



**DEPARTMENT OF
NATURAL RESOURCES**

FOREST PRACTICES DIVISION

1111 WASHINGTON ST SE
MAIL STOP 47012
OLYMPIA, WA 98504-7012

360-902-1400

FAX 360-902-1428
FPD@DNR.WA.GOV
WWW.DNR.WA.GOV

MEMORANDUM

September 24, 2024

To: Cooperative, Monitoring, and Research Committee (CMER)

From: Schedule L-1 Cooperative, Monitoring, and Research Committee (CMER) Workgroup:
Welles Bretherton (Washington State Department of Ecology)
Theryn Henkel (DNR, AMP Project Manager)
Debbie Kay (Westside Tribes, Suquamish Tribe)
Mark Meleason (Counties)
Chris Mendoza (Conservation Caucus)
Rachel Rubin (DNR, CMER Scientist)

Subject: Process for Formation of Subject Matter Expert (SME) Groups to Provide Independent Review for Schedule L-1 Revision

Introduction:

The Schedule L-1 CMER Workgroup (Workgroup henceforth), is proceeding through the Schedule L-1 Review and Revision Process as outlined in the approved memo to the TFW Policy, TFW Policy SAO Workgroup, and CMER on September 6, 2023. The approved process has five steps (this memo addresses step 3):

1. Historical Review - gather information to document previous process of establishing original Schedule L-1. (Completed)
2. Prioritize Review - identify the Functional Objectives and Performance Targets that need more clarity and refinement. (Completed per approved memo dated March 7, 2024)
3. ***Establish Subject Matter Expert(s)(SME) Group(s) - define the appropriate expertise necessary to be a SME in the AMP based on the topic. Determine capacity to contribute to the decision criteria review/revision process and identify individuals or groups within or outside CMER to serve in this role. The Schedule L-1 Workgroup acknowledges that the Principal Investigators may serve this role for active projects (SME knowledge and capacity gaps, scope alternatives for filling gaps).***
4. Review Evidence - assess the current state of scientific knowledge and identify what is needed to affirm, refine, or develop Performance Targets based on best available science.
5. Identify measurable criteria for Performance Targets - clearly stated Functional Objectives and measurable Performance Targets identified through evidence review.

As a reminder, there are nine Performance Targets that are up for review, divided into three groups, as approved by CMER and TFW Policy committees on February 27, 2024, and March 7, 2024, respectively. The Performance Targets and Groups are as follows:

- a. Shade, Riparian Condition, Litterfall, In-Stream LWD
- b. Pool Frequency, Pool Depth, Peak Flows, Fines in Gravel
- c. Wetlands

This memo describes a proposed process for forming SME groups, the expertise needed for individual SME group members, and information and guidance that will be provided to the SMEs upon group formation (attachment).

Group Formation Process:

To maintain the credibility of the recommendations produced by the SME groups, it will be imperative that these groups remain independent, both in perception and reality. To that end, SME groups should not include any scientists that are members of caucuses. To foster this independence, we propose using our Independent Scientific Peer Review (ISPR) contract with University of Washington (UW) to identify scientists, based on the criteria/expertise listed below, to participate in the SME groups. We have verified with the UW contractor that this is a valid use under our contract and that they would be willing to accommodate this task. This process will ensure scientific objectivity and that deadlines are met to accomplish the SL1 review and revision in FY2025. In addition to the ISPR established scientists, each SME group will have a CMER staff scientist with the appropriate expertise assigned to the group to provide feedback and offer support and guidance as needed. To maintain the independence discussed above, CMER staff scientists would not make specific recommendations for new Performance Targets, rather would provide guidance. Lastly, there will be one DNR Project Manager assigned across all groups to provide continuity with process, and flag issues as they arise. Based on current capacity and expertise, the CMER staff scientists assigned to Groups a and b (described above) would be Rachel Rubin, Group c would be Tanner Williamson, and the Project Manager (PM) would be Theryn Henkel.

