

# 2011 Status Report

## Georgetown Road Relocation Project

Corey Lyman – Fisheries Biologist, Caribou-Targhee National Forest

January 31, 2011

In August of 2010, the Caribou-Targhee National Forest completed Phase III of the Georgetown Road Relocation Project. The overall goal of the Georgetown Road Relocation Project is to facilitate the restoration of Bonneville cutthroat trout in Georgetown Creek. The project objectives are to reduce sediment delivery to Georgetown Creek, improve water quality, restore stream floodplain access, and restore fish passage in the project area by removing the old road bed, restoring the stream channel meander, and planting exposed soil with native vegetation. The old road material will be transported to previously excavated areas in the upland and topped with soil. These deposits will also be planted with native vegetation. This is a multiple phase project that began with Phase I in 2008 and is scheduled to end in 2013 with the completion of Phase V.

Other work in the watershed has comprised efforts to restore stream channels, screen diversions, provide fish passage at hydropower facility and reclaim a half mile of stream that had been placed in a culvert through an old refinery site (See Table 1.).

The project area is located in Georgetown Canyon and encompasses the two mile segment of FSR 102 starting at the Forest Boundary and ending past Church Hollow. A significant volume of the two mile project length of Georgetown Road is composed of phosphate smelter slag from the phosphate mining operation in the upper watershed in the 1960's. In some parts of the treatment area, slag was continually deposited over the roadside until the valley bottom was full of slag and a 50 - 60 ft. wide haul road corridor was developed. Within this process Georgetown Creek was pushed against the valley wall and several undersized culverts were placed throughout the haul road prism.

In 2008 project implementation began on the upper ½ mile of FSR 102 within the project area selected by the Interdisciplinary Team (**Figure 1**). This reach of Georgetown Creek was selected as starting point because it contained a suitable new road location (old rail road corridor) that if incorporated could eliminate several road/stream crossings.

In 2008 Phase I of the project began by relocating ½ mile of FSR 102 to the uplands on north side of the project area that contained the old rail road prism (**Figure 2**). In addition to building the new road, all traffic was detoured and the old haul road prism was closed to traffic. This portion of the project was funded by the USDA Forest Service using regional Legacy Roads Funding (CMLG) at a cost of \$60,000.



In 2009, Phase II initiated the haul road removal out of the valley bottom. Approximately 600 feet of road were removed from the floodplain of Georgetown Creek located around the Swirly Hole road/stream crossing (**Figure 3**). The culvert was left in place to maintain grade control until the project resumed in 2010. In this reach, the natural contours, including appropriate floodplains widths were restored and several major springs were uncovered from beneath the road. Sediment barriers were erected between the stream and the completed project area. Road fill was transported and deposited in excavated areas in the uplands and covered with topsoil. The treatment area was re-vegetated using shrub transplants and seeding with native grass in the fall. Low gradient areas will be drilled with seed and high gradient areas will be hydro-mulched with seed. The work was funded by USDA Forest Service and the Western Native Trout Initiative (US Fish and Wildlife Service funds through the National Fish Habitat Initiative). The 2009 road removal and revegetation cost \$71,000 (78% USFS and 22% USFWS/WNTI).

In July of 2010, Phase III of the project resumed road and slag removal from the Georgetown Creek floodplain. In a six week work period road removal and slag containment were completed on the lower half of the old road way (**Figure 3**). Between 1,500 to 3,000 tons of material were moved per day resulting in 45,000 to 90,000 tons of road material relocated from the Georgetown Creek floodplain in 2010. Stream stability and floodplain diversity was also enhanced in the reach associated with the swirly hole road crossing. Nine rock weirs were placed to mitigate stream gradient and large wood placement with willow planting was implemented to roughen and revegetate the floodplain. The work was funded by the USDA Forest Service using regional Legacy Roads Funding (CMLG) at a cost of \$200,000.

Project completion is expected to occur by 2013 with two additional phases to implement road removal, floodplain restoration, and removal of the upper road/stream crossings.

Georgetown Creek is one tributary in the Nounan Reach of the Bear River that was identified as high priority for the restoration of migratory Bonneville cutthroat trout. The Nounan Reach has the highest concentration of migratory Bonneville cutthroat trout in the Bear River in Idaho and has the most connected tributaries. Idaho Department of Fish and Game has tracked migratory Bonneville cutthroat trout into lower Georgetown Creek but their upstream migration is blocked by several fish barriers.

The Georgetown Road Relocation Project is a component of an overall watershed restoration strategy for Georgetown Creek that includes enhancing fish passage around a hydroelectric diversion headgate on Bureau of Land Management land and passage over an irrigation dam on private land. In July 2009, the US Bureau of Reclamation constructed a fish ladder around the hydroelectric headgate, achieving passage there. In 2010, dam removal and stream restoration was completed on the Alleman Property and improved fish passage and habitat within lower Georgetown Creek.



