

# Old Growth and Older Forests Policy Overview

Western Washington State Trust Lands

Board of Natural Resources

May 4, 2021

*Angus Brodie*

*Andrew Hayes*



# Agenda

---

- DNR-Managed Trust Lands
- Purpose of Overview
- Development of DNR Policy Framework
- Summary





# Department of Natural Resources

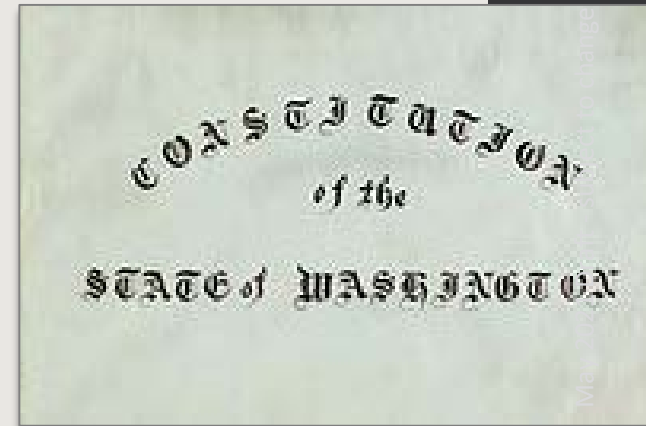
**Trust Manager**  
**~2.9 million acres**  
**of**  
**State Trust Lands**  
**in Washington**



# Trust Responsibilities

**As manager of state trust lands, DNR has legal fiduciary responsibilities to:**

- Generate revenue and other benefits for each trust, in perpetuity
- Preserve the corpus of the trust
- Exercise reasonable care and skill
- Act prudently to reduce the risk of loss for the trusts
- Maintain undivided loyalty to beneficiaries
- Act impartially with respect to current and future beneficiaries



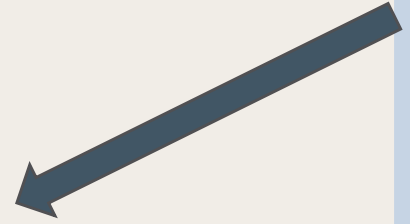
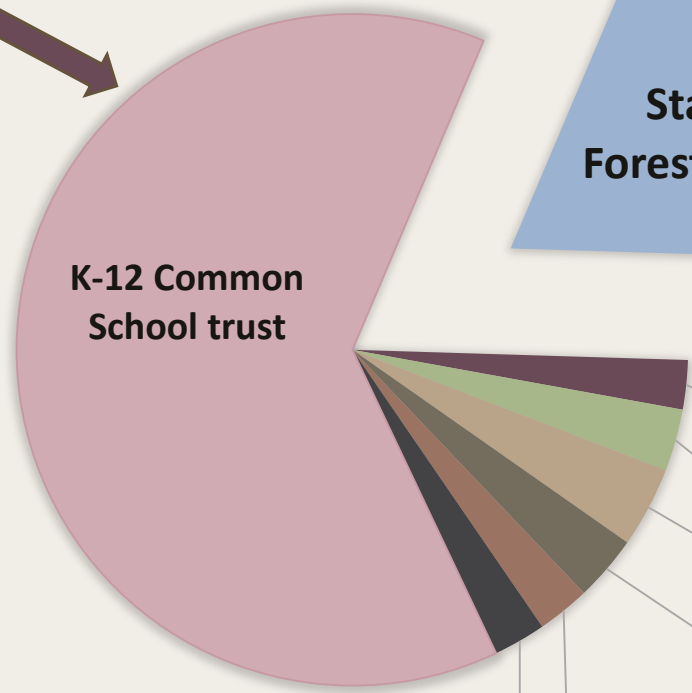
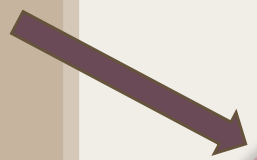
# State Trust Lands

~2.9 Million Acres of State Trust Lands

## State Lands

Federally granted lands

- Enabling Act (25 U.S. Statutes at Large, c 180 p. 676)
- State Constitution
- Revenue is generated from a variety of sources
- Source of financial support, primarily for public schools and colleges



## State Forestlands

- Two types: Transfer and Purchase
- > 617,000 acres\*
- Transfer lands acquired by counties through tax foreclosures.
- Statutory Trusts
- Revenue helps fund county services, state schools, and junior taxing districts
- 21 counties

May 2021 Draft - Subject to Change





# Purpose of Overview

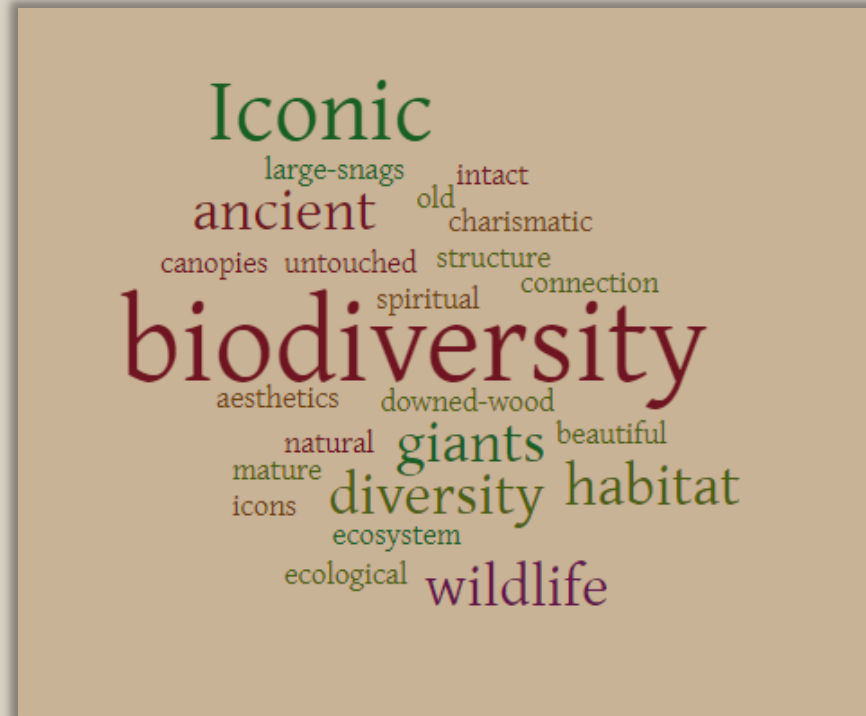
Summarize existing policy framework for the management and protection of old growth and older forests.

