





Sustainable Harvest Level

A Presentation to the Board of Natural Resources

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Today's Agenda

Two Parts

- **Part 1 – The decision options**
- Part 2 – The environmental and financial analysis

Part 1 Outline

◆ Arrearage Options

◆ Riparian Options

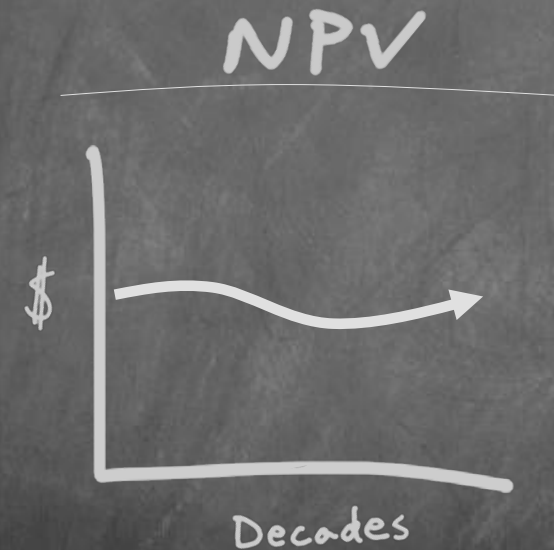
◆ Marbled Murrelet Options



Trust Mandate

As manager of state trust lands, DNR has legal fiduciary responsibilities under the State Constitution to:

- Generate revenue and other benefits for each trust
 - 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



What is the Sustainable Harvest Level?

RCW 79.10.300

“the volume of timber scheduled for sale from state-owned lands during a planning decade as calculated by the department and approved by the board.”

Revised Code of Washington



- 79.10.310 – Sustained yield plan
- 79.10.320 – Sustainable harvest program
- 79.10.330 – Arrearages
- 79.10.340 – Sustainable harvest sale
- 79.10.120 – Multiple use

PSF, HCP



SHC Guidance

- Definition of Sustainability
- Sustainable Harvest Units
- Harvest Flow
- Optimize Economic value
- Harvest Deferrals

Management Policy

- Old Growth
- Genetic Reserves
- Cultural Resources
- Visual Impacts
- Public Access



- Northern Spotted Owl
- Riparian
- Marbled Murrelets
- Multiple Species Strategy
- Olympic Experimental State Forest

Sustainable Harvest Level FEIS

Purpose:

Recalculate a sustainable harvest level

**N
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D**

- RCW 79.10.320 – grow forest crops on sustained yield basis
- RCW 79.10.332 – if arrearage occurs, DNR shall conduct an analysis of alternatives
- Policy for Sustainable Forests – Recalculate the statewide sustainable harvest level every 10 years



