

Framework for Building the Conservation Strategy

EXISTING DNR & USFWS POLICIES

NEED

To obtain long-term certainty for timber harvest and other management activities on forested state trust lands and to contribute to long-term conservation for the marbled murrelet, consistent with commitments in the 1997 Habitat Conservation Plan.

PURPOSE

To develop a long-term habitat conservation strategy for marbled murrelets on forested state trust lands in the six west-side planning units, subject to DNR's fiduciary responsibility to the trust beneficiaries as defined by law and USFWS' responsibilities under the ESA, which achieves all of the following objectives:

OBJECTIVES

**Trust
Mandate
Objective**

**Marbled
Murrelet
Habitat
Objective**

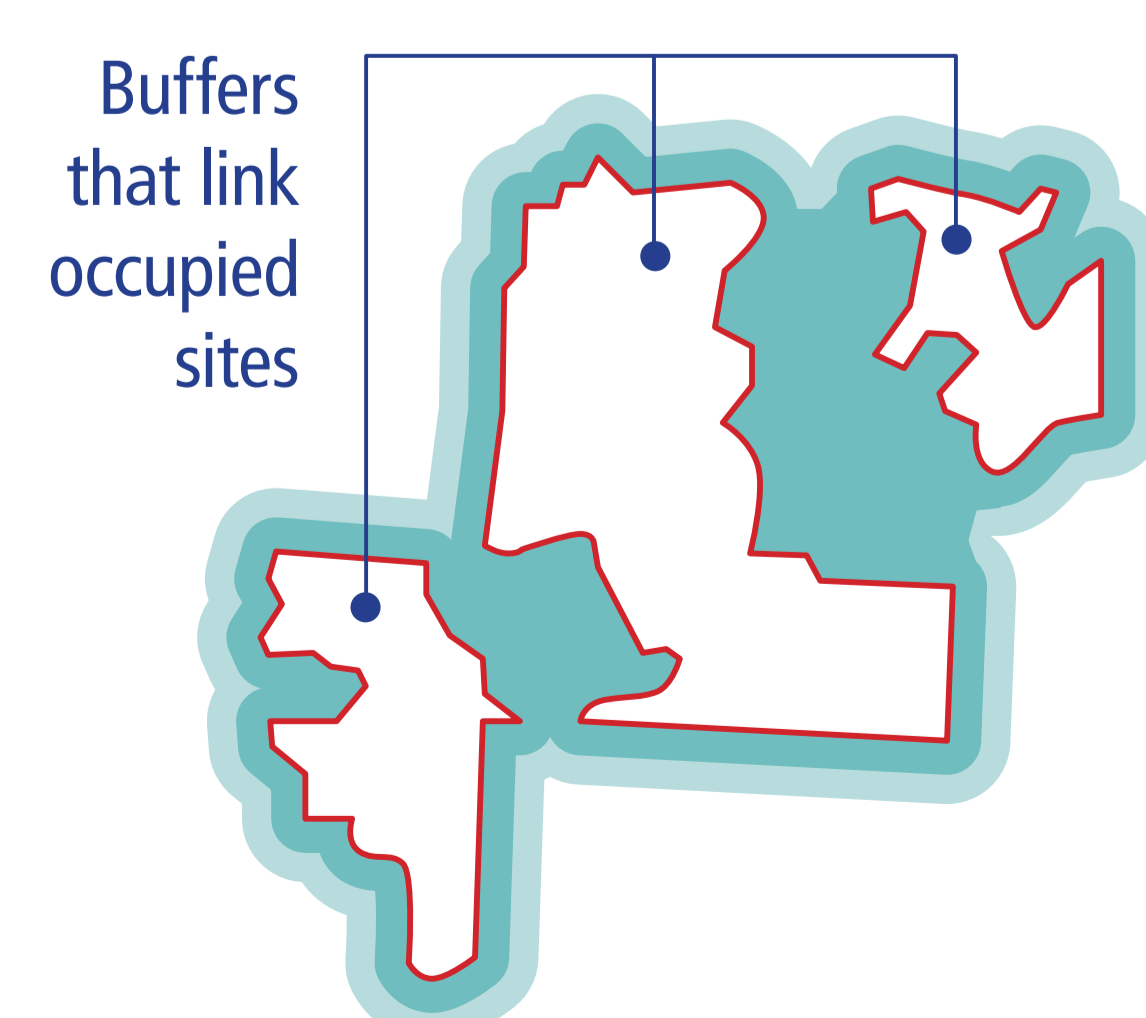
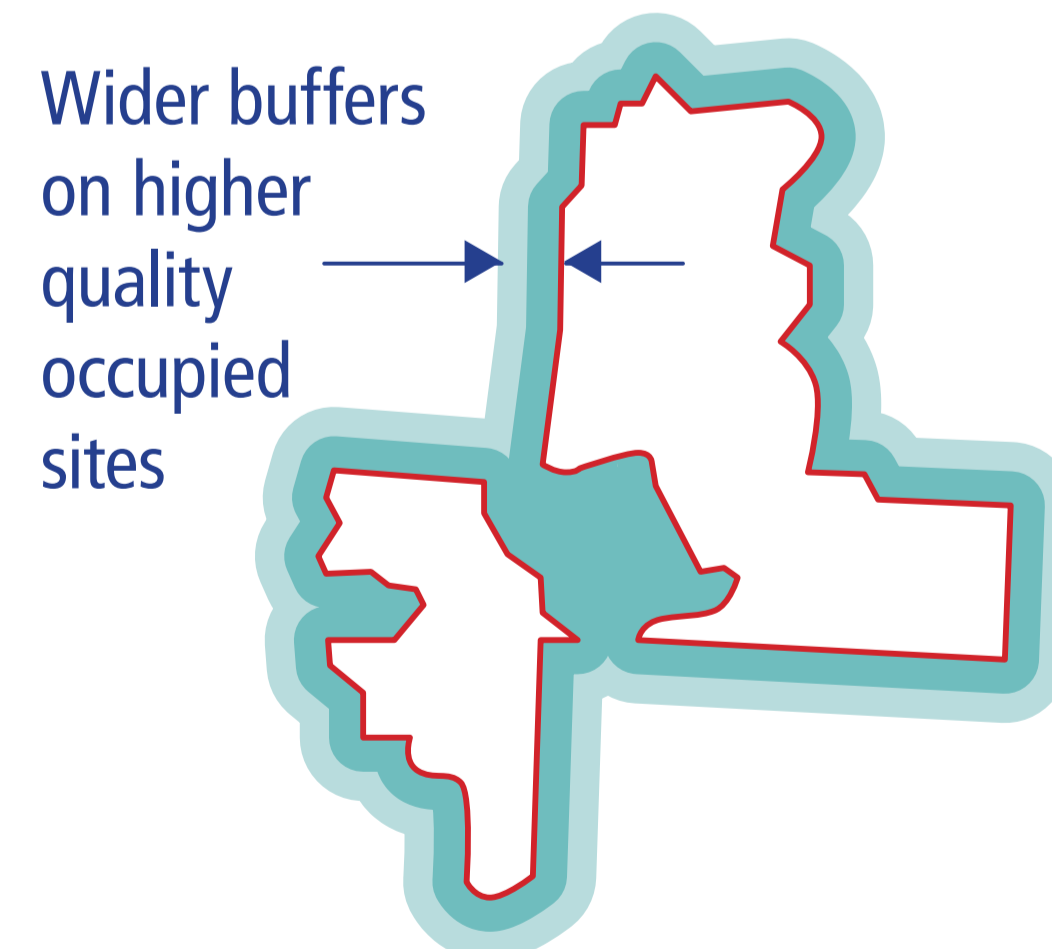
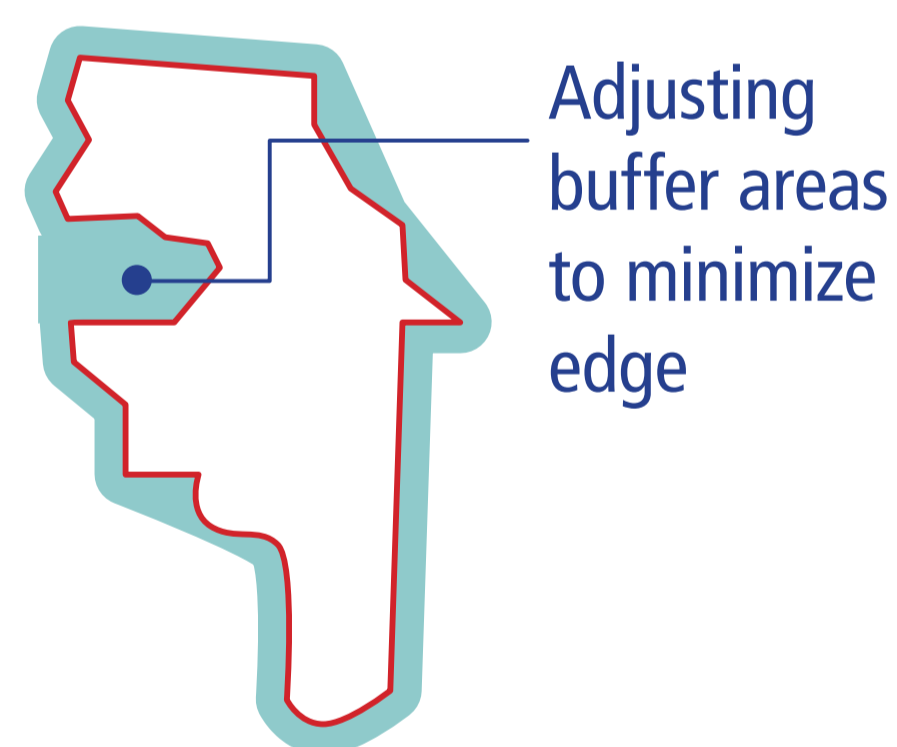
**Active
Management
Objective**

