SPOKANE RIVERKEEPER®

Together. For the River.

November 26, 2025

Dear Ecology Water Quality Team:

Thank you for the opportunity to comment on your TMDL Prioritization presentation. As you may know, Spokane Riverkeeper is a non-profit, advocacy organization that works to protect the Spokane River Watershed. The mission of the organization is to protect and restore the health of the Spokane River watershed, defend access to clean water, and the opportunity for all communities to enjoy the benefits of a clean and healthy Spokane River.

Spokane Riverkeeper appreciates your efforts in implementing TMDLs in eastern Washington to restore our impaired waters. We recognize there are many challenges associated with prioritizing projects in our region, and appreciate the time and effort spent on our river thus far. We especially appreciate your work in establishing the current TMDLs on the Little Spokane, Spokane River & Lake Spokane, and Hangman (Latah) Creek. We wish to offer this brief comment letter to provide thoughts on priorities for the coming year.

1. Hangman Creek ARP

We appreciate your continued prioritization of an advanced restoration plan for Hangman Creek, and look forward to seeing more about Ecology's plan to continue working to address nonpoint source pollution in the basin. Hangman Creek is a major source of pollution to the Spokane River, causing it to be impaired with sediment. In addition, because of the historical critical spawning habitat, re-establishing clean and healthy waters in this creek is necessary to support the restoration of salmon in our basin.

a. *Clean water in Hangman Creek is critical to restoring native fish populations to our basin.*

Hangman Creek has highly erodible soils but was once a meandering stream through bunchgrass prairie, ponderosa pine forest and a dense riparian vegetation of shrubs and trees. The creek has since been degraded by vegetation clearing for agriculture, rerouting, and straightening that has created an unstable bank with increasing stream velocity further eroding the bank, and causing significant water quality problems. When heavy rain falls on empty agriculture fields in the winter, that rainwater runoff can easily pick up large quantities of sediment to the creek and river.

Redband trout populations that exist in Hangman Creek and its tributaries upstream of the Spokane River suggest that the impacted section of Hangman Creek historically provided suitable habitat for redband trout (Biladeau and Kinkead 2018). Land use in Hangman Creek now prevents habitat access by redband trout and native salmon populations. High turbidity and large sediment loads within the creek have buried much of the gravel and sediment beds in the lower reaches of the creek. The primary populations of interior redband trout are now isolated in the headwaters of Hangman Creek tributaries (WDFW 2012). Continued turbidity impairments could reduce or eliminate potential spawning grounds on the interior redband trout in Hangman Creek and the Spokane River.

Hangman Creek has some of the worst water quality in the state, and needs large investment in its restoration to attain healthy water quality levels. We need significant investment into large scale restoration projects to see real progress in water quality. The time is now to double down on the efforts toward recovery of abundant healthy salmon populations, and their habitat. Smaller, disconnected projects are not enough to bring back healthy enough water quality to support abundant native fish life. Large scale riparian vegetation and floodplain restoration projects are necessary to provide the habitat necessary for supporting abundant wild fish. The Spokane River cannot flourish without ecosystem diversity. Improving water quality conditions is a necessary step to enhance and protect the aquatic community, including cold water fisheries on which the water quality standards are based in this watershed.

b. *This plan must be paired with ongoing, consistent enforcement of the law against nonpoint pollution.*

To complement restoration efforts, it is critical that Ecology maintain strong and consistent enforcement of existing requirements that limit agricultural pollution in the Hangman Creek basin. While many landowners are implementing conservation practices, ongoing violations including unbuffered streambanks, dredging and straightening, lack of erosion controls on tilled fields, and riparian clearing, continue to undermine water quality and habitat recovery.

Additionally, many sites will not come into compliance without clear and decisive enforcement actions. Experience in the basin shows that voluntary measures alone are not sufficient; many producers actively reject or avoid regulatory requirements unless compelled to act. Their participation, however, is essential to achieving meaningful reductions in sediment, improving riparian conditions, and meeting water quality standards in both Hangman Creek and the Spokane River.

Ecology has both the responsibility and the legal obligation under the Clean Water Act, state water quality laws, and the terms of our settlement agreement to enforce water quality standards and prevent ongoing pollution from nonpoint agricultural sources. These obligations require the Department to take appropriate action when agricultural activities contribute to or cause water quality violations. Strong and consistent enforcement protects designated uses, provides a level playing field for producers who comply with the law, and ensures that significant public investments in restoration are not undermined by ongoing noncompliance. Ensuring adherence to riparian protection, erosion control, and water quality requirements is necessary

for stabilizing streambanks, reducing sediment loading, and supporting the long-term recovery of native fish populations.

c. *Dissolved Oxygen targets should be included as part of the plan, or alternatively, a full DO TMDL should be established for Hangman Creek*

We also encourage Ecology to prioritize the development of dissolved oxygen (DO) targets within the Hangman Creek Advanced Restoration Plan or, alternatively, to develop a full Dissolved Oxygen TMDL for the basin. Hangman Creek experiences persistent DO impairments driven by nutrient pollution, sedimentation, channel simplification, and warm summer temperatures. These low DO conditions directly harm native fish species, further degrade already stressed habitat, and prevent the creek from meeting its designated uses.

