



State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Southwest Region 5 • 5525 South 11th Street, Ridgefield, WA 98642
Telephone: (360) 696-6211

November 12, 2024

Kelsey Jolley
Sprit Lake NEPA Coordinator
987 McClellan Road
Vancouver, WA 98661

RE: WDFW Comments on Scope of Analysis of the Spirit Lake Outflow Safety Improvement Project

Dear Kelsey Jolley:

Thank you for providing the Washington Department of Fish and Wildlife (WDFW) opportunity to provide input on the Scope of Analysis of the Spirit Lake Outflow Safety Improvement Project. While we appreciate U.S. Forest Service efforts to identify alternatives that recognize the importance of returning native salmonids to Spirit Lake, we have concerns about how the alternatives are framed.

We strongly recommend an alternative that explicitly mentions fish passage to Spirit Lake in a manner that utilizes carefully managed water to erode a natural channel that fish can utilize, supported by a robust monitoring and adaptive management plan. None of the current alternatives address this need. Alternative A attempts to address fish passage but poses unrealistic construction practices and unnatural channel design. Other alternatives “set the stage for engineering with nature” but are absent any specifics assuring funding and follow-through on this commitment by the federal action agencies. As a result, WDFW does not support the current framing of the alternatives.

WDFW continues to encourage any project of this scale to:

- Decrease reliance on engineered solutions, and instead facilitate and make use of natural processes.
- Decrease the need for ongoing maintenance.
- Allow for fish access to historic blocked lake and tributary habitat.
- Provide a robust sediment monitoring and adaptive management plan to minimize downstream impacts (sedimentation, infrastructure, etc.) to WDFW lands.
- Improve long-term safety for downstream communities.

WDFW has a long history of involvement with the Spirit Lake/Toutle River system, including ownership of the Mt. St. Helens Wildlife Area Units located approximately 11 miles downstream of Spirit Lake on the North Fork Toutle River. Any project altering the outflow of Spirit Lake has potential to affect the WDFW Wildlife Area, as well as the fish, wildlife, and recreating public using the associated habitats.

Options for Fish Passage

The 1985 Comprehensive Management Plan was developed prior to ESA listing of native salmonids. With fish documented both above and below the current tunnel outflow structure, any water conveyance should take into consideration the affected fish populations and fish passage. Restoring access to currently blocked habitats on the North Fork Toutle River would boost salmon recovery in the subbasin. The Washington Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan states that spring Chinook, coho, and steelhead would especially benefit from restored access to historic habitat. WDFW supports Options to provide access to currently blocked historic habitats as a way to bring these fish populations closer to recovery goals.

Option A

At the most recent (11/7/2024) meeting of the Spirit Lake Outflow Project Engagement (SLOPE), the USFS and representatives spoke to the current Options under consideration, as listed in the NEPA Scoping Handout. Because WDFW has an interest in fish passage through the North Fork Toutle and into Spirit Lake, we support Options that would create an open channel. Option A would create an open channel, but one that is engineered, excavated with heavy equipment (using new haul roads) and reinforced with a concrete bed. Fish passage would likely depend on additional design elements (such as resting pools) and habitat features (such as large wood). While this may allow for fish passage to Spirit Lake, this solution would not rely on natural processes and would likely require a high degree of maintenance. WDFW believes that other Options would provide more benefit for fish migration.

Options C, F, D

Proponents described Option C (new pressure tunnel) and F (new outlet tunnel & intake) as ways to “set the stage” for future creation of an open channel using natural processes, or “Engineering with Nature.” These approaches could lower the lake level, thus reducing the risk of catastrophic release before moving forward with phases that would go through the debris holding back Spirit Lake. Similarly, Option D (rehabilitation of existing tunnel, with new buried conduit through debris blockage) could set the stage for future creation of an open surface channel in a stepwise manner as the conduit outlet is pulled back toward the lake.

Such approaches could allow for a future phases that create an open channel using the flow of water, and thereby allow volitional fish passage to Spirit Lake. It is our understanding that this process could take decades, because it would be done incrementally, with monitoring between actions to increase safety. While we conceptually support Options that would eventually provide volitional fish passage, we are interested in ways to accelerate the decades-long timeframes. We are also interested in discussions about alternatives for fish passage in the interim if such a long-term Option is chosen.

