



Region One
490 North Meridian Road
Kalispell, MT 59901
(406) 752-5501
Ref # LA07-24
March 6, 2024

Kootenai National Forest
Cabinet Ranger District
2693 MT Highway 200
Trout Creek, MT 59874

RE: Quarterly Small Projects Scoping

Dear Michael Fieger,

Thank you for the opportunity to comment on the scoping of four proposed small projects, including the Rock Creek road realignment, Rock Creek culvert replacement, Smeads Pilgrim motorized trails reroute, and the St. Paul trailhead improvement.

St. Paul Trailhead Improvement

The relocation of the trailhead upslope and further way from the creek is expected to provide positive and localized benefits to the upper East Fork Bull River. This area in the vicinity of the trailhead and upstream is a known spawning and rearing area for bull trout and has the highest densities of the species in the East Fork Bull River drainage. Moving the trailhead further from the stream will help reduce bank erosion from social trails, prevent potential trampling of redds, minimize the disruption to adult fish spawning or staging to spawn, and would improve water quality by removing a leaking outhouse which is in close proximity to the stream. Montana Fish, Wildlife & Parks has been a supportive partner of this project since its inception, working with Avista and the Kootenai National Forest through the Clark Fork Settlement Agreement.

Smeads Pilgrim Motorized Trails Reroute

Increased road and trail density results in decreased security and increased disturbance for big game. Therefore, due to the current easement issues resulting in the inability to use the final 1 mile of National Forest System Roads (NSFR) 2713 and the creation of a new trail connecting Trail #1084 to NSFR 149, we suggest either closing or removing NSFR 2713 from the intersection with Trail #1084 to its intersection with NSFR 149 since it will no longer be needed and does not provide access to any other points of recreation (i.e., trailheads). This closure or removal would decrease (open) road density and disturbance to big game without limiting recreation or access.

Rock Creek culvert replacements

The mainstem Rock Creek is naturally intermittent at both the Orr Creek and West Fork Rock Creek confluence (Moran and Storaasli 2016). This intermittent section flows during spring runoff and is typically dry by late July or August and may occasionally be reconnected during the fall following heavy rain events. The genetic status of westslope cutthroat trout (WCT) has not been determined in West Fork Rock Creek, while the genetic status of WCT in Orr Creek is dated (1993) and is based on a very low sample size ($n=4$). The lower perennial section of Rock Creek (from Engle Creek downstream to above the Highway 200 crossing) is occupied by non-native salmonids and is not routinely sampled. Bull trout and WCT are the only species known to occur in upstream perennial portions of the drainage including in the West Fork and in the mainstem above the West Fork. Westslope cutthroat trout have been found to be hybridized with two other *Oncorhynchus* species in portions of Rock Creek including in the upper drainage (Blakney and Tholl 2019).

Early genetic evaluations in the upper Rock Creek drainage indicated hybridization with Yellowstone cutthroat trout (YCT) in Rock Lake (1985 and 1993) and with both YCT and rainbow trout (RB) downstream of the lake, in Rock Creek Meadows (1984) (MFWP, unpublished data). In 2002, 25 samples were collected from the perennial portion of the drainage above the West Fork Rock Creek, with samples collected at three sites over about 3 kilometers (km). Of these 25 samples evaluated for hybridization, an allele characteristic of RB was detected at one of the six diagnostic loci that distinguish WCT from RB (MFWP, unpublished data). The allele was detected in one fish collected about 1.6 km upstream of the West Fork Rock Creek. It was noted that the presence of the allele could indicate a low level of hybridization with RB, or it could represent WCT genetic variation that is indistinguishable from RB. Thus, at the time, it could not conclusively be determined if the middle portion of Rock Creek (2002 sample locations, from WFRC upstream 3 km) contained non-hybridized WCT. The geneticists that evaluated these samples suggested the fish may not be hybridized because the potential upstream source (Rock Lake and Rock Creek meadows) contain higher YCT genetic contribution when compared to RB. Gene flow from those upstream sources should have introduced YCT genes into the middle reaches but this has apparently not occurred. A 2007 evaluation found no WCT hybrids anywhere in the Rock Creek drainage (Ardren et al. 2009), however, fish were not evaluated for the presence of YCT alleles. In 2014, introgression with RB was documented at low levels in the lower (4%), middle (0.4%) and upper (4%) portions of the watershed, but again fish were not evaluated for the presence of YCT alleles (DeHaan et al. 2016). Given the early findings of hybridization with YCT in the upper drainage, the potential presence of shared alleles between WCT and RB, and the documented presence of hybridization between WCT and YCT in all individuals collected in Rock Lake in 2016 (Kovach et al. 2019), the information gleaned from the 2007 and 2014 sampling should be considered ambiguous (Blakney and Tholl 2019).