Sustainable Harvest Decisions

- Arrearage Volume
- Riparian Harvest
- Marbled Murrelet Conservation Strategy



Arrearage





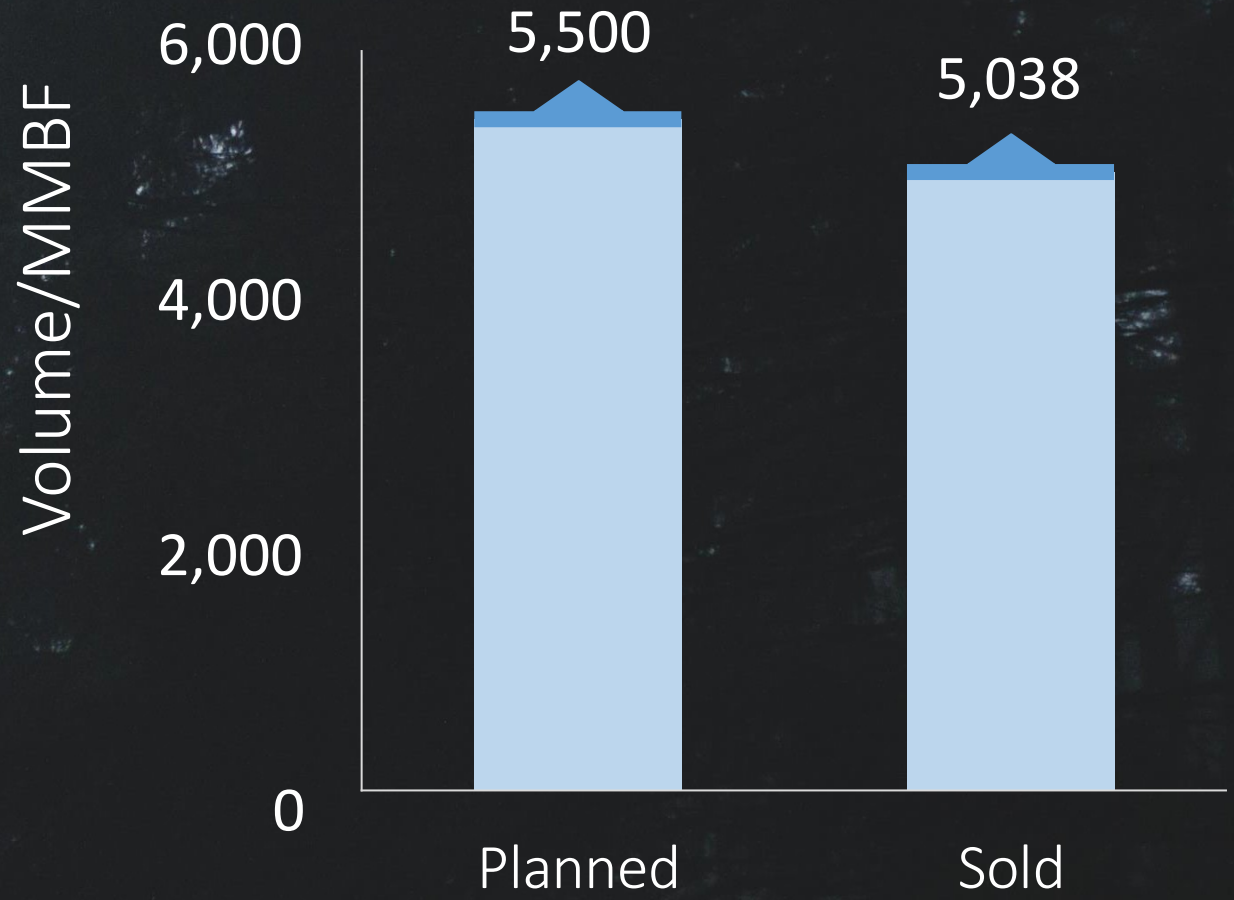
