



State Trust Lands Habitat Conservation Plan

NORTHERN SPOTTED OWL AND BARRED OWL RADIOTELEMETRY STUDY IN SOUTHWEST WASHINGTON

The goal of this study is to examine responses by northern spotted owls and barred owls to variation in habitat conditions in an intensively managed landscape. This research addresses several of the research priorities for the northern spotted owl conservation strategy described in the [Habitat Conservation Plan](#).

Specifically, this study will quantify a number of habitat attributes necessary for nesting, roosting, and foraging. It will also determine the amount and distribution of habitat needed to support spotted owls in managed forest landscapes.

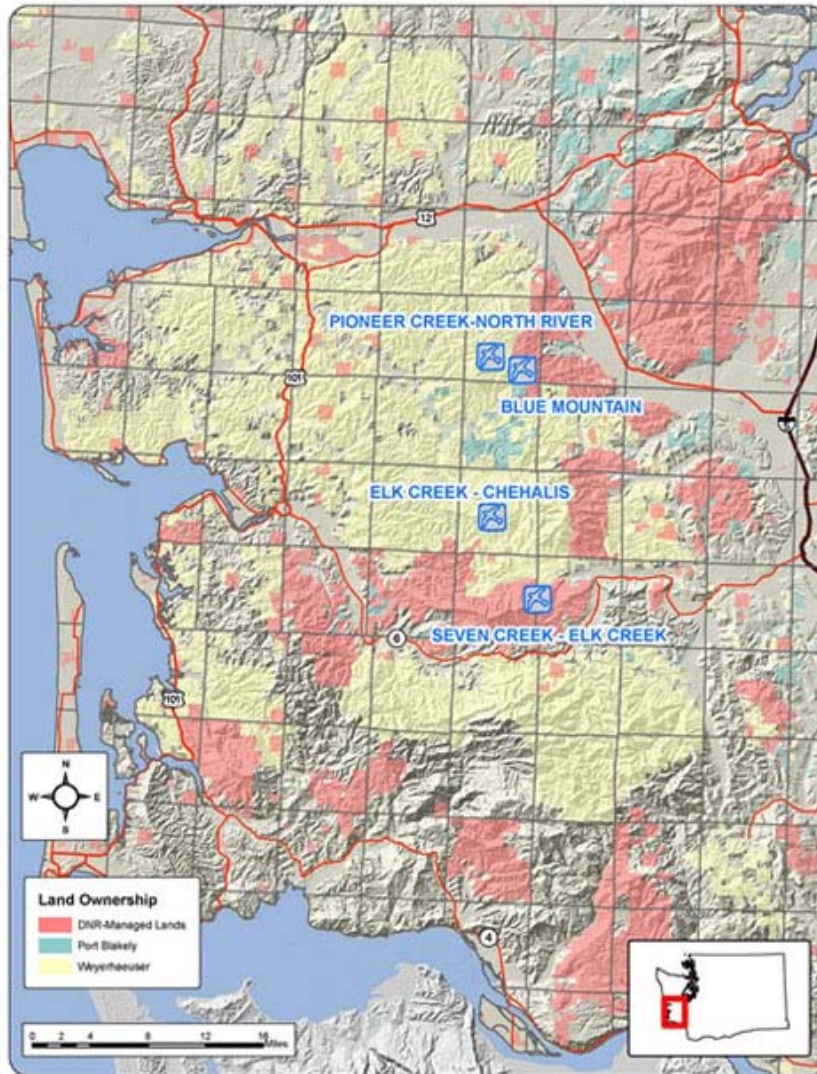
The results will be used in planning future forest practices for maintaining and/or enhancing spotted owl habitat. In addition, the study will provide information on presumed competitive interactions between spotted owls and barred owls and the potential of forest management to influence these interactions.

What are the objectives of this project?

- Capture, radio-tag, and track spotted owls and associated barred owls at two locations on DNR-managed land in southwest Washington where spotted owl were identified in 2005 and 2006 surveys. (Under separate agreement, all spotted owls and associated barred owls at 2 adjacent locations on Weyerhaeuser land will be radio-tagged.)
- Quantify detailed habitat conditions in the home ranges of each species based upon DNR inventory.
- Develop a discrete-choice resource selection function for each species. This is a statistical model defined to be proportional to the probability of owl use of a resource unit. For this project, it means that we conclude what resources each species uses based on how many times the species is detected in stands with certain characteristics.
- Prepare a GIS-based map of the habitat most likely to be used by each species.
- Compare fixed-kernel home range sizes of spotted owls and barred owls occupying the same area.

Where is the study area?

DNR-managed land in the Western Washington lowlands (west of I-5 and south of Highway 12).



When will this project take place?

April 2007 to March 2009

What are the project activities?

- A Cooperative Agreement was signed in April 2007.
- Fieldwork is currently being conducted by the National Council for Air and Stream Improvement (NCASI).
- As of August 2008, 11 barred owls (10 males and 1 female) and 3 spotted owls (1 single male and 2 single females) had been radio-tagged.
- Using GPS units to record detection points, polygons of the owls' locations are being mapped.
- By the end of August 2008, 1,975 points were recorded for the 14 owls.
- The final report from the project is expected in March 2009.