (Petition) in response to ongoing dry conditions and low storage at Lake Mendocino.

Lake Mendocino in early May of 2021. Storage in the reservoir is at historic lows.

The Petition requested that storage thresholds at Lake Mendocino be used to determine the water year type and set minimum stream flow requirements for the Upper Russian River instead of cumulative inflow into Lake Pillsbury. No changes were requested for how the water year type is determined for Dry Creek or the Lower Russian River. The Petition was noticed on January 19, 2021 and an Order approving the temporary requested changes was issued by the State Water Board on February 4, 2021. Based on the Lake Mendocino storage thresholds approved by the State Water Board order, the water year type for the Upper Russian River changed from *Dry* to *Critical*. The water year type for Dry Creek and the Lower Russian River remains *Dry*.

On May 11, 2021, Sonoma Water filed another Petition to request a reduction in minimum instream flow requirements for the Lower Russian River and extend the reduced minimum instream flow requirements in the Upper Russian River, which would increase on July 27 when the February order expires. This is in response to very low storage levels at both Lake Mendocino and Lake Sonoma. Included with the May Petition was a commitment by Sonoma Water to reduce its Russian River diversions by 20 percent between July 1 and October 31 compared the same time period in 2020 in an additional effort to preserve storage at Lake Sonoma.