**Volume planned
— Volume sold**

Arrearage



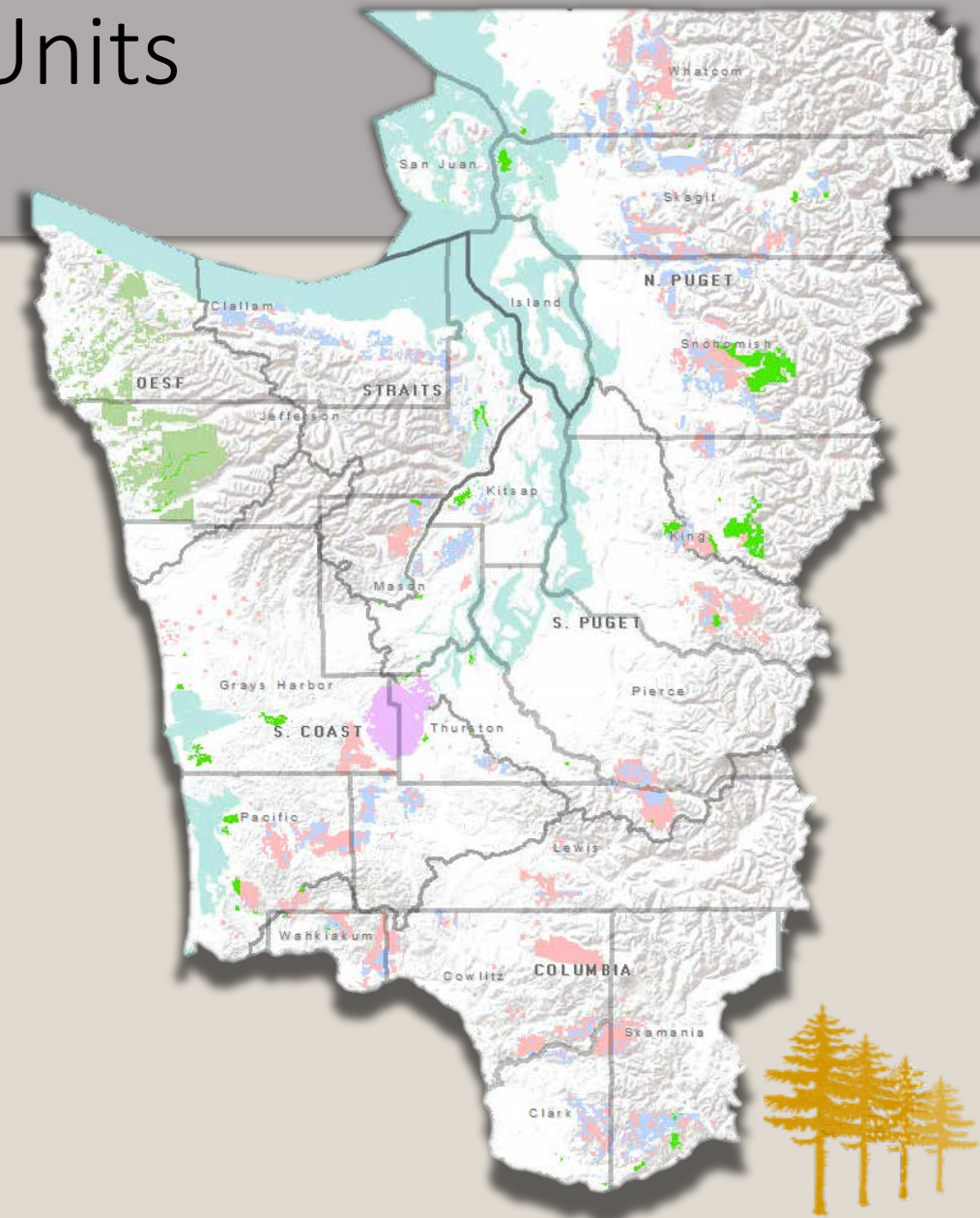
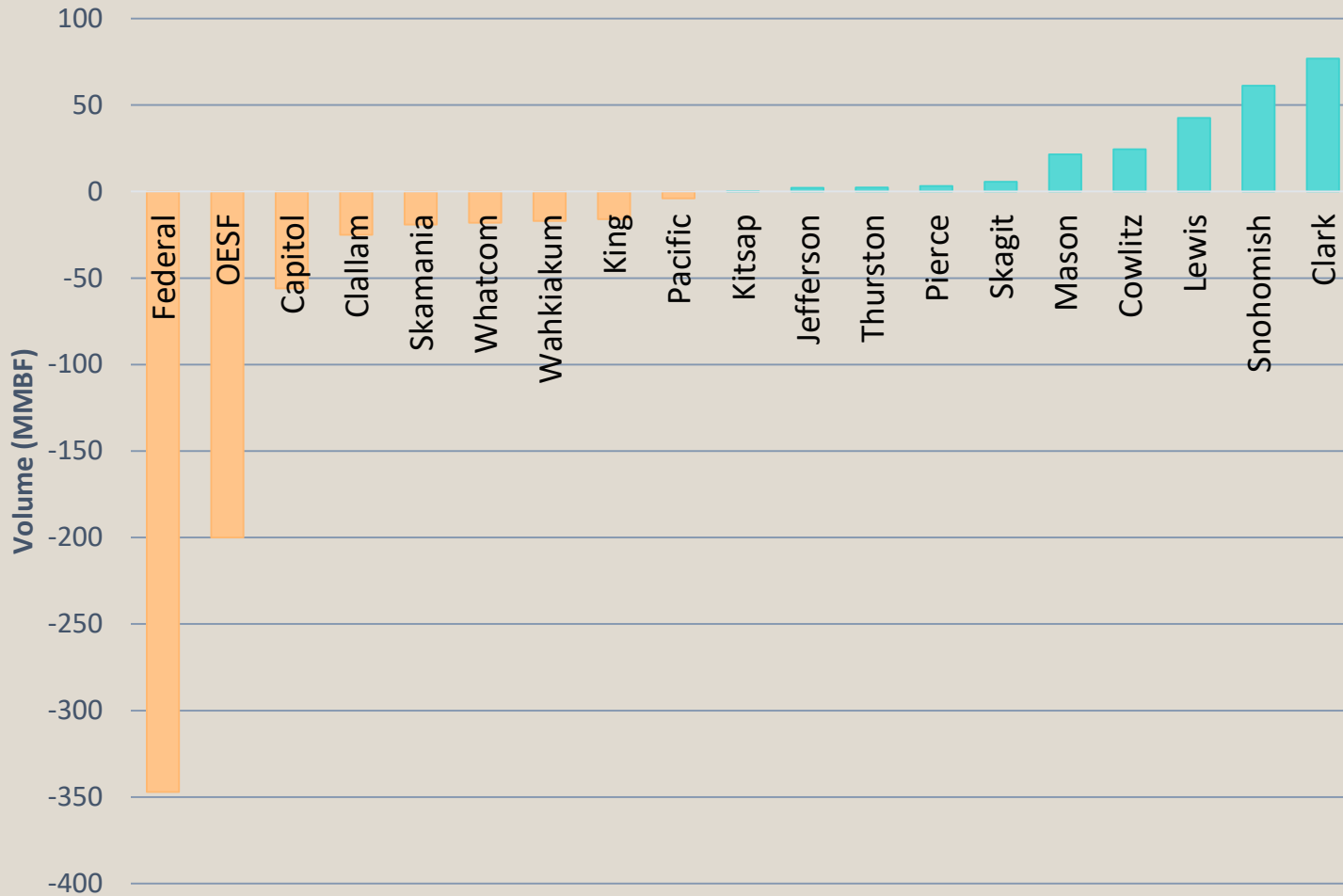


