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NATURAL RESOURCES**

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MEMORANDUM

March 7, 2024

TO: TFW Policy

FROM: Schedule L-1 Cooperative, Monitoring, and Research Committee (CMER) Workgroup
Harry Bell (Small Forest Landowners (WFFA))
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)
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SUBJECT: Schedule L-1 Performance Target Revision Prioritization

The Schedule L-1 CMER Workgroup (Workgroup) was formed in response to the Schedule L-1 Review and Revision Process Memorandum (The Memorandum) approved by the CMER and the Timber, Fish and Wildlife Policy (TFW Policy) Committees on September 26th, 2023. The Memorandum directed the formation of a CMER workgroup to execute the Schedule L-1 (SL1) Review and Revision Process. The Workgroup was approved by CMER and has completed Step 2 of The Memorandum: Prioritize Review in order of (a)(b)(c). **Step 2** further directs the Workgroup to:

“identify the Functional Objectives and Performance Targets that are in need of more clarity and refinement. Prioritize updating those Functional Objectives and Performance Targets that are most immediately relevant to adaptive management decision making priority for review based on:

- (a) CMER studies that are closest to completion (e.g., ENREP),
- (b) Performance Targets which have been recommended for review in completed CMER study reports, Stillwater Report, or planned CMER studies (e.g., water typing, wetlands, shade targets), and
- (c) Functional Objectives with no corresponding Performance Targets.

Summary of prioritized list will be approved by Policy before moving to Step 3.”

To accomplish the above directive more efficiently, the Workgroup split into three separate teams to accomplish each task (a)(b)(c). The teams gathered background information, including compiling a list of current CMER studies that will produce results that will directly inform SL1 Performance Targets (e.g. Roads BMP Study), completed CMER studies with results that could further inform SL1 Performance Targets (see CMER references attached), and flagging existing SL1 Functional Objectives or Performance Targets that are vague, not measurable, unfeasible, or do not exist. Although not required as part of this process, some

of the CMER Science Advisory Groups (SAGs) provided feedback related to missing or vague Performance Targets for consideration by The Workgroup.

Based on the gathered background information, the Workgroup separated the existing Performance Targets into three groups: 1) High priority for review and revision, SME group should be formed; 2) High priority for review and revision, whereby active CMER studies currently being implemented will directly inform the performance target, no SME group needed; and 3) Performance Target is not a priority for review. The table below (and attached) summarizes which Performance Targets fall into each category and provides rationale for the Workgroup's prioritization. The Workgroup has completed Step 2, as directed, and is seeking approval of the prioritized list from CMER, before it is transmitted to TFW Policy for review and approval.

Given the prioritization outlined in the table, there are multiple possibilities for the formation of SME Groups. Formulating a process for selecting SME groups is the next task for the Workgroup (Step 3), after this prioritization is approved. To aid in those discussions, the Workgroup is seeking advice from CMER on the number of groups that should be formed around each topic. The Workgroup discussed and decided against having a group for each Measure as that would result in an overly siloed structure when some Measures are interrelated. Therefore, the Workgroup has a recommendation on how the priority Measures could be collated for SME group formation:

Group by related Performance Targets/Measures, resulting in 3 groups:

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

Regardless of how the SME groups are categorized, the Workgroup recognizes that there could be overlap in members on different SME groups that allows for the sharing of knowledge if and when needed. The process for forming SME groups, size of groups, experts to include, etc., is the next step in the process and will proceed upon approval of this prioritization by CMER and TFW Policy.

Attachments:

- Prioritization Table
- Schedule L-1 Review and Revision Process Memo
- List of completed CMER studies that served as background for Workgroup's prioritization and could further inform SMEs in Step 3.