*Why are these forests significant?*

- Wildlife and Biodiversity
- Forest Health
- Carbon Storage
- Timber Sales



# What do people think of as Older Forests and Old-Growth?



**Ecological**  
High Biodiversity  
Wildlife Habitat  
Carbon Storage

**Economic**  
Large Timber  
Quality Wood  
High Volume

**Social**  
Spiritual Connection  
Natural Beauty  
Culture

*Acres may not add due to rounding*



# Older Forest and Old-Growth in Western Washington State

Estimated Acres of Old-Growth and Older Forest by Ownership in Western Washington			
Ownership	Old Growth	Older Forest	Total Forested Acres
Federal	1,916,000	912,000	5,000,000
DNR	193,000	221,000	1,543,000
Private/Other	224,000	605,000	6,100,000
Tribal	15,000	21,000	300,000
Local Government	31,000	42,000	250,000
State (Non-DNR)	10,000	16,000	82,000
<b>Total</b>	<b>2,390,000</b>	<b>1,820,000</b>	<b>13,300,000</b>

*Data source: Estimated from GNN (2012, 2017), DNR Cadastre, Non-DNR Major Public Lands, & RS-FRIS  
All numbers rounded. Acres may not add due to rounding*

Old Growth = forests with late succession complex structure

Older Forest = showing structures associated with mature forests

# Development of DNR Policy Framework



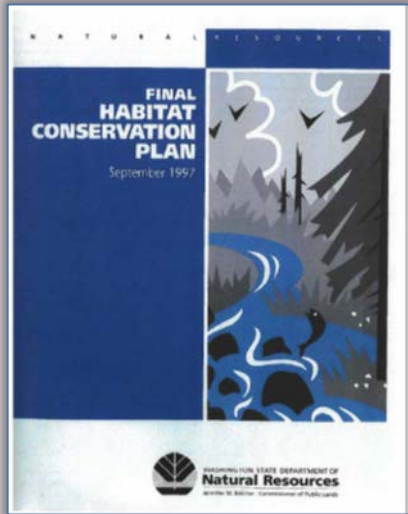
# Historical Context

Summary of key federal and state actions that affected forest management

Decade	Federal	Washington State
1960s	<ul style="list-style-type: none"> <li>• Multiple-Use Sustained Yield Act</li> <li>• Wilderness Act</li> </ul>	<ul style="list-style-type: none"> <li>• First sustained yield calculations conducted</li> </ul>
1970s	<ul style="list-style-type: none"> <li>• Clean Water Act</li> <li>• Clean Air Act</li> <li>• Endangered Species Act (ESA)</li> <li>• National Environmental Policy Act</li> <li>• National Forest Management Act</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable Harvest program RCWs</li> <li>• State Environmental Policy Act</li> <li>• Forest Practices Act</li> </ul>
1980s		<ul style="list-style-type: none"> <li>• Skamania vs State</li> <li>• Timber Fish and Wildlife Agreement</li> <li>• Commission on Old Growth Alternatives for Washington's State Forest Lands</li> </ul>
1990s	<ul style="list-style-type: none"> <li>• ESA listing of Northern Spotted Owl, Marbled Murrelet, and Salmonid species</li> <li>• Northwest Forest Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Forest Resource Plan</li> <li>• State Trust Lands Habitat Conservation Plan (HCP)</li> </ul>
2000s	<ul style="list-style-type: none"> <li>• Health Forest Restoration Act</li> </ul>	<ul style="list-style-type: none"> <li>• Forest And Fish Law and HCP</li> <li>• Sustainable Harvest Calculations</li> <li>• Policy for Sustainable Forests</li> </ul>
2010s	<ul style="list-style-type: none"> <li>• Good Neighbor Authority</li> </ul>	<ul style="list-style-type: none"> <li>• 20-year Forest Health Strategy</li> <li>• Marbled Murrelet Long-term Conservation Strategy Amendment to the State Trust Lands HCP</li> <li>• Sustainable Harvest Calculation</li> </ul>