We propose that an attempt is made to keep the groups as small as possible while ensuring the proper expertise is present. The SL1 review is on a specific completion timeline and a smaller group will aid in expediting the process, scheduling meetings, etc. We do not want to limit SME groups to a specific number of participants, as having broad expertise is more important so that may require a different number of participants for each group. Ideally, the groups would be around five members not including the PM and the CMER staff scientist.

Subject Matter Expert Criteria/Expertise:

This section describes the expertise that should be present overall and within each group. One individual may have expertise that crosses multiple criteria on the list.

General Expertise for All Groups:

- Local and landscape scale perspectives on for the parameters up for review
- Diverse backgrounds (e.g. academia, field work, etc.)
- Knowledge of Northwest ecology (forest, riparian, wetland)
- An understanding of the processes that form salmonid habitat and the other species that will utilize that habitat

- Experience with reviewing forest or other land use impacts related to aquatic resource protection (e.g. clean water, wetlands, etc.)
- Current knowledge of how climate change may influence forest and aquatic ecological functions
- Experience in study design and relevant statistical analysis
- Experience in managed forests

Expertise for Group A (Shade, Riparian Conditions, Litterfall, In-Stream LWD)

- Stream/riparian ecology
 - Riparian shade / heat energy
 - Expertise in ecological functions supportive of perennial and seasonal in-stream and off-channel fish habitat
 - In-stream hydrology including expertise with the structure and function of large wood inputs
 - Modelling and other analyses of large wood recruitment (including upslope sources of wood)
- Biology (fish, amphibians, invertebrates, etc.)
 - Experience with functions that support fish habitat in streams including seasonal and off-channel habitat
 - Riparian and in-stream organisms and their habitat requirements by life stage – trophic pathways
- Forest ecology
 - Effects of natural and anthropogenic disturbances in the forested environment.

Expertise for Group B (Pool Frequency, Pool Depth, Peak Flows, Fines in Gravel)

- Stream/riparian ecology
 - Riparian and in-stream organisms and their habitat requirements by life stage – trophic pathways
 - Experience with functions that support fish habitat in streams including seasonal and off-channel habitat
 - Familiarity with the habitat-forming process such as LW recruitment from the riparian and upslope sources
- Hydrology
 - Above ground and below ground water movement (snowpack vs springfed)
- Geomorphology (fluvial, hydro)
 - Stream channel formation, channel erosion and degradation
- Effects of timber harvest on these resources (including effects of cutting trees and building roads on water quality)

Expertise for Group C (Wetlands)

- Wetland hydrology and soils
 - Hydrogeomorphic processes controlling surface and subsurface connectivity of wetlands and associated processes controlling the fate and composition of wetland exports (DOC, nutrients, temperature and downstream flows to streams)
- Forested Wetland Ecology
 - Knowledge of the interplay between wetland chemical, physical and biological processes
 - Habitat requirements of wetland associated organisms in all life stages
 - Expertise with impact of natural and anthropogenic disturbances on wetlands in the forested environment and recovery processes

- Wetland functional assessment
- Wetland development
- Wetland restoration and succession
- Carbon cycling above ground and below ground (climate change and biogeochemistry/nutrient cycling)
- Intersection of processes with climate change
- Stream / riparian ecology
- Familiarity with unique wetland systems in Washington

Guidance to Subject Matter Experts

Attached to this memo is a guidance document which would be delivered to the SMEs upon assignment. It outlines some general expectations for the review and revision process and deliverables from the SMEs.

Summary

The Workgroup is seeking approval of the recommended process for forming the SME groups as well as the attached Guidance document which would be delivered to the SMEs upon assignment. Once a process is approved, groups will be formed and the process will proceed to Step 4 above, which is to review scientific evidence and make recommendations for Performance Target revision.

Attachments:

- Subject Matter Expert Guidance Letter