WDFW Responses to Anonymous Comments Received on SEPA DNS Determination/Adoption 25-014: Upper West Branch LeClerc Creek Westslope Cutthroat Trout Restoration

Comment 1:

How do you reverse the rotenone so that it doesn't kill fish downstream? May 12, 2025 6:22 pm

WDFW Response:

Deactivation of rotenone is accomplished through the application of potassium permanganate (KMnO₄) to treated water near the downstream boundary of the Project Area (Finlayson et al. 2018). Potassium permanganate chemically binds with rotenone, creating a non-toxic compound.

Deactivation for the Upper West Branch LeClerc Creek treatments will occur at the temporary fish management structure, where a 1% solution of KMnO₄ will be mixed in 400-gal tanks and applied to the stream via 0.83 hp chemical-resistant pump (March Pump, Glenview, IL) powered by a Honda EU2000 generator at a constant rate to achieve a 3 ppm in-stream concentration of KMnO₄. Deactivation will begin at least 2 hours prior to initiation of treatment to satiate organic demand prior to the arrival of rotenone. Secondary equipment (i.e., extra tanks or Mariotte bottles) will be available on-site for use in the event of primary equipment malfunction.

In-stream measurements of KMnO₄ concentration will be conducted throughout the treatment at 30 minutes (flow) travel time and 60 minutes travel time downstream of the deactivation station. Hourly samples will be analyzed using a Hach model DR900 colorimeter. Continual monitoring of KMnO₄ concentration will allow for adjustment of the application rate of 1% KMnO₄ solution to the stream, so that a residual concentration of 0.5–2.0 ppm KMnO₄ would be maintained in the stream at all times. Deactivation will continue until bioassay fish placed above the upstream deactivation station survive 24 consecutive hours.

Out of an abundance of caution, native fish salvage will be conducted in West Branch LeClerc Creek within 60 minutes travel time downstream of the tFMS prior to beginning treatment or deactivation. Captured native fish will be translocated outside the project area.

Reference

Finlayson, B., D. Skaar, J. Anderson, J. Carter, D. Duffield, M. Flammang, C. Jackson, J. Overlock, J. Steinkjer, and R. Wilson. 2018. Planning and standard operating procedures for the use of rotenone in fish management – rotenone SOP manual, 2nd edition. American Fisheries Society, Bethesda, Maryland. WDFW Responses to Anonymous Comments Received on SEPA DNS Determination/Adoption 25-014: Upper West Branch LeClerc Creek Westslope Cutthroat Trout Restoration

Comment 2:

I have a house on the West Branch of Le Clerc Creek. I remember not long ago the Kalispel Tribe tried something similar. They took out the beaver dams and then tried to reintroduce Bull Trout, I think it was Bulls. Might have been cutties. I have never seen a bull trout in that creek and I fish it regularly during that creek's season. The only fish I have caught have been West Slope Cutthroat. I have never caught a Brookie. I have caught them in Caldwell Lake where they are stoked. I have also caught them in the Pend Oreille river at the mount of Le Clerc Creek. So I am wondering if you're going to kill the Brookies in the river? It makes sense they would move up the creek from the river. Are you going to kill off the Brookies in Caldwell Lake. They can get into the creek from the lake via bucket biologists and even eagles that lose their catch over the creek. I have seen that happen at other water ways. Also, West Branch of Le Clerc goes underground in several places. How is that going to help the Cutthroat. This has been tried in that past and has not been successful in the past. So what are you going to do to make it successful this time.

May 19, 2025 2:59 pm

WDFW Response:

The Kalispel Tribe was contacted in regard to this comment and has not conducted beaver dam removals or fish stocking/reintroduction in the LeClerc Creek drainage (N. Bean, Kalispel Tribe Fish Biologist, pers. comm.). The United States Forest Service (USFS) did remove two log crib dams on West Branch LeClerc Creek associated with historic logging operations to restore fish passage in 2018. The intent of that project was to provide connectivity for native fish including Westslope Cutthroat Trout and Bull Trout. Westslope Cutthroat Trout are currently found throughout the drainage, while Bull Trout are rare. However, environmental DNA sampling conducted by the USFS has detected them downstream of the project area in recent years. Nonnative Brook Trout occur throughout much of West Branch LeClerc Creek and many of its tributaries (Maroney and Andersen 2000, Walker et al. 2022; 2024). As described in the project proposal, Brook Trout pose risk to long-term persistence of native fish populations due primarily to competition for food resources and habitat. The intent of the proposed project is to remove Brook Trout to benefit native fish.