**Operational
Flexibility
Objective**

**Implementation
Certainty
Objective**

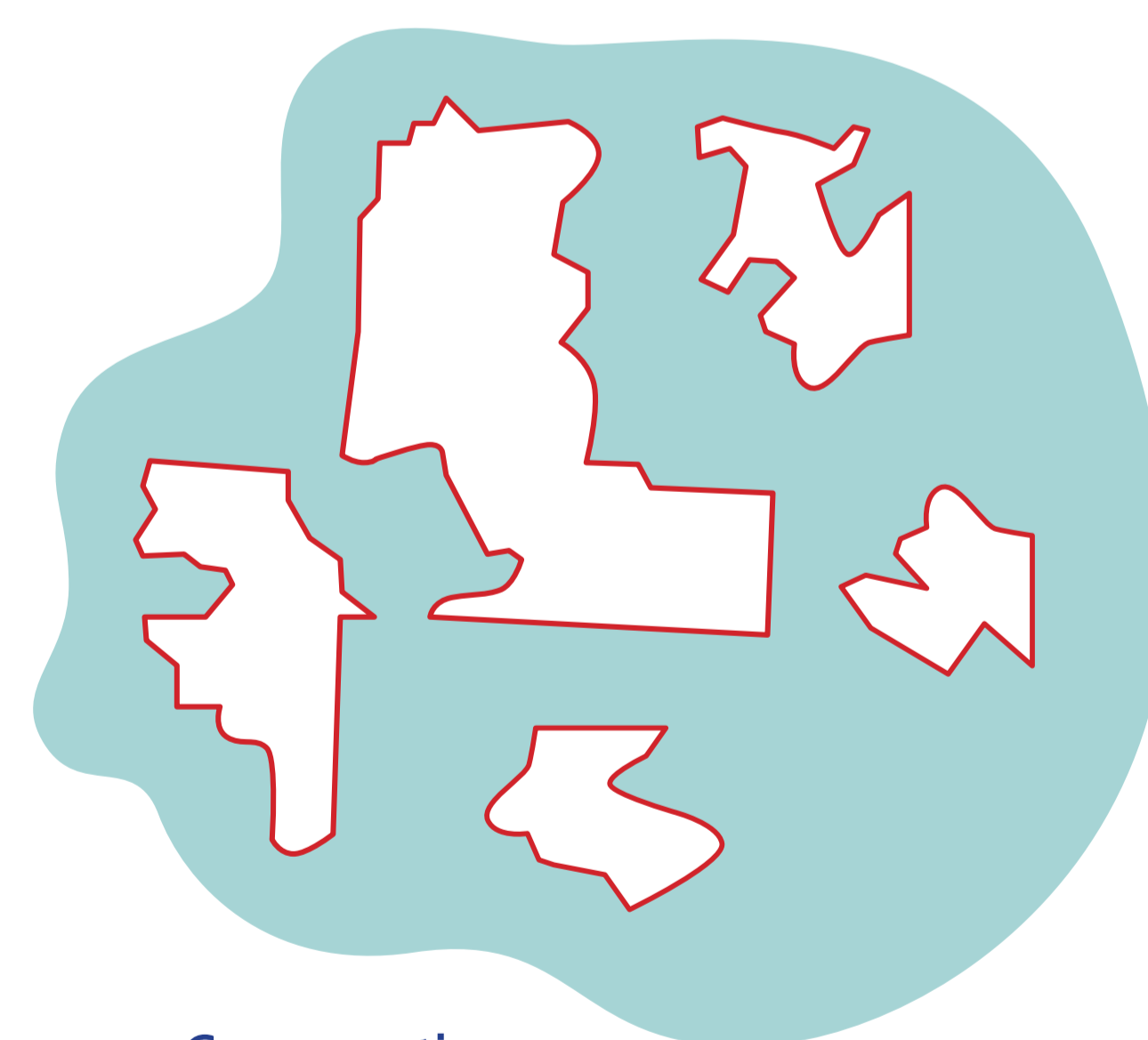
CONCEPT 1

- Protect all occupied sites
- Measures to reduce the risk of corvid predation
- Maintain the integrity of occupied sites with variable width buffers, for example with buffer configurations as seen below



CONCEPT 2

- Protect most or all occupied sites
- Maintain functional buffers
- Create Conservation Areas in Southwest Washington, the Olympic Experimental State Forest (OESF), and the North Puget Planning Unit
- Conservation Areas would be managed to develop contiguous blocks of high quality habitat



CONCEPT 3

- Protect most or all occupied sites
- Maintain functional buffers
- Create Conservation Areas in Southwest Washington, and the North Puget Planning Unit
- Conservation Areas would be managed to develop contiguous blocks of high quality habitat

NO ACTION

DNR would follow existing regulations that apply to marbled murrelet habitat, including current Forest Practices rules and the Endangered Species Act.

Identifying Types of Impacts

Management activities or disturbance may impact the following categories of murrelet habitat:

- Occupied sites
- Unoccupied habitat
- Unsurveyed habitat
- Unknown occupied sites

Identifying Types of Mitigation

The following mitigation measures may be incorporated into the conceptual alternatives to address impacts to murrelets:

- Conservation of murrelet habitat on trust lands and in Natural Areas
- Buffers around occupied sites
- Development of habitat inside Conservation Areas, potentially using innovative silviculture
- Adaptive management
- Campground trash control, education, and outreach to reduce the risk of predation by ravens, crows and jays