Ecology has indicated that DO improvements may be indirectly addressed through implementation of the existing 2009 Temperature, Bacteria, and Turbidity TMDL. While those implementation activities (riparian restoration, erosion control, and reductions in nonpoint nutrient loading) are necessary and beneficial, they are not sufficient substitutes for explicit DO targets or load allocations. Without DO-specific requirements, neither point sources nor nonpoint sources are held accountable for achieving the reductions necessary to meet state water quality standards.

The lack of DO targets also limits Ecology's ability to address ongoing nutrient discharges from wastewater treatment plants in the basin. Recent studies evaluating nutrient loads from facilities in the basin underscore the need for watershed wide enforceable benchmarks and load limits. A DO TMDL or, at minimum, DO targets incorporated directly into the ARP, would provide a clear regulatory framework for developing appropriate permit limits, ensuring compliance, and preventing further degradation of the Spokane River downstream.

While we recognize that Ecology must balance staff capacity with implementation needs, the absence of DO-specific goals creates regulatory uncertainty and delays progress toward meeting water quality standards. Incorporating DO targets into the ARP would support continued nonpoint implementation while simultaneously guiding necessary improvements at point sources. Should Ecology determine that DO impairments cannot be resolved through the ARP process alone, we respectfully request the initiation of a Dissolved Oxygen TMDL to ensure a comprehensive and enforceable path toward recovery.

We welcome continued discussion with Ecology on advancing water quality protections in Hangman Creek and the Spokane River and believe that establishing clear DO requirements is an essential next step.

d. *Sediment Pollution levels in the Spokane River should be considered and monitored in the Hangman ARP.*

Because of the pollution levels in the Spokane River, Ecology should consider including monitoring in the river as part of the assessment and monitoring of progress of Hangman Creek. The 2022 Water Quality Assessment, and data submitted by Spokane Riverkeeper in support

thereof, indicate that the Spokane River is impaired due to sediment pollution out of the Hangman Basin.

A significant portion of the sediment pollution in the Spokane River can be addressed through restoration efforts in the Hangman Creek basin. Hangman Creek has some of the worst water quality in the state due to its abuse by the agricultural industry. What was once a meandering stream is now exposed, highly erodible soils often left barren during the wettest seasons of the year. During the winter, when rain falls on snow, sediment pours into the river, flowing through the entire system to the Columbia River.

Sediment deposition in the Spokane River reservoirs has already reached critical levels and continues to threaten water quality, habitat, and reservoir function. The Nine Mile Reservoir, which is now essentially filled with sediment after more than a century of accumulation, has received an estimated 2.2 million cubic yards of material since 1906, with average annual inputs of roughly 25,000 cubic yards and substantially higher loads during high-flow years (NHC, 1999). As sediment has filled the main channel upstream of Nine Mile Dam, the river has shifted laterally, accelerating bank erosion and degrading riparian and aquatic habitat. Once the reservoir reaches full equilibrium, greater volumes of fine and coarse sediment are transported into the Long Lake Reservoir, where slackwater conditions already result in significant deposition. Estimates now nearly 30 years old indicated that 35–50% of fine suspended sediments passing Nine Mile Dam settle in the Long Lake Reservoir's deeper areas (NHC, 1999). Projections suggest that up to 20% of Long Lake Reservoir’s total storage volume could be filled with sediment in the next 50 years (or by 2050), raising bed elevations in some upper reaches by as much as five feet (Avista 401 Certification, 2009). These changes will intensify nutrient loading, create new substrate for invasive aquatic plants, reduce water depth, and further alter fish and wildlife habitat in already vulnerable shallow-water zones.

Sediment pollution in the Spokane River is also contributing to dissolved oxygen violations in the Long Lake reservoir, as documented in Ecology’s recent 10-year DO assessment. Elevated sediment loads carry organic material that increases oxygen demand as it decomposes, worsening low-oxygen conditions and limiting habitat for native fish. These documented impacts underscore the need for continued, robust monitoring on the river to track sediment inputs, understand their downstream effects, and support effective management actions that protect water quality throughout the basin.

Reducing sediment delivery from Hangman Creek—one of the basin’s largest sediment contributors—is essential. Completion and implementation of a robust plan, alongside enforceable reductions upstream, is critical to attaining water quality standards in the Spokane River. Addressing sediment pollution is essential not only for environmental protection but also for the communities that depend on a clean and healthy Spokane River. This river, and fish that depend on it, are a vital resource for recreation, cultural significance, and economic value in our entire region. Restoring its health through comprehensive restoration efforts ensures that it remains a cherished resource for future generations. In preparing the ARP, Ecology should consider the pollution in the Spokane River as a benchmark for progress in the Hangman Creek

Basin. While progress within the creek on its specific TMDL parameters must also be considered, the sediment pollution in the river and potential listing should also be incorporated into this plan.