Fiscal Years 2005 - 2014



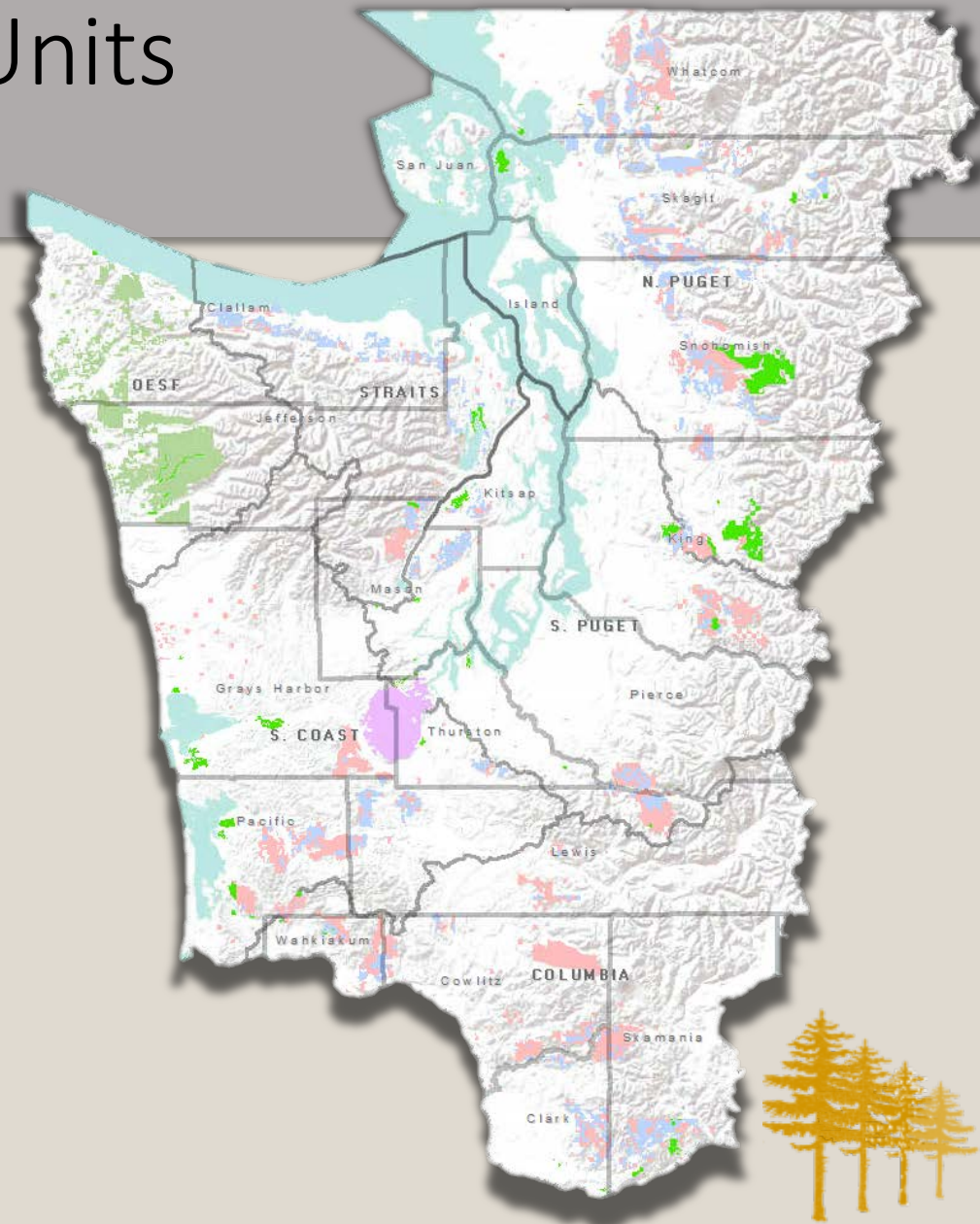
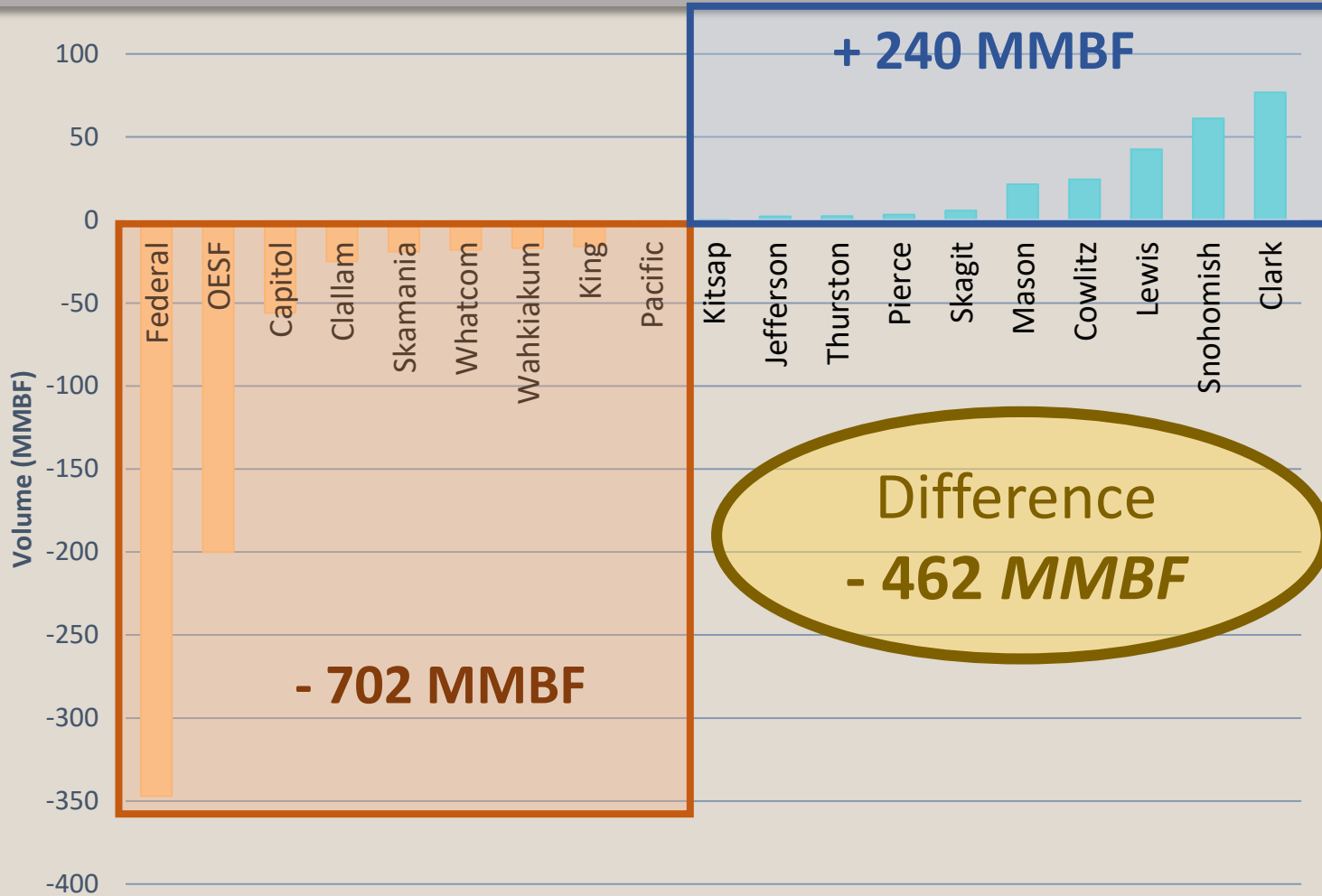
Arrearage in Sustainable Harvest Units

FY 2005-2014



Arrearage in Sustainable Harvest Units

FY 2005-2014



— What happens if there is an arrearage? —

RCW 79.10.330

If an arrearage exists at the end of any planning decade, **the department shall conduct an analysis of alternatives to determine the course of action regarding the arrearage** which provides the greatest return to the trusts based upon economic conditions then existing and forecast, as well as impacts on the environment of harvesting the additional timber. The department shall offer for sale the arrearage in addition to the sustainable harvest level adopted by the board of natural resources for the next planning decade if the analysis determined doing so will provide the greatest return to the trusts.



