



## **Russian River Biological Opinion Update – December 6, 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](http://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 2022.

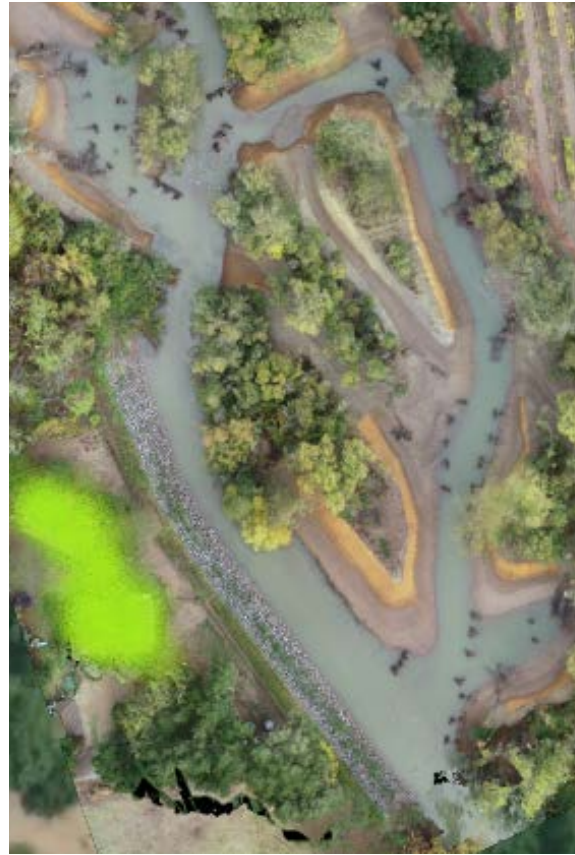
### **Fish Monitoring**

The large storm event that occurred from October 23 to 24 necessitated removing the video monitoring system at the Mirabel fish ladder before the adult migration period started to ramp up. The video system, operated each year, is aimed at providing an annual count of upstream migrating adult Chinook salmon passing the Mirabel dam. The October 23 end to the video monitoring season was the earliest since monitoring began in 2000. The loss of an annual count of live adult Chinook passing the dam means that Sonoma Water will instead have to rely on spawner surveys in the mainstem Russian River and Dry Creek to give an indication of where adult Chinook spawned in 2021.

### **Dry Creek Habitat Enhancement Project**

#### **Construction**

Hanford ARC, the contractor for Sonoma Water, completed the construction of the two remaining Phase III Reach 5A project elements in late September and has fully demobilized. Some minor damage occurred in a small area of the inlet to the newly constructed site as a result of a panel of erosion control fabric being lifted up during the approximate 3,000 cfs flows that occurred during the October 24, 2021 atmospheric river event. No other damage was noticeable to any of the features throughout the site. Hanford ARC was able to come back out and reinstall the erosion control fabric panel with a hand crew and restake the location with additional willow cuttings and wooden stakes. Sonoma Water crews have also been installing willow cuttings throughout the rest of the site.



*Aerial photo of the site on October 6 (at left) immediately after construction, and October 27 (at right) after the October 24 storm event, taken by the Sonoma Water monitoring crew using a drone. The mainstem of Dry Creek is flowing from top to bottom of the photos. Area of minor bank failure is circled in blue.*



*Photo shows minor bank failure from the October 24, 2021 high flow event at the inlet to one of the habitat features in Phase III Reach 5A site (circled in blue above). View is looking across the inlet with flows coming from the right to the left. Photo taken November 3, 2021.*





*Repair of minor bank failure area showing new fabric, willow cuttings and wooden stakes at inlet to the Phase III Reach 5A site (repair area is on right hand side of photo). View is looking downstream into the habitat feature. Photo taken November 17, 2021.*



*Another view of inlet channel on November 15 during the restaking of the fabric, showing the pool and riffle that were created by the bank adjustment and gravel deposition. The mainstem of Dry Creek is on the right and flow is going right to left into the habitat feature. Juvenile salmon were feeding at the downstream end of the inlet riffle by the log structures.*

### **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, and recording the location and extent of specific habitat structures such as log jams, pools, and riffles. A post-construction drone flight was conducted on October 6<sup>th</sup> and a 2<sup>nd</sup> flight was conducted on October 27 (comparison shown above) to evaluate changes following the high flows of the October 24<sup>th</sup> rainfall event.





