

Request for help with developing an Effectiveness Monitoring Strategy

Dear Members of the IRST,

The AMPC is charged with developing an Effectiveness Monitoring Strategy, which forms an essential part of the Adaptive Management Program. Specifically, OAR 629-603-0100(1) says “the adaptive management program must conduct effectiveness monitoring by assessing the degree to which the rules facilitating forest conditions and ecological processes achieve the biological goals and objectives. This assessment may include evaluation of cumulative effects.” (See below for full text of this rule at the end of the document). In addition, this effectiveness monitoring strategy is needed to fulfill the requirements of the Habitat Conservation Plan (HCP). We request your help in developing this Strategy.

We are still refining the process for how to develop the Strategy, especially because the federal agency requirements for effectiveness monitoring are not expected until the draft HCP is widely available (anticipated to be in late 2025). However, your scientific expertise will be helpful in getting this process started. We have the following questions:

1. Are you familiar with and do you recommend a particular approach to effectiveness monitoring in this context?
2. We have looked at several examples of effectiveness monitoring and have sent these to you in a separate folder along with this letter. Are any of these useful as a model for our project and why?
3. The biological goals and objectives are provided at the end of this document for your reference. What approach and data would you recommend in developing a monitoring strategy based on these?

Below are some other types of potential questions and requests for the IRST developed via brainstorming:

- What considerations and characteristics would IRST recommend in a monitoring strategy? For example:
 - What species demography, water quality parameters, habitat metrics, and stand conditions should be monitored?
 - At what spatial and temporal density should that monitoring occur?
 - How do we target assessment to specific parts of the HCP (i.e. road rules, steep slope rules, riparian rules)?
 - How can the effects of private forestlands be measured against high background variability and differentiated from other land uses in a statistically sound manner (e.g. minimizing false negative results)?
- When is additional monitoring unnecessary because of ongoing studies by academic researchers or government agencies designed to answer the same questions?
- Which BGOs are better assessed via ongoing monitoring vs. targeted research projects?
- In which instances should effectiveness be measured by observations of conditions (e.g. WQ, physical habitat) vs. direct observations of health/recovery of covered species? Which BGOs should be supported by one or both observation types?

Commented [EM1]: For discussion:

Who will be designing and who will be implementing the strategy?

What is the funding going to look like?

Commented [TF2]: Should we mention this request is outside of the AMP step process outlined in OAR 629-603-0200(3 through 8), but within the spirit of the AMP and OAR 629-603-0200(1)?

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- When is prescription/site scale monitoring needed vs. landscape scale monitoring?
- As the AMPC develops the strategy, what information would the IRST want to know (in addition to e.g., priorities, funding) since the IRST will be in charge of implementing the strategy?

The AMPC looks forward to working with you on developing this strategy. If you have any questions, please reach out to Oregon Department of Forestry's Adaptive Management Program Coordinator, W. Terry Frueh at Terry.Frueh@ODF.Oregon.gov or 503.871.2699.

Sincerely,
Members of the AMPC

2022 Draft HCP Biological Goals and Objectives:

Goal 1: Provide clean water and substrate for the covered species.

- **Objective 1.1** - Forest practices near streams minimize sediment delivery.
- **Objective 1.2** – Slope Retention Areas reduce episodic sediment delivery to fish-bearing streams.
- **Objective 1.3** – Road runoff directly to streams is minimized.
- **Objective 1.4** – Roads are not a significant source of episodic sediment delivery to streams.

Goal 2: Shade and watershed processes controlling stream temperature provide cool water compatible with the needs of the covered species.

- **Objective 2.1** – Forest practices maintain stream shade sufficient to support desired cool water temperatures on fish-bearing streams.
- **Objective 2.2** – No-harvest RMAs maintain stream shade sufficient to support desired cool water temperatures for covered amphibians.
- **Objective 2.3** – Forest practices near non-fish-bearing perennial streams do not notably increase water temperatures in fish-bearing streams.

Goal 3: Stream network connectivity satisfies freshwater habitat needs for covered species.

- **Objective 3.1** – Road crossings on fish-bearing streams are passable by the covered fish species.
- **Objective 3.2** – Forest practices maintain the hydrologic continuity of stream-associated wetlands and stream-adjacent seeps and springs to stream habitats.
- **Objective 3.3** – Timber harvest maintains stream-associated connectivity in riparian areas along non-fish streams sufficient to support covered amphibians.

Goal 4: Riparian areas function to support complex habitats for the covered species.

- **Objective 4.1** – Mature, complex riparian forests are fostered in no-harvest zones of RMAs.

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- **Objective 4.2** – Forest practices within tree retention areas of RMAs promote delivery of large wood.
- **Objective 4.3** – Designated Debris Flow Traversal Areas function to deliver large wood to fish-bearing streams.
- **Objective 4.4** – Forest practices maintain stream-associated wetlands and stream-adjacent seep and spring habitat for amphibians.

OAR 629-603-0100 Adaptive Management Program Overview

(1) The adaptive management program must:

(a) Conduct effectiveness monitoring by assessing the degree to which the rules facilitating particular forest conditions and ecological processes achieve the biological goals and objectives. This assessment may include evaluation of cumulative effects.

(b) Conduct research inquiry and validation monitoring to:

(A) Determine if additional scientific inquiry is needed to fill knowledge gaps related to biological goals and objectives; and

(B) Test and improve existing and new models and methodologies used to design and implement forest practice rules intended to meet the biological goals and objectives.