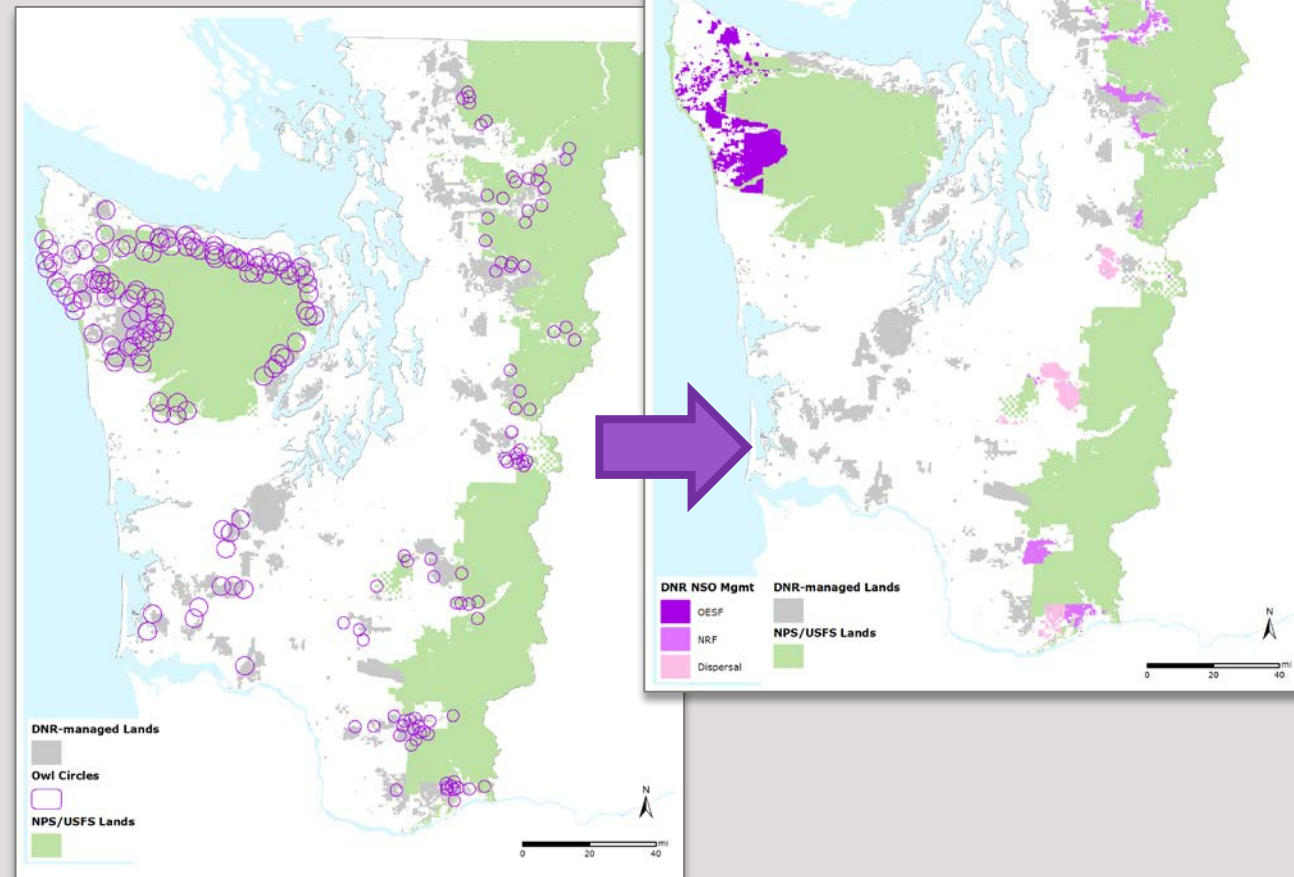
# The 1997 State Trust Lands Habitat Conservation Plan (HCP)





# Federal listing of Northern Spotted Owl, Marbled Murrelet, and Salmonids under the Endangered Species Act (ESA)

- **ESA Compliance Options**
  - Take avoidance (*or*)
  - Habitat Conservation Plan (HCP)
- **Conservation Approach**
  - Take avoidance is site specific
  - HCP's provide **landscape approach**
- **1997 State Trust Lands HCP**
  - Much of the existing older forest is captured in the HCP strategies





# Landscape Management Activities under the Habitat Conservation Plan



**HCP Multi-species Conservation Strategy**  
**Uncommon Habitat**



**HCP Riparian Conservation Strategy**  
**Riparian Buffer**



**Policy for Sustainable Forests**  
**Sustainable Harvest Level**



**HCP Marbled Murrelet Conservation Strategy**  
**Occupied Site**



**HCP Northern Spotted Owl Conservation Strategy**  
**NRF Habitat**







# Multispecies Conservation Strategy for Unlisted Species in Westside Planning Units

## Stand Structure Objectives at Year 100

Habitat Types	Stand stage (with approximate ages)	Projected percent of land base at year 100
Grass/forbs	Open (0-10 years)	5-10
Shrub	Regeneration (10-20 years)	5-15
Open sapling/pole	Pole (20-40 years)	15-25
Closed sapling/pole timber	Closed (40-70 years)	25-35
Large timber	Complex (>70 years)	25-35
Old growth	Fully Functional (subset of Complex) (>150 years)	10-15

Strategies: Riparian, Northern Spotted Owl, Marbled Murrelet, and Unlisted Species

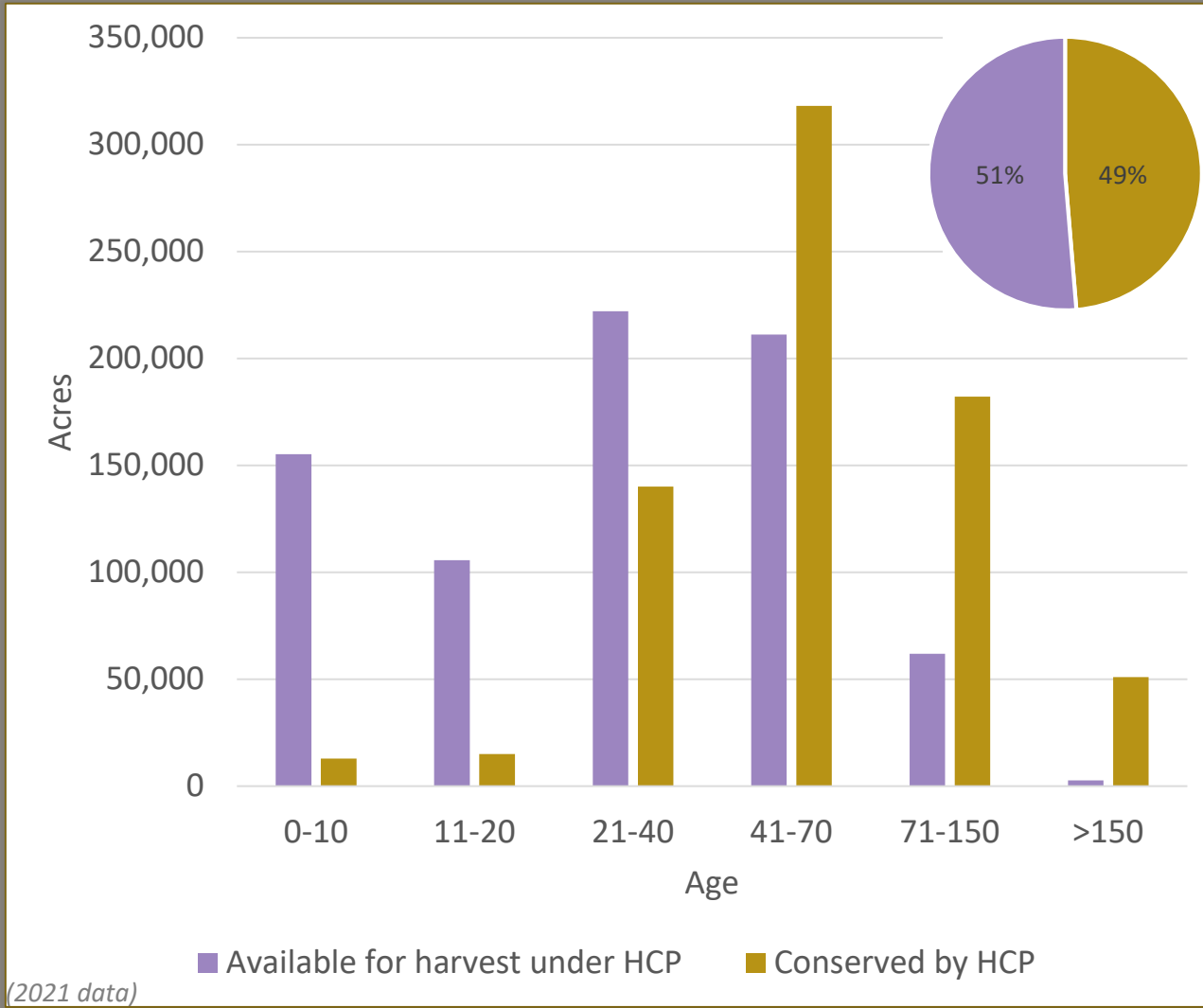
Result: Distribution of forest types for a wide range of species