No rotenone projects have previously been conducted in the LeClerc Creek watershed. Nonnative fish were successfully removed via backpack electrofishing in two very small tributaries to Upper West Branch LeClerc Creek (e.g., West Branch LeClerc Creek Tributary 1 and Saucon Creek), but both projects required more than 10 years of intensive effort (Harvey and Bean 2016; 2024; N. Bean, Kalispel Tribe Fish Biologist, pers. comm.). However, no such work has been conducted in mainstem West Branch LeClerc Creek prior to this project.

The LeClerc Creek drainage has been identified as a priority watershed for native fish restoration/mitigation to be conducted under the Federal Energy Regulatory Commission (FERC) license issued to the Pend Oreille Public Utility District #1 for operation of Box Canyon Dam. Future work, aimed at removal of non-native fish followed by reintroduction of Westslope Cutthroat Trout, will be proposed throughout the entirety of the West Branch LeClerc Creek drainage. Due to the size and complexity of the drainage, the work would occur in stages and take many years to complete. Following non-native fish removal in West Branch LeClerc Creek,

fisheries managers would weigh the risk of potential reinvasion from the mainstem Pend Oreille River. If warranted, management options could include a semi-permanent fish trapping facility near the mouth of West Branch LeClerc Creek to capture migratory fish attempting to move upstream and allow for selective passage of native fish. No rotenone treatments would occur in the Pend Oreille River, and all rotenone will be deactivated before exiting any proposed project within the LeClerc Creek drainage.

The project area is located more than 7 stream-miles above the seasonally intermittent portions of West Branch LeClerc Creek. Mainstem West Branch LeClerc Creek within the project area boundary is not known to experience dewatering or intermittent flow. Tributaries to the mainstem are also predominantly perennial. Habitat within the project area is capable of supporting a strong population of native WCT. The intermittent section(s) of West Branch LeClerc Creek make up a small portion of the watershed (< 10%). Although these areas experience seasonal dewatering in the summer and fall months, surface flow occurs for much of the year, allowing for fish passage. West Branch LeClerc Creek above and below the seasonally dewatered section(s) provides quality trout habitat. Native fish above and below the intermittent section will function as a single population due to fish movement during times of surface flow.

Caldwell Lake has no surface water connection to West Branch LeClerc Creek or any other drainage. Brook Trout are currently stocked in only a few lakes in NE Washington, all with no outlets due to potential for negative impact on native trout populations. Caldwell Lake is a Brook Trout monoculture with no other fish species present. The proposed project will not impact the Caldwell Lake fishery, and no changes to stocking are proposed.

The project proponents acknowledge the potential risk of illegal stocking or fish escaping from predatory birds. However, it should be noted that individuals transporting and releasing fish from one waterbody to another is a misdemeanor under WAC 220-450-030, with the offender also subject to restitution for the costs involved in capturing and removing released fish. The likelihood of fish dropped by eagles or other birds of prey establishing a viable population in West Branch LeClerc Creek is very low, as it is over 2 miles from Caldwell Lake to the closest portion of West Branch LeClerc Creek.

References

- Harvey, S. and N. J. Bean. 2016. Kalispel non-native fish suppression project: Annual report (May 2016-April 2017). Project no. 2007-149-00. Report to Bonneville Power Administration by Kalispel Tribe of Indians, Usk, Washington.
- Harvey, S. and N. J. Bean. 2024. Kalispel non-native fish suppression project: Annual report (May 2023-April 2024). Project no. 2007-149-00. Report to Bonneville Power Administration by Kalispel Tribe of Indians, Usk, Washington.
- Maroney, J. R., and T. A. Andersen. 2000. Habitat inventory and salmonid abundance for West Branch LeClerc Creek. Prepared for Pend Oreille County Public Utility District #1. Kalispel Tribe of Indians Natural Resource Department, Usk, Washington.
- Walker, B. M., N. J. Bean, S. Harvey, W. P. Baker, and J. A. Olson. 2022. Upper West Branch LeClerc Creek native fish restoration phase 1: Pre-treatment data collection – Progress Report. Prepared for the Box Canyon Hydroelectric Project Technical Committee.

Washington Department of Fish and Wildlife, Spokane, and Kalispel Tribe of Indians Natural Resource Department, Usk, Washington.

Walker, B. M., N. J. Bean, S. Harvey, W. P. Baker, and J. A. Olson. 2024. Upper West Branch LeClerc Creek native fish restoration phase 2: Proposed piscicide treatment. Prepared for the Box Canyon Hydroelectric Project Technical Committee. Washington Department of Fish and Wildlife, Spokane, and Kalispel Tribe of Indians Natural Resource Department, Usk, Washington.