

East Fork Bear River Reconnection Project

Federal grant #: F10AC00563

WNTI amount: \$105,000

Location: Summit County, Utah

TU project manager: Jim DeRito

Date: March 30, 2015

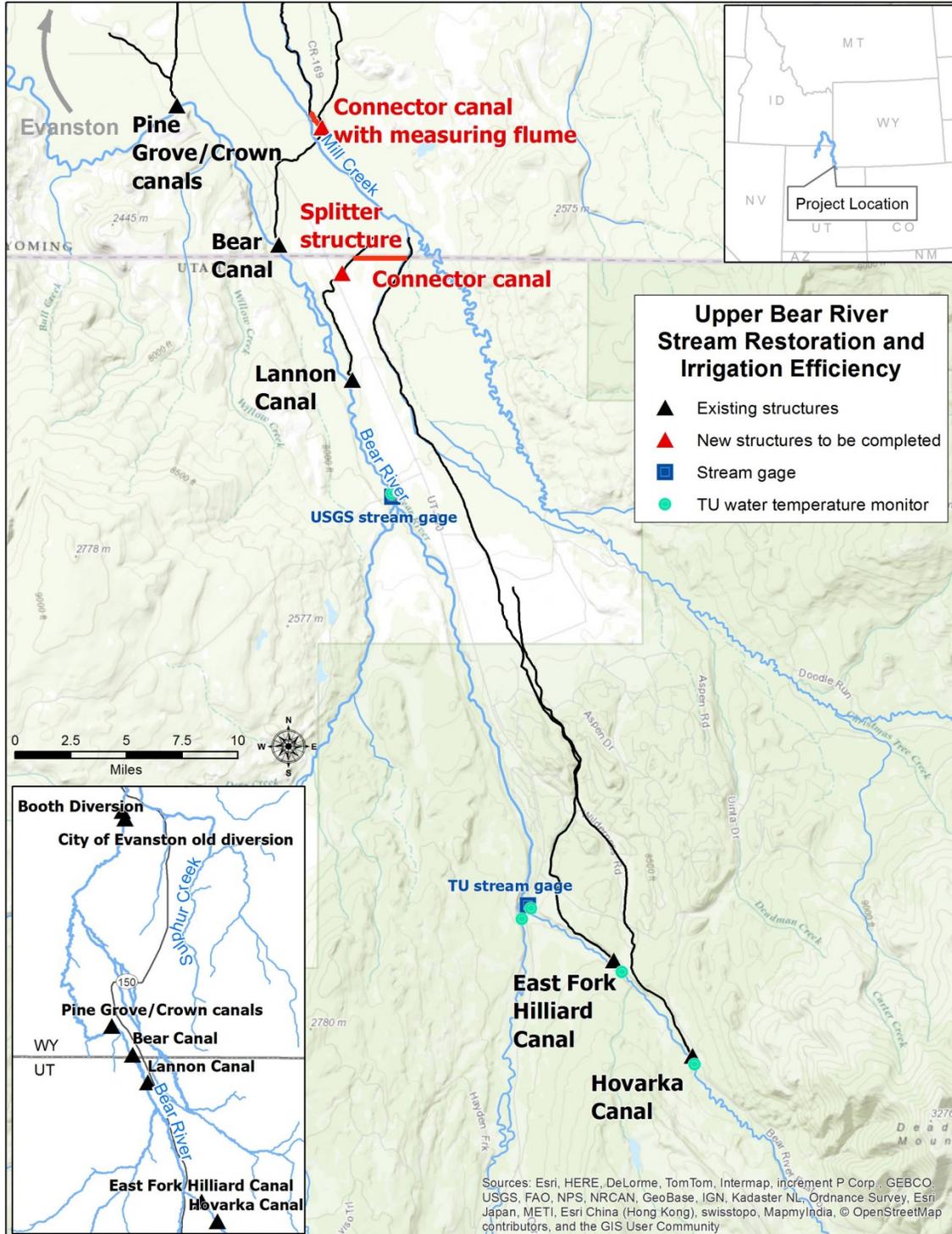
The East Fork Bear River originates in the Uinta Mountains at elevations over 10,000 feet and flows north and west through the Uinta-Wasatch-Cache National Forest to its confluence with the Bear River. The East Fork has a resident population of cutthroat trout and provides spawning and early rearing habitat for migratory cutthroat trout from the Bear River. Two irrigation diversions have their points of diversion on the East Fork Bear River and both of these have been documented to entrain cutthroat trout, whitefish, and sculpin. The primary objective of this project is to improve fish passage and eliminate fish entrainment at these two canals.

The upper diversion on the East Fork Bear River is the Hovarka Canal and the entire diversion structure was replaced and a horizontal flate plate fish screen installed in it during autumn 2013. The diversion and screen were operable and functioned well during the 2014 irrigation season (Photos 1 to 5). The East Fork Hilliard Canal was also planned to have a fish screen installed initially, but then it was decided by Trout Unlimited and the canal company to completely remove the diversion from the East Fork Bear River and consolidate it into an existing Lannon Canal that is seven miles downriver on the mainstem Bear River (see map). Not only will this eliminate fish entrainment, it will keep an additional 20 to 25 cfs in this reach during the irrigation season and eliminate the need for the canal company to regularly build a “push-up dam” with a bull dozer so that they can divert their water (Photos 6 & 7).

Planning and design work for the East Fork Hilliard and Lannon Canal consolidation has been occurring for the past several years. The in-river work on the Hilliard-Lannon consolidation project will occur after the 2015 irrigation season. The consolidation will be completed with over a mile of pipeline and a fish screen after the 2016 irrigation season.



Photo 1. Hovarka Canal fish screen from headgate.



Map. Project area on the East Fork and Upper Bear River where WNTI funding was applied. The fish screen was installed in the Hovarka diversion. The East Fork Hilliard Canal will be consolidated into the Lannon Canal on the mainstem Bear River. Water currently in the Lannon Canal will be moved to the Pine Grove/Crown and Bear canals.



Photo 2. Hovarka Canal fish screen at bypass



Photo 5. Hovarka Canal fish screen from downstream.



Photo 3. Hovarka Canal new diversion structure.



Photo 6. East Fork Hilliard Canal and push up dam.



Photo 4. Hovarka Canal and screen from hillside.



Photo 7. East Fork Hilliard Canal at push up dam.

All Western Native Trout Initiative funds have been spent on the Hovarka canal fish screen and diversion rebuild along with the engineering and planning for the East Fork Hilliard Canal consolidation (Table 1). A total of \$118,827 of matching contributions was spent through 12/31/2014 (Table 2).

Table 1. Expenses for WNTI funds for the East Fork Bear River Reconnection Project.

Item	amount
Supplies and materials	\$759.99
Engineering and construction contractors	\$101,868.58
Project coordination and oversight	\$2,371.43
	\$105,000.00

Table 2. Funding for the East Fork Bear River Reconnection Project.

Funding Source	Amount
Wildlife Conservation Society	\$47,406
Utah Watershed Restoration Initiative	\$26,274
Bonneville Environmental Foundation (Coca-Cola)	\$25,147
U. S. Forest Service	\$20,000
Total to date	\$118,827