

## **State Trust Lands Habitat Conservation Plan Northern Spotted Owl Habitat Effectiveness Monitoring**

**Updated October 2024**

The goal of northern spotted owl effectiveness monitoring, as defined by the *State Trust Lands Habitat Conservation Plan* (HCP), is to determine whether applied management activities result in anticipated habitat conditions.

To meet this goal, DNR set up effectiveness monitoring sites on DNR parcels across the western Cascades within the range of the northern spotted owl. The data we collect helps us determine how well our HCP conservation strategies are working, and adjust treatments as needed.

### **What is the purpose of monitoring?**

- Documenting short- and long-term changes in habitat conditions to assess habitat development over the years and decades following silvicultural treatments (such as variable density thinning) that are intended to maintain and/or develop northern spotted owl habitat.
- Evaluating the effects of different silvicultural treatments for habitat enhancement and/or maintenance.
- Currently, the emphasis is on monitoring biodiversity-type thinning (variable density thinning).

### **When are the stands sampled?**

- Pre-harvest, and
- Post-harvest: Immediately after harvest; 7-10 years after harvest, and 16-19 years after harvest.

### **What are the monitoring methods?**

This study uses passive monitoring (following existing silvicultural prescriptions):

- Four sample areas per timber sale: three replicates of the treatment and one untreated control.
- Systematic random sampling: 13 permanent, 0.1 acre vegetation plots per sample area, remeasured at each sampling visit.
- 12 stand characteristics sampled per plot (for example, down woody debris, live trees, snags, canopy closure).

## **Which sites are being monitored?**

Four timber sales are currently being monitored. The goal is to assess the role of variable density thinning in maintaining and enhancing northern spotted owl habitat.

### ***Lyon's Share***

Nesting, Roosting, and Foraging (NRF) management area in Western Washington (Siouxon block):

- Pre-treatment data collected in 2003, second year post-harvest data collected in 2006, and subsequent measurements conducted in 2014 and 2023.
- Data from most recent measurement are being compiled and checked for quality; analyses of short- and medium-term changes in habitat conditions are being conducted.
- Monitoring site will remain active and re-measured at future intervals of approximately 10 years.

### ***Cougarilla***

Dispersal management area in Western Washington (Tahoma block):

- Pre-treatment data collected 2005, post-harvest data collected in 2006, and subsequent measurements conducted in 2013 and 2023.
- Data from most recent measurement are being compiled and checked for quality; analyses of short- and medium-term changes in habitat conditions are being conducted.
- Monitoring site will remain active and remeasured at future intervals of approximately 10 years.

### ***Big Beaver***

Dispersal management area in the South Puget HCP Planning Unit (Elbe block):

- Pre-treatment data collected 2007, post-harvest data collected in 2008, subsequent measurements conducted in 2014 and 2024.
- Data from most recent measurement are being compiled and checked for quality; analyses of short- and medium-term changes in habitat conditions are being conducted.
- Monitoring site will remain active and remeasured at future intervals of approximately 10 years.

### ***Whitehorse Flats***

NRF management area in the North Puget HCP Planning Unit (Northwest Region):

- Pre-treatment data collected 2007, post-harvest data collected in 2008, subsequent measurements conducted in 2015 and 2024.

- Data from most recent measurement are being compiled and checked for quality; analyses of short- and medium-term changes in habitat conditions are being conducted.
- Monitoring site will remain active and remeasured at future intervals of approximately 10 years.