Functional Objective	Measure	Performance Target	Rationale (number from reference list)
Heat/Water Temperature: Provide cool water by maintaining shade, groundwater temperature, flow, and other watershed processes controlling stream temperature	Stream Temperature	Water quality standards—current and anticipated in next triennial review (e.g., for bull trout).	Temperature standard is under the purview of Department of Ecology and EPA standards, and is therefore outside the purview of this
	Groundwater Temperature	To be developed	Currently, there is insufficient data at a proper scale to inform the development of a standard and there are no ongoing CMER studies that will be able to provide relevant information. There is some ongoing groundwater temperature data collection in wetlands, and this could be a topic for a potential Wetland SME to consider.
	Shade	•Type F & S streams, except Eastside bull trout habitat: that produced by shade model or, if model not used, 85-90% of all effective shade. • Westside and eastside high elevation, Type N streams: shade available within 50' for at least 50% of stream length. • Eastside: all available shade within 75' of designated bull trout habitat per predictive model.	Existing shade targets are a repeat of FP rules and not an actual Performance Target. Completed and ongoing CMER studies are available to inform a review and revision of this target. SME should be formed (5, 6, 16, 19, 29).
	Potential new Measure developed by SME group	Potential new Performance Targets Developed by SME group	Developed Performance Targets could be new, replaced, or revised targets.
LWD/Organic Inputs : Develop riparian conditions that provide complex habitats for recruiting large woody debris and litter	Riparian Condition	• Westside and high elevation Eastside habitats: riparian stands are on pathways to meet Desired Future Condition (DFC) targets (species, basal area, trees per acre, growth, mortality). • Eastside (except high elevation): DFC; current stands on pathways to achieve Eastside condition ranges for each habitat series.	Completed and ongoing CMER studies are available to inform a review and revision of this target. SME should be formed (3, 11, 31, 32, 44, 47).
	Litter Fall	• Westside Type N: at least 50% of recruitment available from within 50'. • Eastside Type N: at least 70% of recruitment available from within 50'.	Existing litter fall targets are a repeat of FP rules, not an actual performance target. Completed and ongoing CMER studies are available to inform a review and revision of this target. SME should be formed.
	Pool Frequency	< 2 channel widths per pool.	SME should be formed.
	In-stream LWD	Westside: • Streams <20 m (or 65.6 ft.) bankfull width: > 2 pieces (total wood) per channel width • Streams <10 m (or 32.8 ft.) bankfull width: >0.30 key pieces per channel width • Streams >10 m (or 32.8 ft.) bankfull width: >0.50 key pieces per channel width Eastside: (To be developed.)	Completed and ongoing CMER studies are available to inform a review and revision of this target. SME should be formed (27)
	Residual pool depth	See Residual Pool Depth Table	SME should be formed.
Potential new Measure developed by SME group	Potential new Performance Targets Developed by SME group	Developed Performance Targets could be new, replaced, or revised targets.	
Sediment: Provide clean water and substrate and maintain channel forming processes by minimizing to the maximum extent practicable, the delivery of management induced coarse and fine sediment to streams (including timing and quantity) by protecting stream bank integrity, providing vegetative filtering, protecting unstable slopes, and preventing the routing of sediment to streams.	Mass wasting sediment delivered to streams	• Road-related: virtually none is triggered by new roads; favorable trend on old roads. • Timber harvesting-related: no increase over natural background rates from harvest on a landscape scale on high risk sites	Ongoing CMER studies will provide relevant information, too soon to form SME.
	Road sediment delivered to streams	New roads: virtually none.	Ongoing CMER studies will provide relevant information, too soon to form SME.
	Ratio of road length delivering to streams / Total stream length (miles/mile)	Old roads Not to Exceed: Coast (Spruce) =0.15-0.25; West of Crest = 0.15-0.25; East of Crest = 0.08-0.12	Ongoing CMER studies will provide relevant information, too soon to form SME.
	Ratio of road sediment production delivered to streams/Total stream length (tons per year/mile)	Old roads Not to Exceed: Coast (Spruce) =6-10 T/yr; West of Crest = 2-6 T/yr; East of Crest = 1-3 T/yr	Ongoing CMER studies will provide relevant information, too soon to form SME.
