

## **Eel River Recovery Project Starts 2017 Fall Chinook Assessment – Potential Problems in Lower Eel River**

The Eel River Recovery Project (ERRP) has begun its annual assessment of the Eel River fall Chinook salmon run, which is projected to be robust. Dive surveys in the lower river will begin in early October or as soon as there is sufficient rain to allow fish passage and to flush algae. The ERRP will also track the migration of fish and spawning activity throughout the Eel River basin. However, first the Chinook salmon must stage and pass through the lower Eel River, and there is elevated risk of adult salmon stranding this year.

ERRP has conducted fall Chinook assessments since 2012 and has found the runs oscillating between 10,000 and 50,000 fish, which is similar to population levels from 1955-1958 that were measured by the U.S. Fish and Wildlife Service. While run strength declined from 2012 to 2015, ERRP found that the 2016 run rebounded to between 15,000 and 30,000 fish. Due to ocean fishing closures in 2017, good ocean productivity, and high juvenile survival in several years preceding, ERRP is expecting the run to rebound further this year.

In early September, ERRP found that all the pools in the lower Eel River, except the 12<sup>th</sup> Street Pool at River Lodge, are filled in and the channel is braided and shallow. The Creamery Pool below Fernbridge is disconnected and stagnant. The Worswick Pool above Fernbridge, which held several hundred Chinook salmon in past years, has filled in because of a massive bank failure during high flows earlier this year. Similarly, the Drake Pool at Palmer Avenue and the Boxcar Pool just upstream were formerly capable of holding several hundred adult salmon each, and have also filled. This means that Chinook salmon must run several miles from tide water to the 12<sup>th</sup> Street Pool to find appropriate habitat. The risk of the larger adults stranding in shallow riffles is high, if rainfall doesn't come in time and flows remain low.



**Stream bank erosion above Fernbridge caused the Worswick Pool to fill in and lose suitability for salmon.  
Photo by Pat Higgins. 9/17/17.**

Previous winter flows caused scour and channel recovery in a number of tributaries of the Eel River, but not in the lower river. ERRP has documented the problem of poor habitat conditions in the lower Eel River downstream of Fortuna since 2012. In October 2015, numerous salmon went blind while sitting in the shallow, algae-filled Worswick Pool.

The dive counts in lower Eel River pools use standard scientific methods where divers swim in a line and count salmon as they swim upstream. Dive teams are comprised of professional fisheries biologists and ERRP volunteers, many of whom have five years of dive experience. Even inexperienced divers help the team span the river and make sure fish do not pass around the team. Trained divers are paired with less experienced volunteers so that new people learn the art of counting fish.

The Wiyot Tribe and the Humboldt Redwood Company are co-sponsors of the Eel River fall Chinook assessment and will coordinate dives on different river reaches upstream of Fortuna on Fridays and Mondays, while ERRP will conduct dives in index pools in Fortuna and below on Saturdays. Dives will happen after sport fishing ends on October 1 and are scheduled for the weekends of October 6-9, October 20-23 and November 3-6. Dive dates are subject to change since there needs to be enough rainfall and increased flow to allow Chinook salmon to swim from tide water to lower river pools and to flush algae so conditions are safe for divers. Anyone who likes to swim and doesn't mind cold water can volunteer by calling Eric Stockwell at 845-0400.

In 2016, ERRP used drones with photographic capability to enumerate fish in shallow lower river pools and this technique will be employed again in 2017, if conditions are right. Scuba divers are also being recruited to assist with counts in pools that are more than 25 feet deep because free divers on the surface cannot count the fish holding at greater depth. After fish migrate out of the lower river, volunteer observers can call ERRP Managing Director Pat Higgins at 223-7200 to report migration or spawning activity. Photos and videos are used to document run strength and are often posted to Facebook, the ERRP website ([www.eelriverrecovery.org](http://www.eelriverrecovery.org)) and Vimeo channel ([vimeo.com/eelriverrecoveryproject](https://vimeo.com/eelriverrecoveryproject)).