Arrearage

Causes

- Land transactions
- Riparian area management
- Owl management areas
- Marbled murrelet strategy
- Uncertainties



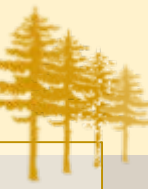
Arrearage

DEIS Arrearage Options

- 702 mmbf / 5 years
- 462 mmbf / 10 years
- 462 mmbf / 1 year
- No specified arrearage quantity



Arrearage Influence on Volume



702 MMBF

Provides approximately 493 MMBF annually for the first decade. The 10-decade average = 405 MMBF annually.

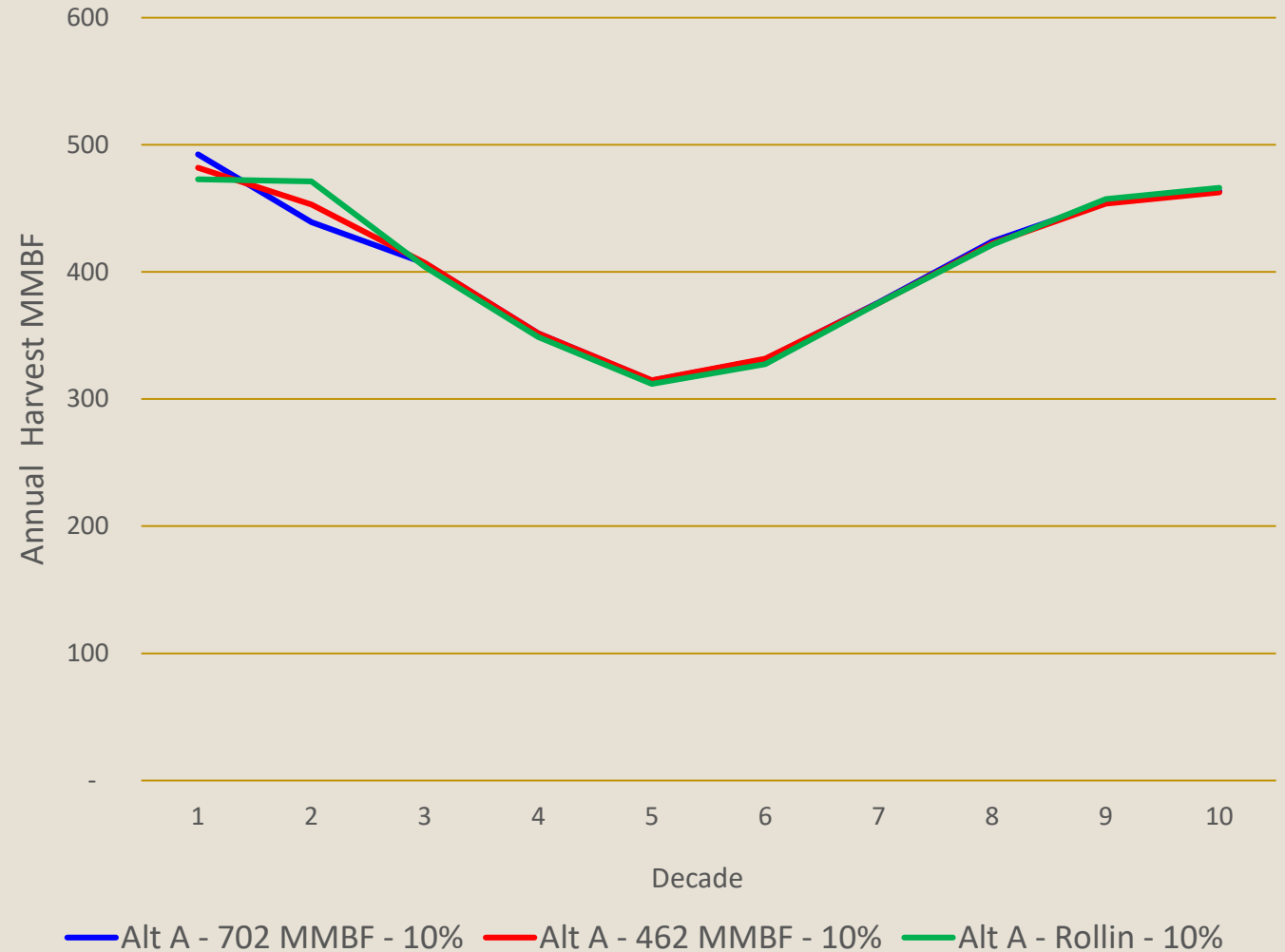
462 MMBF

Provides approximately 482 MMBF annually for the first decade. The 10 decade average = 405 MMBF annually