- **Used age as a surrogate for forest habitat/structural type**
- **Expected outcome in 100 years**

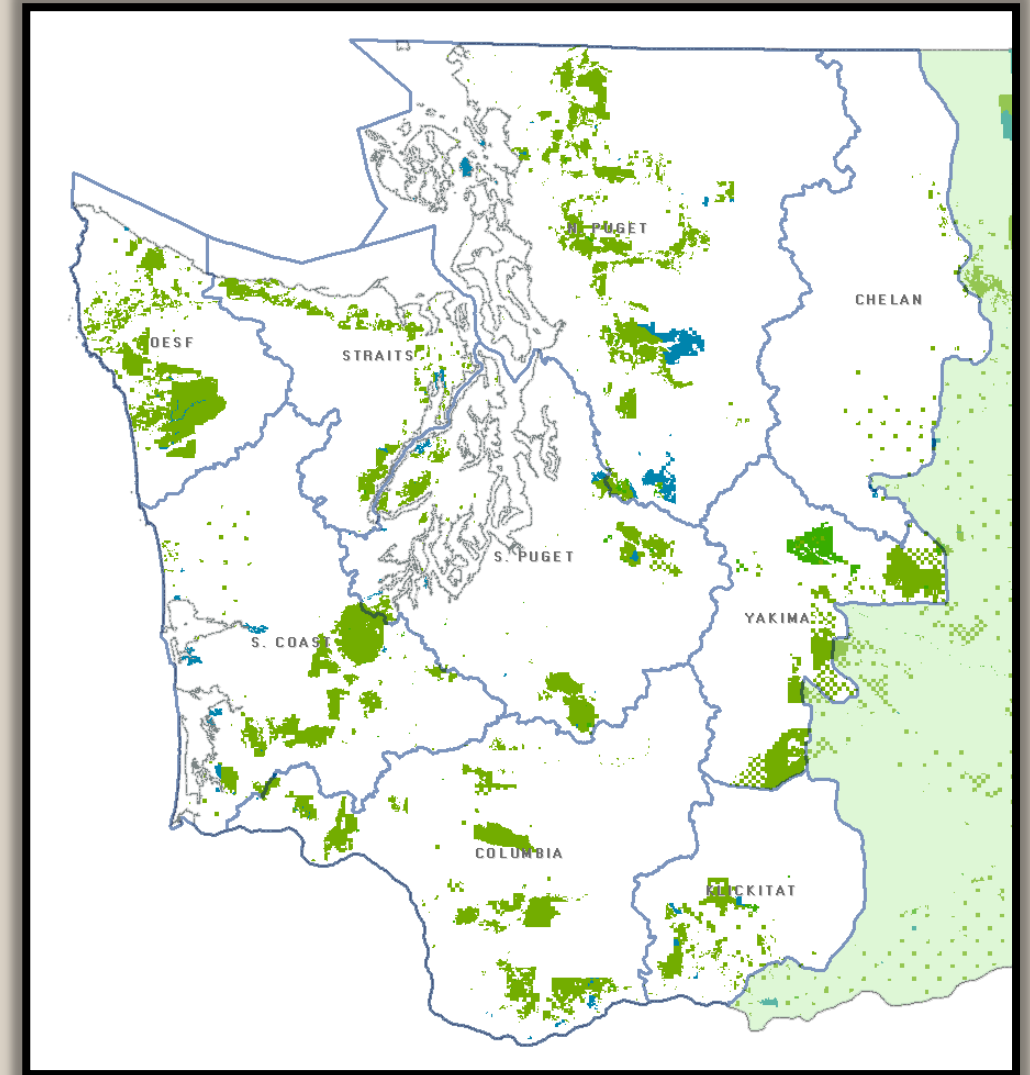
Adapted from HCP pages IV. 172,173, 179

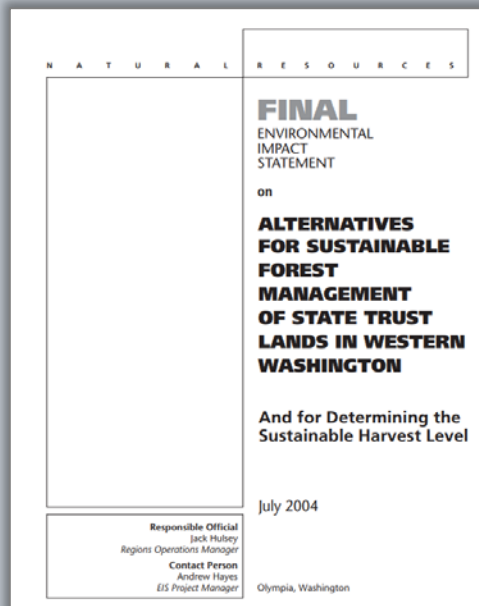


# Acres Available for Harvest and Conserved under the HCP Strategies



# HCP Planning Units within the Range of the Northern Spotted Owl





# 2004 Sustainable Harvest Level





# Stand Development Stages

- Foundation of Ecological Forestry (*Carey, Franklin, et al.*)
- Interrelationships of biodiversity, function, and structure
- Use to assist in silviculture decision making



