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Document 4

For the 3 May 2024 IRST meeting

NOTE: AMPC responses start on page 2. Original responses were in green font; we changed the color to orange for accessibility.

21 March 2024

Dear Members of the AMPC,

Thank you for the document *Preliminary Research Questions for the Research Topic: Requirements of Baseline and Trend Monitoring of Road Rules* that we received on 8 February 2024. The purpose of this letter is to fulfill OAR 629-603-0200(4)(a) – responding to the AMPC within 45 days of the receipt of the research questions package.

Having read and discussed the roads research question package, we have determined that (1) in consultation with the AMPC, the IRST will refine the preliminary research questions listed in the abovementioned document into finalized research questions, and (2) develop scoping proposal(s) regarding how to address the finalized research questions by 31 December 2024.

Recognizing that this is our first foray into working within the Adaptive Management Program, we will keep the AMPC Coordinator up to date on our progress. Should at any time we need to reevaluate the submission deadline of the scoping proposal(s), we will give adequate notice to discuss this with the AMPC. Since this is also the first time that the AMPC has completed this stage of the AMP process, on the following page we have some initial questions regarding the roads research question package.

We look forward to working with you on this and in the long term. If you have any questions, please reach out to the IRST Housing Agency Technical Lead, Sean Gordon at Sean.Gordon@oregonstate.edu.

Sincerely,
Members of the IRST

Questions from the IRST to the AMPC about the roads questions package.

The "IRST questions" were submitted by individual IRST members for each of the roads research questions.

1. Baseline Report.

a. What are the baseline levels of hydrologic connectivity of roads prior to the implementation of the Oregon Forest Practices Act (OFPA) road rules10 effective Jan 1, 2024?

IRST questions and comments (AMPC responses (in orange) per their April 8, 2024 meeting):

1. The first field sampling of roads will likely not occur for several years after the PFA road rules become effective. There may be ways to identify and account for road segments that were updated per the rules before first sampling, but if not, is the AMPC satisfied that the first sampling results may best be useful for a "baseline" status evaluation, against which future trends will be measured? Note that the first visit by Dube et al. (2010) occurred 5-7 years after rule implementation, and no effort was used to account for updates between implementation and first sampling.

The AMPC recognizes this limitation. The AMPC would encourage use of road segments that have not been changed since PFA implementation, and if not possible, changes following PFA implementation to be accounted for. The AMPC would be interested in how the IRST navigates this research consideration. One possible approach: A record is being kept of road work that is being done under the PFA road rules so it should be possible to oversample and exclude sites where work has been done before sampling.

2. Does the IRST have the latitude to use what we deem is best available science in developing the monitoring methods and strategy? For example, can the IRST replace the WARSEM model reported in methods used by Dube et al. (2010) with another model or approach that the IRST determines to be more scientifically appropriate or efficient for the specific monitoring questions to be answered?"

Yes to both questions. Decisions regarding methods are the purview of the IRST.

3. Will a report containing information like that found in Dube et al. (2010) be sufficient to meet the AMPC's expectations on hydrologic connectivity status?

Yes, with the caveat that the IRST needs to oversee development of a second, summary report written for the lay person per OAR 629-603-0200(6)(g).

b. How do these levels vary based on landowner type and East/West region?

IRST questions and comments:

1. Please identify the land ownership categories that you would like to be considered here.

This is clarified in the original document sent to the IRST, section B.5:

"Landowner classifications in the FPA (of which there are two, each with a different regulatory framework for roads) – 1) small forestland owners (RCA); 2) large forestland owners (FRIA)."

2. There may be other strata, such as parent geology, within the East and West georegions that may be important for discerning differences in status and trends of hydrologic connectivity. Would the AMPC like the IRST to explore these strata? Note that the difficulty of obtaining an adequate sample size and the cost of sampling may increase with more strata.

The core question relates to the FPA-based landownership types and east/west geography and so these factors

must be prioritized. The AMPC would caution against additional strata that would detract from the ability to address those factors with available capacity.

(Note: the AMPC is scheduled to finalize responses to the remaining questions in early May, 2024)

c. What other factors or variables within the regulatory framework of the FPA might be relevant?

IRST questions and comments:

1. Presence of undersized culverts, particularly below areas identified as having high potential to result in landslides, would likely be useful to document.
2. For the work in Washington, annual road use (traffic level) is an important variable in the sediment delivery estimates. Are landowners in Oregon required to report traffic levels broadly as part of the new rules, or are they expected to do so in areas sampled for this status and trends assessment?

2. Trend Monitoring.

What are the trends in these levels of hydrologic connectivity of roads over 5-year intervals? These trends should be assessed for the same variables in question 1.

IRST questions and comments:

1. The potential for hydrologic connectivity of roads may be fairly static because the location of the roads, characteristics of underlying lithology, hillslope angle, etc., are unlikely to change. Condition of the roads (surface, drainage, culvert flow passage) are likely conditions that can change in response to management action and have an effect on hydrologic connectivity. Please further clarify what the specific characteristics about roads that should be part of the baseline inventory described in question 1.

3. Determination of Rule Effectiveness.

In the long term, to what extent are road rules associated with hydrologic disconnection effective at achieving biological goals and objectives?

IRST questions and comments:

1. The Washington status and trends monitoring effort uses specific road hydrology and road sediment performance measures to describe status and ultimately trends. Importantly, specific targets are used to evaluate performance. Is the IRST free to select alternative targets or performance measures based on our assessment of best available science for determining rule effectiveness at achieving the HCP BGOs?

Other questions or comments the IRST has about the roads question package

1. The status and trends monitoring described in Dube et al. (2010) is not likely to inform the AMPC on effectiveness of road rules in meeting HCP Biological Goal “Clean”, Objective 1.4 – “Roads are not a significant source of episodic sediment delivery to streams”. Given the OAR definition of hydrologic disconnection, we assume that the AMPC understands that a question related to "hydrologic connectivity of roads" will not also address episodic sediment delivery. Please advise us if this is not the case.