Given the complex and ambiguous patterns of *Oncorhynchus* hybridization with native WCT in the Rock Creek drainage as well as the presence of non-native brook trout in the lower mainstem of Rock Creek and in a major tributary, Orr Creek; caution should be taken when considering improving connectivity between the mainstem, Orr Creek and the West Fork Rock Creek to ensure it does not facilitate the invasion by hybridized *Oncorhynchus* and/or non-native salmonids. Genetic testing should be completed above and below both proposed crossings to characterize the genetic status of *Oncorhynchus*. The complete fish community should be recorded during these efforts to document species composition and the potential for expanded distribution of non-native salmonids. Please coordinate with local FWP fisheries staff on these data collection efforts.

Limited sampling has occurred in the West Fork Rock Creek and Orr Creek. Sampling efforts by Avista and FWP staff have noted the occurrence of lone, resident adult-sized bull trout in West Fork Rock Creek at rivermile (rm) 0.6 in 2015 (311 mm) and at rm 0.8 in 2019 (250 mm). Along with these lone bull trout, all other fish captured at these two sites were WCT. In 2012, the U.S. Forest Service found six juvenile bull trout in the West Fork just upstream of its confluence with the mainstem of Rock Creek and below the proposed road crossing upgrade at rm 0.15. Annual natural intermittency extends up the West Fork about 0.5 rm, which would limit the temporal extent of improved connectivity to the spring freshet, a period when WCT, RB, and hybridized *Oncorhynchus* would be expected to make movements associated with spawning. Genetic samples were collected from four individuals in Orr Creek in 1993 and these fish were found to be non-hybridized (MFWP, unpublished data). Orr Creek was sampled at one location in 2015 beginning around rm 0.2. and WCT were the only species observed. It is unclear how much suitable habitat exists for fish above the culvert proposed to be upgraded on Orr Creek at rm 0.5 but given the steep nature of the drainage above this area, there may not be an additional 1.1 miles of habitat above the culvert as stated in the project scoping document.

Rock Creek road realignment

Moving 0.7 miles of U.S. Forest Service Road #150 out of the floodplain and riparian area on the lower perennial portion of Rock Creek should benefit habitat quality by reducing fine sediment delivery to the stream.

We appreciate the opportunity to review these proposals. If you have any questions, please feel free to contact Zack Farley, Thompson Falls area wildlife biologist, at (406) 250-5490 or Zachary.farley@mt.gov or Jason Blakney, Thompson Falls area fisheries management biologist, at (406) 382-3033 or jblakney@mt.gov.

Sincerely,

A handwritten signature in cursive script that reads "Lee Anderson".

Lee Anderson
Region 1 Supervisor
Montana Fish, Wildlife & Parks

Literature Cited

Ardren, W., Diggs, M., and S Bernall. 2009. Genetic Analysis of Westslope Cutthroat Trout at Cabinet Gorge Dam and Noxon Rapids Dam: Geographic Origins, Hybridization, and Management Implications. Report to Avista Corporation, Spokane, Washington.

Blakney J. and T. Tholl. 2019a. Native Salmonid Abundance and Tributary Habitat Restoration Monitoring. Comprehensive Report, 2014-2016. Including Summarized Data, 1999-2016. Report to Avista Corporation, Noxon, Montana and Montana Fish, Wildlife and Parks, Thompson Falls, Montana.

DeHaan, P., Adams, B., Von Bargaen, J. and M. Brinkmeyer. 2016. Genetics analysis of native salmonids from the Lake Pend Oreille and Clark Fork River System, Idaho and Montana. U.S. Fish and Wildlife Service, Abernathy Fish Technology Center, Longview, Washington. Report to Avista Corporation, Noxon, Montana.

Kovach, R., Leary, R., Painter, S. and A. Lodmell. 2019. August 6 Genetics letter to Montana Fish, Wildlife and Parks, J. Blakney. University of Montana Conservation Genetics Laboratory, College of Forestry and Conservation, University of Montana, Missoula, Montana.

Moran, S., and J. Storaasli. 2016. Fisheries Survey of the Rock Creek Drainage, Montana – 2015 Final Report. Fish Passage/Native Salmonid Restoration Program, Appendix C. Report to Avista Corporation, Noxon, Montana.