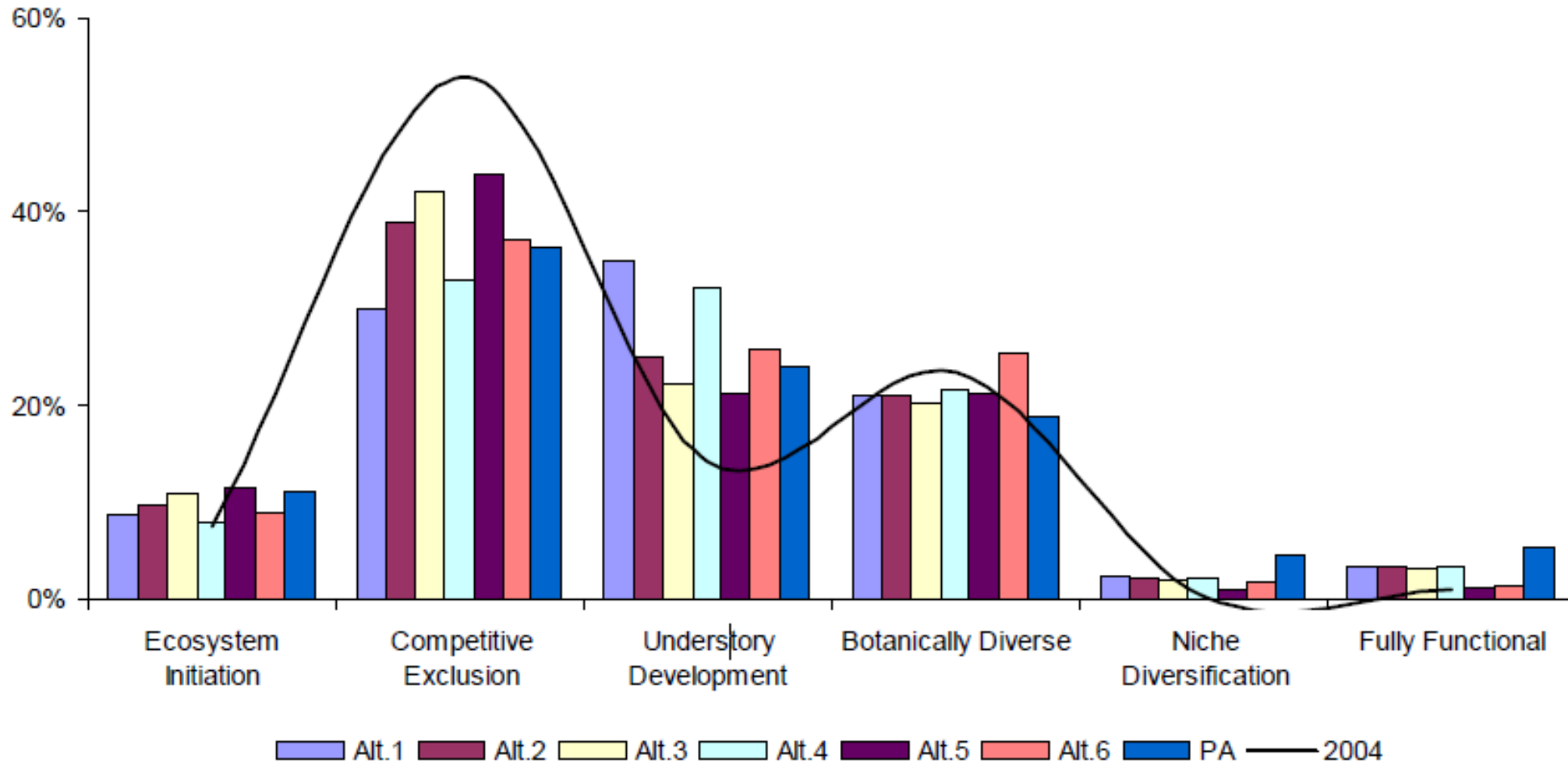
	Summarized Stand Development Stage	Stand Development Stage
Less Complex Forest	Ecosystem Initiation	Ecosystem Initiation
	Competitive Exclusion	Sapling Exclusion
Pole Exclusion		
Large Tree Exclusion		
Understory Development		
More Complex Forest	Structurally Complex	Botanically Diverse
		Niche Diversification
		Fully Functional



# Stand Development Stages Over Time

## Sustainable Harvest Final EIS 2004

2067 Projected Stand Development Stage – Distribution by Alternative



# Board Decision on Older Forests in 2004

## Resolution 1134 - General Silviculture Strategy:

- Use innovative silviculture to foster stand development that simultaneously produces trust revenue and creates structural diversity across the landscape
- **Target 10-15% of each HCP Planning Unit for old forest based on structural characteristics**
- In meeting targets, Old Growth Research Areas will continue to be deferred and existing old growth (HCP definition) and older stands will be a priority focus in developing HCP Planning unit targets



CERTIFICATION OF ENROLLMENT  
ENGROSSED SUBSTITUTE HOUSE BILL 2573

Chapter 277, Laws of 2004  
(partial veto)  
58th Legislature  
2004 Regular Session

CAPITAL BUDGET

EFFECTIVE DATE: 4/1/04 - Except sections 117 and 202, which  
become effective 4/16/04.

Passed by the House March 11, 2004  
Yeas 62 Nays 14

FRANK CHOPP

Speaker of the House of Representatives

Passed by the Senate March 11, 2004  
Yeas 49 Nays 0

BRAD OWEN

President of the Senate

Approved April 1, 2004, with the  
exception of sections 114(b), 117, 118,  
122(b), 126, 137, 202, 216(d), 245, and  
317, which are vetoed.

GARY F. LOOZE

Governor of the State of Washington

CERTIFICATE

I, Richard Hafziger, Chief Clerk  
of the House of Representatives of  
the State of Washington, do hereby  
certify that the attached is  
ENGROSSED SUBSTITUTE HOUSE BILL  
2573 as passed by the House of  
Representatives and the Senate on  
the dates hereon set forth.