Another concern with Options that could take decades to provide volitional fish passage is that continuing the project for decades would require additional funding, which may require Congressional approval. With little certainty about future work phases to provide volitional fish passage, WDFW would prefer options that would provide for volitional fish passage under current authorizations. **We would like to consider an Option that includes fish passage as part of the current plan**, rather than Options which only “set the stage” for possible fish passage at a later phase. Ideally, the plan will include a firm commitment and timeline for volitional fish passage to Spirit Lake.

WDFW therefore strongly recommends the project proponents either re-write an Option, or create a new Option, that provides fish passage to Spirit Lake using Engineering with Nature methods. Due to uncertainties about the underlying geology and how water would shape the new channel, we also recognize that monitoring and adaptive management would be crucial components of such an Option.

Effects of Sediment Downstream, and Potential Capture of Sediment

WDFW recognizes that Options involving an open channel, particularly those using Engineering with Nature, would send sediment downstream. We understand that unchecked, this erosion would have potential to affect the efficiency of the Sediment Retention Structure, or flood-related levels of protection for downstream communities. Rather than dismiss these Options based on potential effects, WDFW encourages USFS to explore additional actions that could retain any mobilized sediments so that they do not become problematic. WDFW is aware of various grade building structures and large wood placements that have retained sediment within the North Fork Toutle River system. We hypothesize that additional placements or other such projects may capture mobilized materials that would otherwise lead to downstream issues. We emphasize the role of science to inform decision-making, and encourage additional research, monitoring, and adaptive management as it relates to sediment deposition, the effectiveness of downstream catchments, and the geologic stability of a newly eroded outlet channel.

WDFW owns and manages a portion of the land downstream of Spirit Lake, primarily for elk and riparian habitat. While we want to partner in this effort to return fish passage to Spirit Lake, we also want to avoid excess sediment compromising our efforts to return a more stable plant community to our lands. We strongly recommend development of a robust monitoring and adaptive management plan as a new channel is being formed, using a science-based approach to make adjustments and minimize impacts to our lands. We also strongly encourage the use of the Spirit Lake/Toutle-Cowlitz River Collaborative as a forum for detailed information sharing and problem-solving to ensure good decisions are made to avoid impacts. In the event future impacts are anticipated downstream, we also want to be a part of conversations to mitigate these impacts.

Effects of New Infrastructure

Several Options would require constructing new access roads to build and maintain the elements. Development of this infrastructure in an otherwise largely undeveloped area will have negative impacts to various wildlife species and their habitats. These include but are not limited to:

- **Elk and mountain goats**
 - Direct disturbance
 - Impediment to movement
 - Increased likelihood of illegal harvest
- **Carnivores**
 - Increased disturbance
 - Increased illegal harvest
- **Amphibians**
 - Disrupted movement patterns
 - Direct mortality

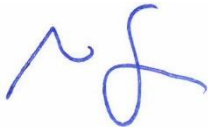
Consideration of Options should identify associated impacts from elements such as improved roads, supporting infrastructure, equipment storage, etc. Such elements should be minimized to as small a footprint as possible. Options using Engineering with Nature methods may require less infrastructure than other methods; this comparison should be part of the analysis. Also, new infrastructure should be located close to existing buildings and developed areas (such as parking lots and rock pits). Any new roads should be gated at all times, and motorized use by the public should not be allowed at any time of the year.

Risk Analysis

WDFW staff involved with the SLOPE group meetings were given a brief preview of a risk analysis for the various Options, with the understanding that a more thorough presentation of a risk analysis was forthcoming. It seems premature to write scoping comments and weigh alternatives without a better understanding of the risks associated with each alternative. Therefore, we request an extension to the comment deadline to allow time to learn more about the risk analysis. The weighting factors associated with the risk analysis would also be helpful for all reviewers.

Again, we thank you for the opportunity to provide input. Please contact Dave Howe at (360) 742-7423 or david.howe@dfw.wa.gov should you have any questions or need additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Sallee', with a stylized flourish at the end.

Rian Sallee
Regional Director
WDFW Region 5

cc: Dave Howe