

State Trust Lands Habitat Conservation Plan RESEARCH AND ADAPTIVE MANAGEMENT TEAM MEMBERS

Richard Bigley

Richard is the Habitat Conservation Plan research and adaptive management team leader. Richard was one of the architects for the department's HCP effectiveness and validation monitoring program and has also served as team leader for both the forest ecology and wildlife science teams. In 2004, Richard was a member of the northern spotted owl "5-year review" panel. The panel was charged with the first comprehensive evaluation of scientific information on the northern spotted owl since it was listed as threatened under The Endangered Species Act.

Richard earned a Ph.D. in Forest Ecology and Silviculture from the University of British Columbia in 1988. Before joining DNR, Richard worked as an ecologist for Weyerhaeuser and the Forest Service PNW Experiment Station. Since 1994, he has been an Affiliate Assistant Professor at the University of Washington College of Forest Resources.

Richard's current work focuses on research to support adaptive management of the department's riparian and marbled murrelet conservation strategies. His team is active in the headwater stream research community in the Pacific Northwest.

Jeff Ricklefs

Jeff joined the team in 2004 to oversee the implementation of several headwater research projects. He currently serves the team as a Natural Resource Scientist. He received a B.S. in Computer Science from Rensselaer Polytechnic Institute in 1989 and a B.S in Environmental Studies from the Evergreen State College in 1999. Jeff has more than a decade of professional experience in resource management at the federal, state, and county level.

His current projects include:

- An analysis of pre and post harvest data collected for the Riparian Ecosystem Management Study (REMS), an experimental study to examine the effects of various buffer configurations along headwater streams;
- An analysis of data collected as part of a retrospective study of the HCP Interim Type 5 Conservation Strategy, a study to quantify the implementation of interim protection guidelines for headwater streams while a long-term conservation strategy is being developed. As part of this retrospective study, Jeff has made use of LiDAR-based flow accumulation models to more accurately predict the location and extent of the headwater system.
- Refining automatic terrain extraction (ATE) techniques to build elevation models from stereo imagery for use in a multitude of research areas, including automated edge detection and a chronological analysis of windthrow in stream buffers.

His research interests include grid-based spatial analysis, flow accumulation modeling, LIDAR, GPS, photogrammetry, and multivariate statistical analysis of ecological communities.