RICHARD HAFZIGER

Chief Clerk

FILED

April 1, 2004 - 12:02 p.m.

Secretary of State  
State of Washington

14 NEW SECTION. Sec. 905. (1) The department of natural resources  
15 shall conduct an inventory on state lands of old growth forest stands  
16 as defined by a panel of scientists. The panel of scientists shall  
17 include three scientific scholars with well documented expertise in  
18 Pacific Northwest forest ecology, one of whom will serve as chair by  
19 consensus of the panel, one representative from the department of  
20 natural resources, and one representative from the Washington  
21 department of fish and wildlife. The panel shall review the best  
22 available scientific information and develop a definition for old  
23 growth forest stands in Washington state. The inventory shall include  
24 maps illustrating the distribution of old growth forest stands on state  
25 lands, and tables describing the number of acres of such stands in each  
26 county, the department's administrative unit, and forest type. The  
27 maps and tables shall identify both structurally uniform and  
28 structurally complex stands. The department of natural resources shall  
29 make a report of the inventory to the appropriate committees of the  
30 legislature.  
31 (2) For the duration of the study, cutting or removal of the trees  
32 and stands 160 years or older is subject to the department publishing  
33 notification of proposed cutting or removal of old growth timber.  
34 (3) This section expires June 30, 2005.

# 2004 Legislation on Old Growth

2004 Capital Budget ESHB 2573, Sect. 905

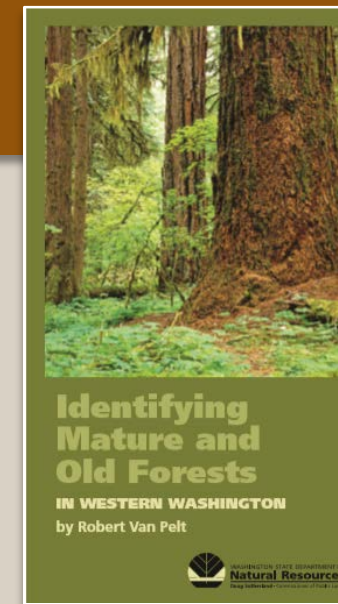
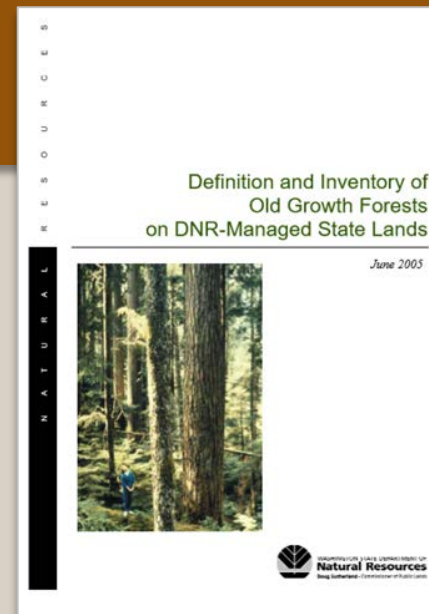
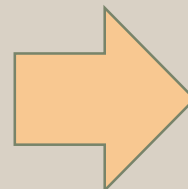




# Define and Inventory Old Growth

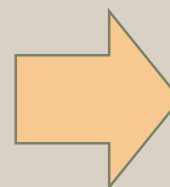
## Convened a panel of scientists

- Dr. Jerry F. Franklin (UW)
- Dr. Thomas Spies (USDA FS)
- Dr. Robert Van Pelt (UW)



## Weighted Old Growth Habitat Index (WOGHI)

- Large trees
- Large snags
- Down woody debris
- Tree size diversity
- (Stand age)



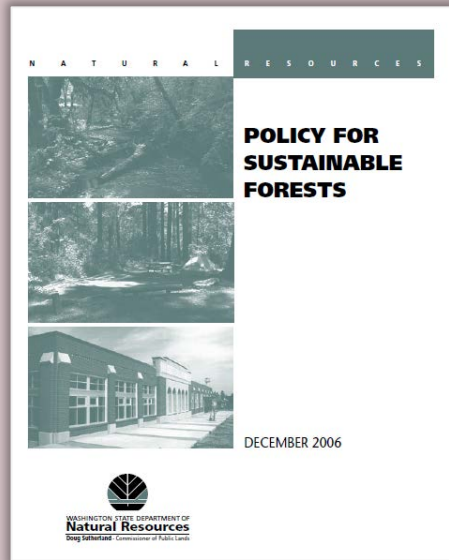
**Table 2.3 Old growth (acres) by Western Washington Habitat Conservation Plan (HCP) Planning Unit (Administrative Unit)**  
(All figures are estimates, subject to field verification)

HCP Planning Unit	High Likelihood Potential Old Growth (WOGHI = 60+) <sup>1</sup>	Lower Likelihood Potential Old Growth (WOGHI < 60) <sup>2</sup>	Total <sup>3</sup>
Columbia	2,871	1,845	4,717
North Puget	21,977	3,332	25,309
OESF	26,695	29,011	55,705
South Coast	221	650	871
South Puget	820	613	1,433
Straits	82	318	400
<b>Total</b>	<b>52,666</b>	<b>35,769</b>	<b>88,435</b>

<sup>1</sup> Washington Old Growth Habitat Index (WOGHI) score of 60 or more out of 100 has a high probability of being an old growth stand. This includes stands aged 160 years or more, where the Index is not available.

<sup>2</sup> Some stands with a WOGHI score less than 60 that may be old growth but need secondary screening.

<sup>3</sup> Acres values are from Sustainable Harvest Implementation data set 2.