### Caribou-Targhee National Forest

In recognition of the partnerships and conservation work underway, Georgetown Creek was listed by the National Fish Habitat Action Plan as one of the "10 Waters to Watch" in 2010 and was highlighted in a status report in 2011 by NOAA.

http://www.fishhabitat.org/index.php?option=com\_content&view=article&id=300:george town-creek-id&catid=56:waters-to-watch-archive-2010&Itemid=148

http://www.habitat.noaa.gov/pdf/fishhabitatreport.pdf

Year	2008	2009	2010	2011	2012	
	Phase I	Phase II	Phase III	_011	Phase IV	
Road	\$60,000	\$55,000	\$200,000	No	\$400,000	
Relocation	CMLG	CMLG?	CMLG	Funding	+,	
Hydro-Fish		\$15,000		U		
Ladder		USFWS				
		\$145,000				
		BOR, USFS				
Moving		Estimated cost to				
Stream out		reconstruct .5	miles of			
of .5 miles		stream – appr	oximately			
of culvert on		\$500,000				
patented		Mining Company				
mining						
claiming			L .			
Lower			\$45,000			
Georgetown			ECC			
Stream			\$30,000			
Restoration			IDFG LIP			
Project			\$25,000			
			USFWS/W			
			NTI			
			\$20,000			
			Eastern Idaho RAC			
			\$130,000			
			NRCS			
Total	\$60,000	\$465,000	\$700,000	\$0.00		\$1,225,000

#### Table 1.



Figure 1. Pre-project photo (2004) showing existing conditions.

Figure 2. Photo of the project area (2009) that captures the new road alignment.



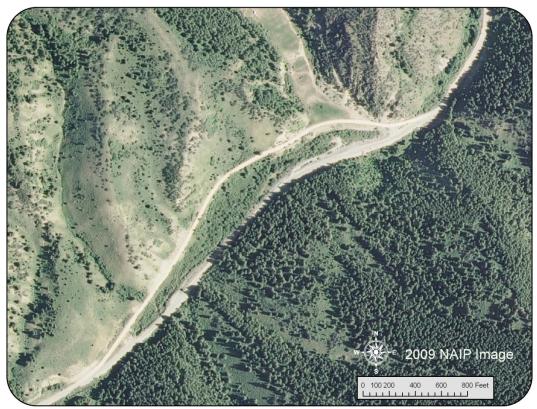
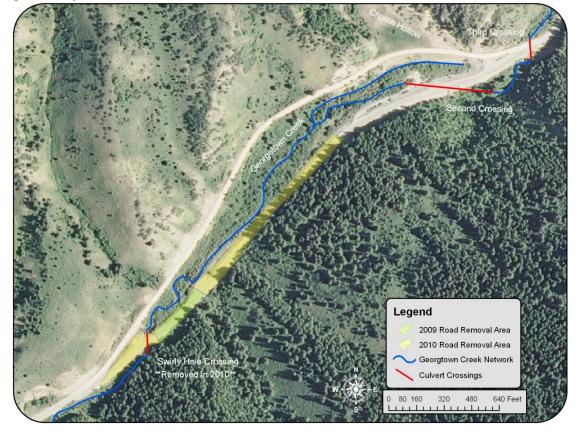


Figure 3.Project area with road removal treatments and barrier culvert locations.





#### Project Photos



Church Hollow Project End Point Swirly Hole Crossing Project Start Point



per end of project area taken near Church Hollow. One of the remaining perched culvert, to be removed in Phase IV is located in the center of the photo.



Concern: Slag-laden Georgetown Road adjacent to, in, or over Georgetown Creek.



Concern: In addition to Georgetown Road encroaching upon the stream and its floodplains, it presents significant migration barriers to upstream-migrating fish. Capurso prepared an environmental assessment during the winter of 2007-8 for the removal of the road from the stream and its floodplains. Close coordination between the Forest Service, the City of Georgetown, Idaho Department of Environmental Quality, and U.S. Environmental Protection



Agency was maintained throughout the project planning.



During the summer of 2008, a new road was constructed in the uplands, farther away from the stream. In this photo, you can see the new road (red in color) veering off to the right and the old road (grey in color) continuing along the stream to the left. Chevron signs were erected to divert traffic away from the old road. Senior Health Physicist, monitors air quality during operation.



An excavator removes the road fill and places it in a dump truck for transport to the uplands.



In July 2009, excavation of the old road was initiated. During the project planning process, a couple individuals expressed concerns about the potential toxic nature of the mining slag within the road base. Monitoring occurred during the implementation phase. In this photograph, Dave Jones, Idaho Department of Environmental Quality



Georgetown Road is removed from the floodplain and stream. During excavation, several springs were uncovered.



#### Caribou-Targhee National Forest



An aerial view of the road segment completed during July 2009 (dark brown in color). This area will be planted in shrub clumps and native grass seed in the fall.



One of the upland deposit sites. We chose excavated areas to spread the road fill material and cover it with soil. These areas will be hydromulched with native grass seeds this fall.



Another upland deposit site ready for planting.



The view from the upstream end of the project site from an untreated segment of the old road.







A segment of the re-contoured floodplain of Georgetown Creek after the removal of the road. This area will be planted with shrubs and native grass seeds in the fall.