

Dibble Creek Fishway Modifications

In 2008, a scour mitigation project was constructed on Dibble Creek at Interstate 5. Sheet piles were placed across the creek downstream of the Interstate 5 bridge, and a fishway was constructed to allow fish passage over the sheet piles. During the subsequent years, high flows have washed out some of the smaller rock and damaged some of the weirs, and low flows have been observed passing through the weirs instead of over them. Caltrans maintenance forces completed the required modifications between October 17 and 20, 2011.



Figure 1: Cutting Low Flow Notch



Figure 2: Weir 2 Looking Downstream

Caltrans Red Bluff Maintenance Supervisor Robert Ybright, Leadworker Bert Begrin, and 4 other crew members performed the work. Brett Ditzler of Caltrans Hydraulics was also onsite for most of the duration. DFG personnel were onsite at various times, and included Craig Martz (Environmental Scientist - Caltrans Liaison), Kevin Gale (Senior Fish Habitat Supervisor), and James Thompson (Fish Habitat Supervisor). Access to the site was from an access ramp cut into the north bank of Dibble Creek west of Interstate 5. Fishway modification work consisted of the following:

- A low flow notch was cut in the sheet piles on the upstream end of the fishway.
- Under the direction of Kevin Gale, weir 2 was reconstructed, and the center boulder on weir 1 was replaced with another that better fit the low flow elevation.
- A grade control structure was constructed at the downstream pool tailwater control.
- Rock (1/4 ton to 1 ton) was placed on the south bank, just downstream of the fishway, to repair an area where the bank was beginning to erode.
- Loose rocks in the bottoms of the pools were used to fill gaps between the boulders in the weirs and the longitudinal berm along the north side of the fishway.
- Streambed material (gravel and fines) was placed on the weirs and jetted into the voids with a high pressure water hose.
- A mix of streambed material and 1/4 ton to 2 ton rock was used to build up and reinforce the longitudinal berm.

The total cost of the project was \$16,100 (not including project development resources). As-built weir elevations were recorded for reference.



Figure 3: Fishway Flow Left to Right