# The 2006 Policy for Sustainable Forests



# 2006 Policy for Sustainable Forests - Old Growth: Final EIS Alternatives

## Summary of Western Washington Old Growth Policy Differences among Alternatives considered in the Policy for Sustainable Forests FEIS

Alt. 1 (No action)	Alt. 2 (Permanent Protection)	Alt. 3 (Protect >80 Acres)	Preferred Alternative
<ul style="list-style-type: none"> <li>•Target 10-15% for older forests</li> <li>•OESF - deferral of 15,000 acres (until 2007)</li> <li>•Defer Old Growth Research Areas (10 years)</li> <li>•Retain existing old growth <b>(HCP definition)</b> to meet forest targets. Once targets met, may be available for harvest</li> </ul>	<ul style="list-style-type: none"> <li>•Target 10-15% for older forests</li> <li>•OESF – research permitted in old growth stands</li> <li>•Retain large diameter, old growth trees (HCP requirement)</li> <li>•Permanent deferral of all old growth <b>(HCP definition)</b>, includes Old Growth Research Areas.</li> </ul>	<ul style="list-style-type: none"> <li>•Target 10-15% for older forests</li> <li>•OESF—experimental silviculture in old growth, (but no harvest*)</li> <li>•Retain large diameter, old growth trees (HCP requirement)</li> <li>•Defer 80+ acres old growth stands <b>(HCP definition)</b></li> <li>•Old growth stands &lt;80 acres will be evaluated for HCP and social/cultural significance.</li> </ul> <p style="text-align: right; font-size: small;">*during term of settlement agreement</p>	<ul style="list-style-type: none"> <li>•Defer 5+ acres old growth               <ul style="list-style-type: none"> <li>•Pre-1850 natural origin</li> <li>•Most structurally complex</li> </ul> </li> <li>•Retain large diameter, structurally unique trees (HCP requirement)</li> </ul>
<ul style="list-style-type: none"> <li>•When in best interest of trusts, old-growth stands are subject to transfer out of trust status with full market compensation. Priority on those stands not subject to HCP protection.</li> </ul>			

# 2006 Policy for Sustainable Forests – Resolution 1208

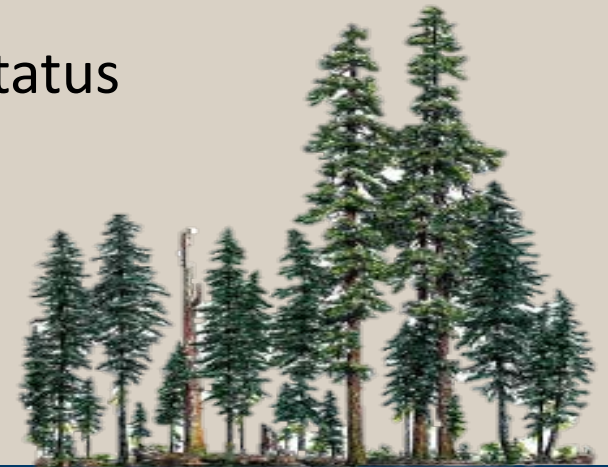
## Final Policy Statements on Old Growth and Older Forests

### Policy on Old-Growth Stands:

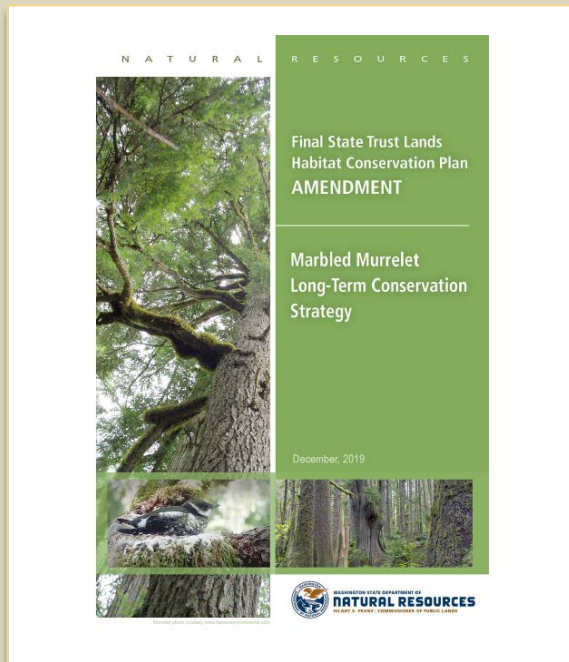
- Defer 5+ acres old-growth stands
  - Pre-1850 natural origin
  - Most structurally complex
- Retain large, structurally unique trees
- OESF: research operations in old-growth are allowed
- \*Seek to transfer old growth and areas of large trees out of trust status  
*(full trust compensation)*

