



## Institute for Natural Resources

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## DOCUMENT 5

# Literature Search Strategy – Eastern Oregon Steep Slopes (DRAFT)

For the 21 August IRST meeting

The eastern Oregon steep slopes literature compilation conducted by the Institute for Natural Resources is intended to serve, not as a comprehensive literature review, but rather as a state-of-the-science compilation that highlights research gaps that will be used to facilitate the development of requests for proposal (RFPs) to address the Adaptive Management Program Committee’s (AMPC) final steep slopes research questions. Comprehensive literature reviews will be included in RFPs and mandatory for any proposals submitted for funding via the competitive proposal process administered by the Independent Research and Science Team (IRST).

This literature search strategy outlines how literature will be sought. It is a living document.

### AMPC’s Final Research Questions

These preliminary research questions were approved by the AMPC as a substantial decision at their July 2, 2024 meeting. These questions apply east of the crest of the Cascades<sup>1</sup> in Oregon, and are to be answered via literature reviews. In addition to overview of literature, the review should provide an assessment of how robust the conclusions from the literature are and where there may be need for additional research.

#### Overarching Question

- What impacts do hillslope processes have on the covered species in the draft HCP and their habitats in Eastern Oregon?

#### Primary Focus

- What does the literature say about upslope initiated shallow rapid slides and how timber harvesting may impact these in Eastern Oregon environments?

#### Secondary Focus

- Are there hillslope processes other than upslope initiated shallow rapid slides that may affect covered species within the draft HCP and are these processes changed by forest practices?

### Search Strategy

#### Focus

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<sup>1</sup> Note: ODF maintains a regulatory GIS layer of the FPA delineation between eastern and western Oregon.

Since the objective is to produce a research proposal for a literature review, this review will just gauge whether sufficient literature exist to justify a full literature review. We will search a number of databases, do a cursory screening for relevance, and collect the qualifying references. IRST can then review the resulting database of references and decide whether a full review is worthwhile.

#### Time period to conduct literature search

- Start date
- End date

#### Electronic databases

- Forest Science: CAB Direct
- Treesearch: USDA Forest Service Research
- Web of Science: Science Citation Index

#### Meta search engine

- Google scholar

#### Library collections

- Oregon State Library
- Washington State Library
- Oregon State University Library
- University of Washington Library
- Washington State University Library
- Land grant university libraries in the noted geographies (Idaho, Colorado,...)

#### Selected bibliographies

- [WA Cooperative Monitoring, Evaluation, and Research Committee \(CMER\)](#)
- [California Board of Forestry, Effectiveness Monitoring Committee](#)

#### Literature dates

- No restriction?

#### Type of literature

- Peer review
- Technical reports
- Dissertations and theses
- Conference proceedings
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#### Literature Geographies

- Oregon
- Washington
- Idaho
- Colorado
- Montana

#### Keywords

- Hillslope processes
  - Shallow rapid slides
- HCP covered species and their habitats

- Aquatic & riparian biota
- Forest practices
  - Timber harvesting
  - Fuel treatments
  - Harvest

## Review Strategy

### Categories of information documented for each publication

- Publication citation (principal investigators, date, title, etc.)
- Study dates and study duration
- Study location
- Research question(s), hypotheses
- Sample sizes and results
- Methods: empirical vs modeled

### Subjects of Interest for article reviews

- Hillslope processes
  - Landslides
  - Hydrology
  - Large wood delivery
- Management actions
  - Harvest type
  - roads
- Environment
  - Climate: rainfall
  - Geology
  - Soil characteristics
  - Forest type
  - Topography