

# HELPER RIVER REVITALIZATION PROJECT



*Phase I drop structure for boat and fish passage*

The Helper City River Revitalization by RiverRestoration includes delineation of 62 acres for riparian conservation to improve the flood capacity, buffer storm water, creation of 1.6 acres of wetlands, connection of 41 acres of floodplain habitat, removal of 8 fish passage barriers, restoration of 12 acres of aquatic habitat, and the engagement of residences and visitors in river stewardship. The project includes a 50-year monitoring and maintenance plan in collaboration with Helper City, schools, citizen volunteers, and state and federal agencies. The Project is restoring stream and riparian health functions, improving water quality, enhancing access, and building community stewardship of the river.

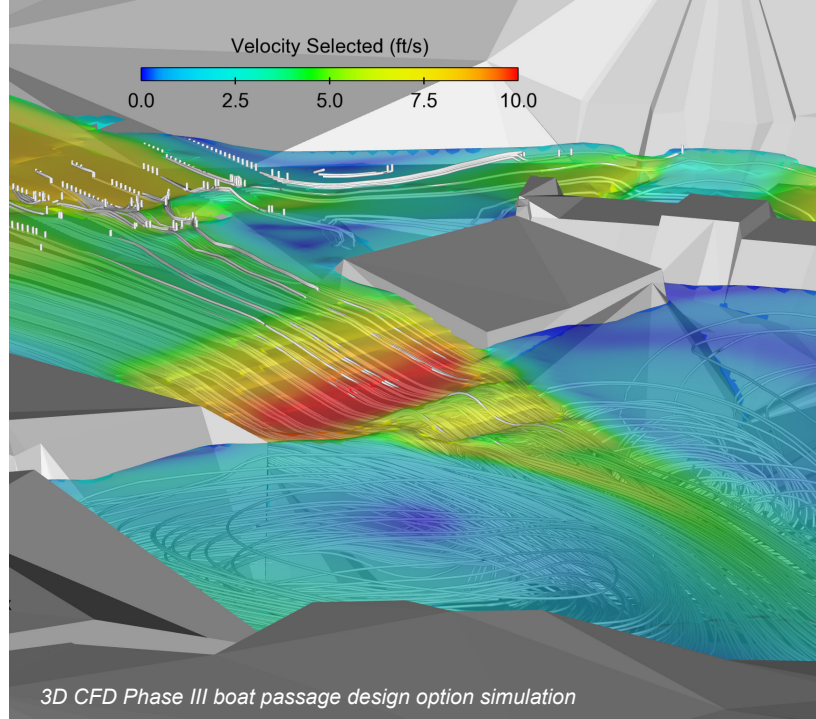


*Completed Phase I river beach access and boat passage channel*





*Pre-project conditions at Phase III site*



*3D CFD Phase III boat passage design option simulation*

The Helper River Revitalization is boat and fish passage project on the Price River which comprises five multiple phases. Phase I was completed in the fall of 2014 and included the installation of two drop structures and an access beach which improves flood capacity. Phase II included the removal of an abandoned diversion structure and installation of rock arch rapids, completed March, 2016. Phase III is scheduled to begin construction in the fall of 2016 and will replace a hazardous grade-control structure with safe passage for boats and fish, with benefits to instream recreation. Along with the final two phases, 2.5 miles of the Price River will be connected for restored upstream and downstream passage in the heart of downtown Helper City, Utah, with recreational, economic, aesthetic, and ecologic improvement.



*Pre-project conditions at Phase II site.*

Primary boat passage concerns for the Price River are downstream light water craft including inner-tubes, kayaks, canoes, and stand-up paddle boards. Structures were designed using 3D CFD to hydraulic metrics for these types of watercraft, including drop heights, velocities, and recirculation zones. Since installation, the Price River has seen an increase in recreational river users. Upstream passage of the bluehead sucker and other native and sport fishes was critical to the project success and fish passage criteria were achieved at each Phase.



*Dam modifications and rock arch rapids at the completed Phase II site.*

City and County officials, community members, and core team members from Utah's Watershed Restoration Initiative (WRI) gathered for the ribbon cutting and official grand opening of the Pilot Project. Helper City Mayor, Edward Chavez, and the citizens were out before the beginning of the ceremony, pulling weeds, and sweeping the bike path to prepare. At the ceremony the voices of all present were heard about both the successes of the newly completed project.