*Sonoma Water habitat monitoring crew collecting data at the Phase III Reach 5A site. Note the water line stain about 2 feet below the top of bank from the October 24<sup>th</sup> high flow event. Photo taken November 3, 2021.*

#### **Phases IV – VI**

Inter-Fluve, Inc. has completed the bid documents for Phase IV, which is planned for construction in summer 2022. The Corps has completed their review of the right-of-way agreement modifications that were requested by some of the participating property owners and submitted the results to Sonoma Water. Sonoma Water is now waiting for some of the property owners to respond to the Corps' feedback and terms

ESA and Cardno have completed the 99% design submittals for Phases V and VI, respectively. Construction of Phase V is scheduled to begin in summer 2023 and Phase VI in 2024. Sonoma Water has presented right-of-way offers to the property owners for review. Property Owners for the Phase V sites are reviewing the appraisals and compensation estimates for the right-of-way easements. The Sonoma Water right-of-way staff and project manager are also working with Cardno and the Phase VI property owners to finalize the access routes and staging areas for these projects and prepare right-of-way compensation offers.

The additional Phase V site in Reach 5B, immediately upstream of the Phase III site currently under construction in Reach 5, is in the 30% design Phase. ESA is updating their designs to address feedback from the 30% design review meeting with Sonoma Water and the on-site meeting with the property owner. The updates primarily involve refining the designs of bank repair and log features and evaluating options for resolving access constraints. Sonoma Water Environmental staff are setting up an on-site review meeting with the regulatory agency staff to obtain their input and preliminary approval for the project.

#### **Russian River Estuary Management Project**

The mouth of the Russian River closed on November 26, 2021, and self-breached on November 28, 2021. Water surface elevation in the lagoon peaked at 5.27 ft during this closure. The lagoon management season concluded on October 15<sup>th</sup> and so did the associated biological monitoring. Baseline, weekly pinniped monitoring continues. Water quality monitoring may resume under the current Temporary Urgency Change Order once river flows decline after the storm. Water quality monitoring data can be viewed as it becomes available in the weekly water quality status report:

<https://www.sonomawater.org/tucp>

## **Interim Flow Changes**

On May 11, 2021, Sonoma Water filed Temporary Urgency Change Petitions (Petitions) to request a reduction in minimum instream flow requirements for the Lower Russian River and the Upper Russian River. This was in response to very low storage levels at both Lake Mendocino and Lake Sonoma. An Order approving the Petitions was approved on June 14, 2021. The Order includes a number of monitoring and reporting requirements. In addition, it required Sonoma Water to reduce its Russian River diversions by 20 percent for the term of the Order compared to the same period in 2020 in an additional effort to preserve storage at Lake Sonoma. The order was amended on October 22, 2021 to link the requirement to reduce Russian River diversions by 20 percent to the water rights curtailments in the upper Russian River per the State's Emergency Drought Declaration. Curtailments are currently temporarily suspended due to high natural flows. The Order expires in early December of 2021. New Petitions were filed with the state on November 16, 2021. These Petitions were filed in light of continued low storage levels at Lake Mendocino and Lake Sonoma. The Petitions request a shift in the index used to determine the water year type, which then determines minimum streamflow requirements in the Russian River and Dry Creek. If approved, a subsequent order would allow the index to be based on storage in Lake Mendocino – more accurately reflecting watershed conditions in the Russian River watershed.

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