

December 22, 2022

Something Wonderful Has Happened! The Hemphill Dam has been removed.

Salmon can now access 4 times more spawning area than they have for decades.

For almost 100 years the dam was a major problem for the salmon that swim up Auburn Ravine to spawn every fall and winter. In wet years, on average, 7 to 10 percent were able to get over the dam to reach good spawning areas upstream. In dryer years, none made it.



Hemphill Dam during a recent irrigation season (April 15 to October 15). After the upper steel and wood structure was removed in mid-October every year, it still blocked most fish that tried to get over it to the good spawning areas upstream.

The good news is that this dam has been removed. The site is now called the Hemphill Fish Passage Project. The salmon now have access to about eight miles of streambed. And they are using it!

The dam was replaced by a modern water diversion system that will allow fish like salmon, and steelhead to migrate upstream with ease while also allowing water delivery via the Hemphill Canal to continue as normal.



In this early-December photo, the old dam has been removed and replaced with a new "nature-like" system. The concrete walls of the canal intake can be seen in the distance just to the right of center. (Friends of Auburn Ravine Photo.)

The new system is called a Roughened Rock Ramp. It was installed in the streambed where the old dam used to be. It provides a gentle slope for the fish to swim up, and at its upper end it keeps the water high enough that water can still flow into the Hemphill Canal during irrigation season. A screen at the entrance to the canal will keep baby fish out of the canal so they can continue their trip down to the ocean. They will no longer die in the canal. To keep water flowing to customers along the Hemphill Canal, the screen is designed with mechanical wipers to keep itself free of leaves, sticks, other debris and sediment that might clog it up.

The project was managed by Nevada Irrigation District (Headquartered in Nevada County, CA) and Westcon Construction of Newcastle, CA. They completed the project before the first big rains came in this fall. When the rains did come in, and the creek water rose, salmon began swimming up into Auburn Ravine from the Sacramento River. In early November, we started seeing them on the Salmon Cameras that we operate near downtown Lincoln.

To find out where those salmon went, our volunteers conducted wading/walking surveys along many sections of the creek. Based on those observations, we can say that the Hemphill Fish Passage Project is clearly a success!

Before the dam was removed no more than 10% of the salmon that tried to get past the dam succeeded. Now that the dam is gone, 80% of the fish are getting past the old dam site, significantly improving the likelihood of Salmon and Steelhead population growth!