

Weber Diversion Fishway 2013-2014

Client: Trout Unlimited

Project Location: Uintah, UT (Weber River)

Name of Project Manager/Engineer: Jason Carey

Brief description of project: Trout Unlimited and the Utah DWR are actively improving connectivity and stream health in the Weber River Basin. An irrigation diversion structure at the mouth of the Weber Canyon, southeast of Ogden, Utah, was a major barrier at high flows. Trout Unlimited and DWR desired to provide bluehead sucker passage without replacing the existing diversion or fish passage structure. The irrigation company requested any modifications to not affect their existing structure and water right. They required the ability to divert their full water right. RiverRestoration designed the Weber Diversion Vertical Slot Fishway has proved to rehabilitate the structure and improve the river hydraulics to achieve both goals.

The design was retrofitted to the existing headgate and bypass channel for an economical solution. RiverRestoration utilized advanced 2-dimensional hydrodynamic flow modeling to predict the performance of the structure and hydraulic conditions that bluehead suckers would be faced with. Water year 2015 proved the success of the structure and predictive modeling through a wide range of runoff flows with successful bluehead sucker passage.



Weber Diversion Vertical Slot Fishway Flow Trace of 2D hydrodynamic modeling



Vertical Slot Fishway from top of structure

