GEORGETOWN FISH LADDER ACCOMPLISHMENT REPORT

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In late July 2009, construction was completed on the Georgetown Creek Hydroelectric Diversion Fish Ladder. The project is the result of a partnership that includes U.S. Bureau of Reclamation (BOR), U.S. Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), Georgetown Irrigation Company, the State of Idaho, the Bear River Environmental Coordinating Committee (ECC), and U.S.D.A. Forest Service (USFS).

The diversion headgate, located on BLM land, has traditionally blocked upstream fish migration. The Statewide Bonneville Cutthroat Trout Management Plan identifies Georgetown Creek as an important tributary of the Bear River to restore access for Bonneville cutthroat trout from the Bear River. In 2006, the ECC (set up to oversee the settlement agreement with PacifiCorp for relicensing their hydroelectric dams on the Bear River in Idaho) funded the design of the fish ladder. Dave Kennington from Sunrise Engineering of Alpine, Wyoming was hired to design the ladder.

The BOR implementation crew out of Provo, Utah was secured to construct the facility. The concrete fishway was constructed adjacent to the existing headgate structure. Weir plates with orifice openings slow water so fish can migrate through the structure and around the hydroelectric diversion headgate. Test flows were released through the fish ladder with the members of the Georgetown irrigation company present and they approved of the project. Fish can easily pass upstream through the passage facility with swim-through conditions when it is flowing. I currently recommend the fish ladder will be closed to fish passage except in during the cutthroat migration period in the spring to exclude most non-native brook and brown trout upstream passage. Idaho Department of Fish and Game is currently considering the possibility of removing non-native brook trout from the watershed upstream of the passage structure.

The fish ladder cost approximately $160,000 to construct with most funding coming from BOR, USFS, and USFWS.

The Georgetown Irrigation Company has agreed with the State of Idaho to dedicate 5 cfs for stream function and fish passage. This flow is also required through a BLM special use permit for the irrigation company to have their facility on BLM land.

The fish ladder is a component of a watershed-wide Bonneville cutthroat trout restoration effort that also includes removing a half-mile road segment and its associated impassable culverts on Forest land upstream of the fish passage facility and removing an irrigation dam on agricultural land that is a barrier to migrating fish. The road removal project is in progress and will continue for several years. The removal of the irrigation dam and

consolidation of its associated diversion ditches is currently being designed and, with proper funding, the project will likely be constructed in 2010.

At the time of writing this report, the catwalks that will be placed over the passage structure were being fabricated for installation in a couple weeks. The soil slope between the road and the fish ladder will be hydromulched and seeded this fall when the upstream road relocation project is revegetated. Adjustments to the weirs will be required each spring to achieve optimal passage conditions. The design engineer recommends the upstream weir plate be adjusted each spring to accommodate various spring flows. The upstream weir plate should be elevated with adjustment boards depending on flow and be replaced with a weir with an orifice for best (swim-through) passage conditions. The flow measuring device below the mouth of Right Hand Fork of Georgetown Creek should be adjusted to ensure optimal passage over it. Correction of the irrigation dam downstream will provide passage for migratory Bonneville cutthroat trout back to public land in the upper watershed.

Looking upstream at the barrier headgate at the Georgetown Hydroelectric Diversion during the Winter of 2007.

Looking downstream at the headgate barrier in the Winter of 2007.

Concrete pumper pouring the floor of the fish ladder facility around the Georgetown hydroelectric diversion headgate, July 2009.

Bureau of Reclamation constructing the Georgetown fish ladder, July 2009.

Georgetown fish ladder under construction, July 2009.

Water diversion into hydroelectric diversion intake so construction crews can work in the dry.

Backfilled fish ladder structure.

Simulated stream bottom in fish ladder.

Orifice weirs in fish ladder with partial flow.