	Streambank/ equipment limitation zone disturbance (caused by forest practices)	• Type S&F: no streambank disturbance outside road crossings. • Type N: ≤10% of the equipment limitation zone.	Studies indicate that this performance target is working, no revision needed.
	Fines in Gravel	Less than 12% embedded fines (<0.85 mm).	There are completed studies available to inform this metric, SME should be formed.
Hydrology: Maintain surface and groundwater hydrologic regimes (magnitude, frequency, timing, and routing of stream flows) by disconnecting road drainage from the stream network, preventing increases in peak flows causing scour, and maintaining the hydrologic continuity of	Road run-off	Same targets as road-related sediment	Ongoing CMER studies will provide relevant information, too soon to form SME.
	Peak flows	West side: Do not cause a significant increase in peak flow recurrence intervals resulting in scour that disturbs stream channel substrates providing actual or potential habitat for salmonids, attributable to forest management activities.	Completed CMER studies are available to inform a review and revision of this target. Current target is vague and difficult to measure. SME should be formed.
	Wetlands	No net loss in the hydrologic functions of wetlands	Target is so vague that it is essentially not a target, wetland focused SME needed (1, 2, 13, 26, 28, 30, 39)
	Potential new Measure developed by SME group	Potential new Performance Targets Developed by SME group	Developed Performance Targets could be new, replaced, or revised targets.
Chemical Inputs: Provide for clean water and native vegetation (in the core and inner zones) by using forest chemicals in a manner that meets or exceeds water quality standards and label requirements by buffering surface water and otherwise using best management practices.	Entry to water	No entry to water for medium and large droplets; minimized for small droplets (drift).	DNR defers to WSDA and EPA on any changes in chemical input chemicals and application rules. They are already doing the verification work to adjust best practices and the list of banned/allowed substances. Also, workshops had at CMER, no directive from policy on next steps
	Entry in RMZs	Core and inner zone: levels cause no significant harm to native vegetation.	DNR defers to WSDA and EPA on any changes in chemical input chemicals and application rules. They are already doing the verification work to adjust best practices and the list of banned/allowed substances. Also, workshops had at CMER, no directive from policy on next steps
Stream Typing and Fish Passage: STREAM TYPING: Type "fish habitat" streams to include habitat which is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management, and including off-channel habitat, by using a multi-parameter, field-verified, peer reviewed, GIS logistic regression model using geomorphic parameters such as basin size, gradient, elevation and other indicators. FISH PASSAGE: Maintain or restore passage for fish in all life stages and provide for the passage of some woody debris by building and maintaining roads with adequate	Accuracy of predictive models	Fish habitat model: statistical accuracy of +/- 5%, with line between fish and non-fish habitat waters equally likely to be over and under inclusive.	Ongoing CMER studies will provide relevant information, too soon to form SME. Board process for water typing rule could also address the need/usefulness of this model or any map based model.
	Access Barriers	Eliminate road-related access barriers over the time-frame for road management plans.	Access barriers are mostly under the purview of WDFW. CMER scoped a fish passage extensive monitoring study, but DNR took over RMAP completion and recommended not to fund study. Large landowners have covered this via RMAP. DOT, counties and municipalities are currently going through barrier removal on public roads following the culvert case results. However, small forest landowners are exempt from RMAP and their private forest roads don't get DOT help. They often defer repairs and get on the DNR FFFPP list, but since projects are prioritized by how much habitat it opens, there are projects that have been on this list for decades. SME group not recommended at this time but wanted to raise awareness of small landowner issue and that effectiveness of WDFW policies has not been studied.

Legend
 = High priority for review and revision, SME group should be formed
 = High priority for review and revision, but ongoing CMER studies should directly address the performance target, no SME group currently needed
 = Performance Target is not a priority for review