### Policy on Silviculture Strategy:

- Target 10-15% for “older” forests







# 2019 Marbled Murrelet Long Term Conservation Strategy HCP Amendment

BNR Resolution 1559

# Review of the 2019 Decision

## Why do we need this decision now?



Obligation in the 1997 Habitat Conservation Plan



Long-term certainty for DNR's timber harvest program



Significant contribution to marbled murrelets

## Board Direction on Marbled Murrelet

*(November 2017)*

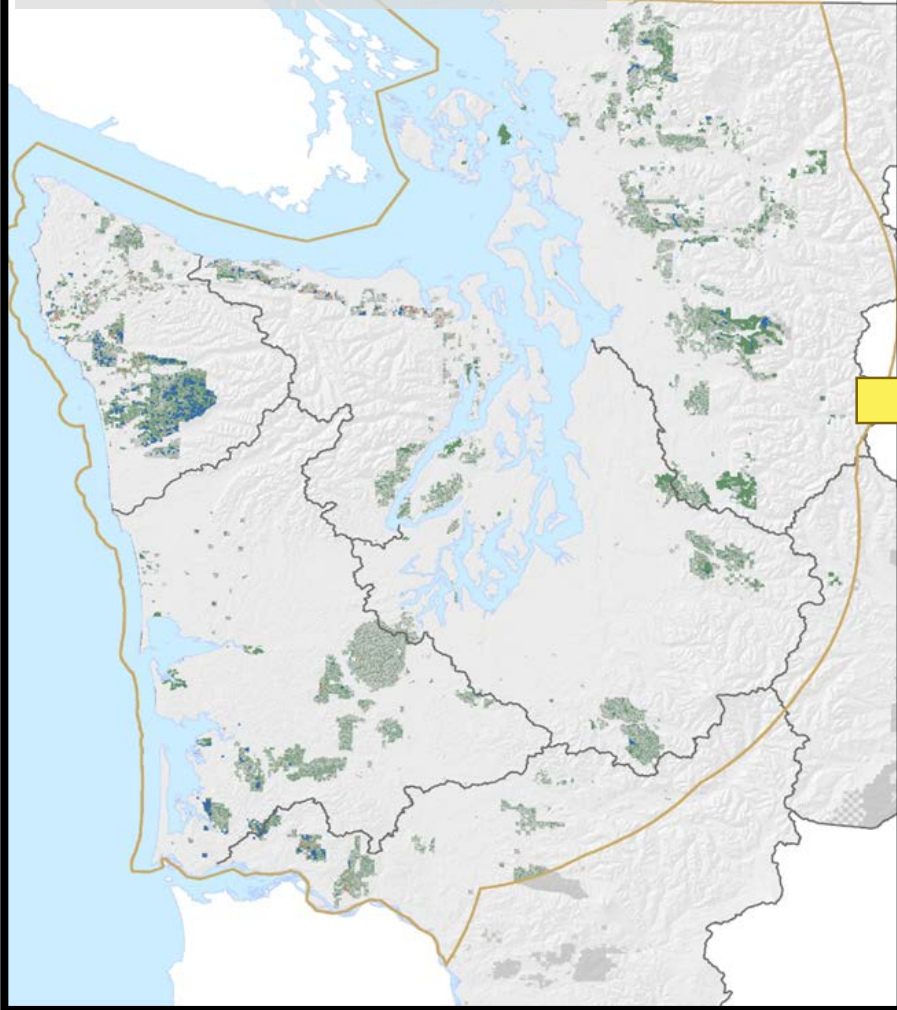
Develop, analyze, and submit for application a preferred alternative based on staff recommendations to:

- **Minimize impacts to marbled murrelets**
  - Conserve all existing occupied sites
  - Capture existing habitat in conservation areas
  - Meter habitat in strategic locations
- **Offset impacts and address uncertainty**
  - Buffer occupied sites
  - Conservation in strategically important locations
  - Increase interior forest
- **Reduce disproportionate financial impacts**



# 2019 HCP Amendment - By the Numbers

## No Action – Interim Strategy



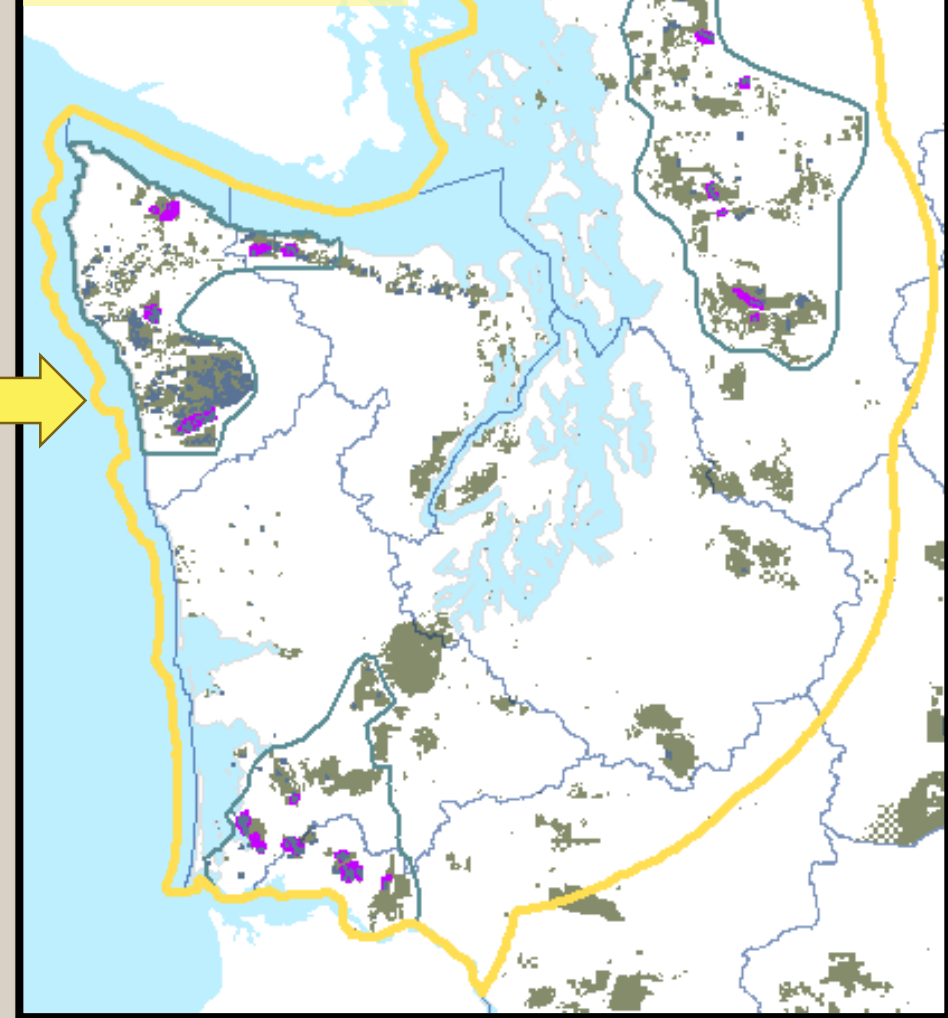
## Interim Strategy

- **Site specific conservation:** occupied sites and existing higher quality habitats (33,000 acres)<sup>1</sup>
- Marginal habitats available for harvest (35,000 acres)<sup>2</sup>

## HCP Amendment

- **Site specific conservation:** occupied site and buffers (21,000 acres)<sup>1</sup>
- **Special habitat area** (47,000 acres)<sup>1</sup>
- **Habitat released** (38,000 acres)<sup>2</sup>
- **Metering**

## HCP Amendment



### Notes:

1. [Table 2.2.3.](#) FEIS
2. [Table 4.6.2.](#) FEIS





# Summary

Trust Lands are managed for long-term revenue

Old Growth is identified and protected  
from harvest

HCP landscape conservation protects species,  
habitat, and biodiversity

Policy framework creates landscapes with  
substantial structurally complex forests

HCP Amendment reinforced landscape conservation and  
released older forests not essential to conservation goals





# Next Steps



- Landscape outcomes
  - Monitoring
  - Projections
- Discuss options going forward