- Removal of derelict fishing gear to improve murrelet habitat in the aquatic environment
- Delay of forest management activities to minimize disturbance

What Is Nesting Habitat?

While murrelets generally nest in older conifer forests, nests have been found in younger forest stands with remnant old trees and also in trees as young as 80 years that have developed platforms from damage by mistletoe, storms or other causes. Because murrelets are so difficult to detect in the forest, we often do not know where they are nesting.

What Is An Occupied Site?

Only when an actual nest is found can one be certain that murrelets are breeding in a particular forest stand. In Washington only 51 nests have been recorded, 13 of those nests are located on DNR-managed lands. All other types of murrelet observations only suggest, with varying degrees of certainty, that murrelets may be nesting in a specific forest stand. There are 369 occupied sites on DNR managed state trust lands.

An occupied site is an area of murrelet habitat where at least one of the following marbled murrelet behaviors occur: 1) A nest is located; 2) Downy chicks, eggs, or egg shells are found; 3) Marbled murrelets are detected flying below, through, into or out of the forest canopy; 4) Birds are calling from a stationary location within the area; or 5) Birds are circling above a stand within one tree height of the top of the canopy.

What Is a Functioning Buffer?

Forested stands adjacent to occupied sites, often referred to as buffers, can function to protect occupied sites, including minimizing windthrow, micro-climate effects, and predation risk. Murrelets are vulnerable to predation by species such as Stellar's Jays, crows, and ravens.