2. Spokane River Temperature TMDL

Spokane Riverkeeper again urges Ecology to prioritize the development of a Spokane River Temperature TMDL. We raised this issue in our comment letter last year, and the need is only becoming more urgent. The Spokane River continues to exceed state temperature standards for prolonged periods each summer, degrading habitat, impairing designated uses, and significantly harming native redband trout. These exceedances have been documented for decades, and climate change is driving longer and more frequent periods of lethal temperatures. Even more so, the dry river this summer indicates that summer habitat for native aquatic wildlife is shrinking and must urgently be protected.

Ecology has a clear legal obligation under the Clean Water Act to develop a TMDL for each 303(d)-listed pollutant in every impaired waterbody. Temperature has been a Category 5 impairment on the Spokane River for many years. Prioritization does not remove this obligation, and courts have found that indefinitely deprioritizing a required TMDL amounts to administrative purgatory that violates the intent of the Act. The Spokane River Temperature TMDL is long overdue.

To support timely action, Spokane Riverkeeper has collected and submitted years of temperature data to Ecology's Environmental Information Management system under study ID SRK_SpokaneR_WQ. These data demonstrate consistent, repeated exceedances beyond the 18°C state standard and provide a robust foundation for analysis. The information is sufficient to begin scoping a TMDL and understanding the appropriate load allocations needed to address cumulative heat sources, including hydropower operations, land-use impacts, stormwater, and point-source discharges.

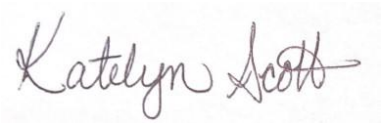
Without a TMDL to provide enforceable reductions and an integrated basin-wide strategy, temperatures in the Spokane River and its tributaries will continue to rise, constraining already limited cold-water refuges and undermining regional efforts, including significant tribal investments, to restore native salmonids to the basin. The TMDL process would also provide essential riparian-condition assessment, identify critical reaches for thermal mitigation, and guide restoration actions that support cold-water fisheries.

For these reasons, we respectfully request that Ecology elevate the Spokane River Temperature TMDL as a priority for the upcoming TMDL planning cycle, using the data already submitted to advance an overdue and urgently needed regulatory pathway.

Thank you for your attention to these issues. We value Ecology's role as the region's water quality regulator and appreciate the work your staff does to improve the Spokane River through strong standards and consistent enforcement. Ensuring timely progress on these priorities is

essential to reaching water quality standards in our basin, and we look forward to continued collaboration as this work moves forward.

Respectfully submitted,



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References

Bear, E. A., McMahon, T. E., & Zale, A. V. (2007). Comparative thermal requirements of westslope cutthroat trout and rainbow trout: implications for species interactions and development of thermal protection standards. *Transactions of the American Fisheries Society, 136*: 1113-1121. https://www.montana.edu/mcmahon/documents/cttxrbt%20temp%20TAFS.pdf

Behnke, R.J. 1994. Native trout of western North America. Rev Fish Biol Fisheries 4, 488–489. https://doi.org/10.1007/BF00042892

Biladeau, T. J., and B. A. Kinkead. 2018. Hangman Creek Fisheries Enhancement RM&E Progress Report, 2014-2016. BPA Project #2001-032-00, Annual report 5/1/2014-04/30/2017.

Ficke, A. D., Myrick, C. A., & Hansen, L. J. (2007). Potential impacts of global climate change on freshwater fisheries. *Reviews in Fish Biology and Fisheries, 17*, 581-613. https://doi.org/10.1007/s11160-007-9059-5

Northwest Hydraulic Consultants (NHC), 1999. Nine Mile HED Sediment Diversion Project. Prepared for Avista Corporation, Spokane, WA.

McLellan, J.G. 2005. Part 1. Baseline Assessment of Fish Species Distribution and Densities in Deep and Coulee Creeks and A Genetic Assessment of the Wild Rainbow Trout Populations in Selected Tributaries of Latah (Hangman) Creek and the Middle Spokane River. In: 2004 Washington Fish & Wildlife Annual Report for the Project Resident Fish Stock Status Above Chief Joseph and Grand Coulee Dams.

Washington State Department of Fish and Wildlife. 2009. Final Report for Redband Trout Status and Evaluation Project. https://wdfw.wa.gov/sites/default/files/publications/01711/wdfw01711.pdf

Washington State Department of Fish and Wildlife. 2021. Inland redband trout (landlocked pop). Webpage.
https://wdfw.wa.gov/species-habitats/species/oncorhynchus-mykissgairdneri#conservation