Rolled In

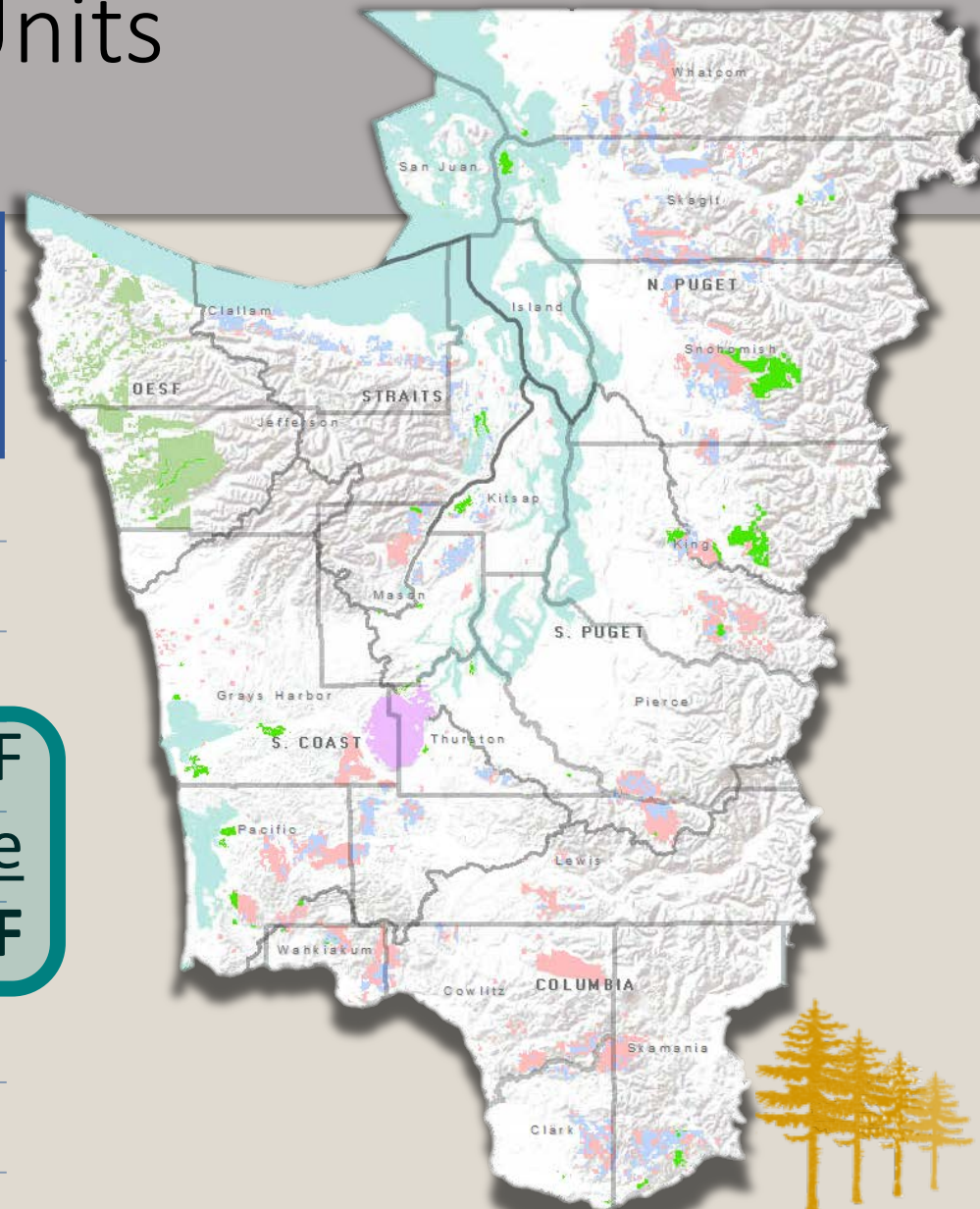
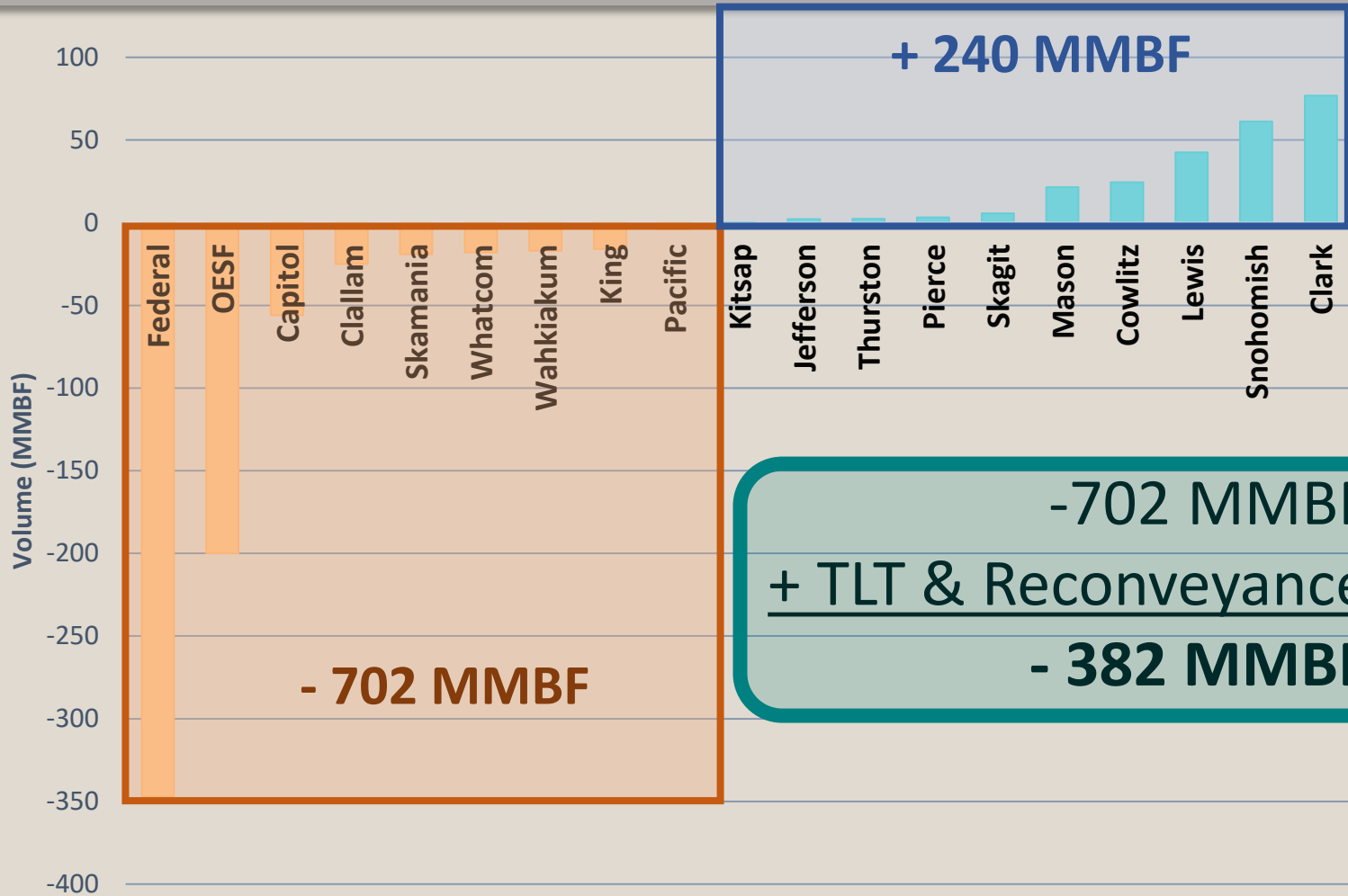
Provides approximately 473 MMBF annually for the first decade. The 10-decade average = **406** MMBF annually

Arrearage Options Across 100 Years



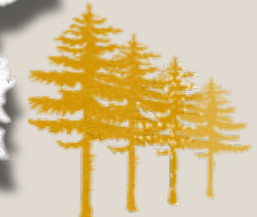
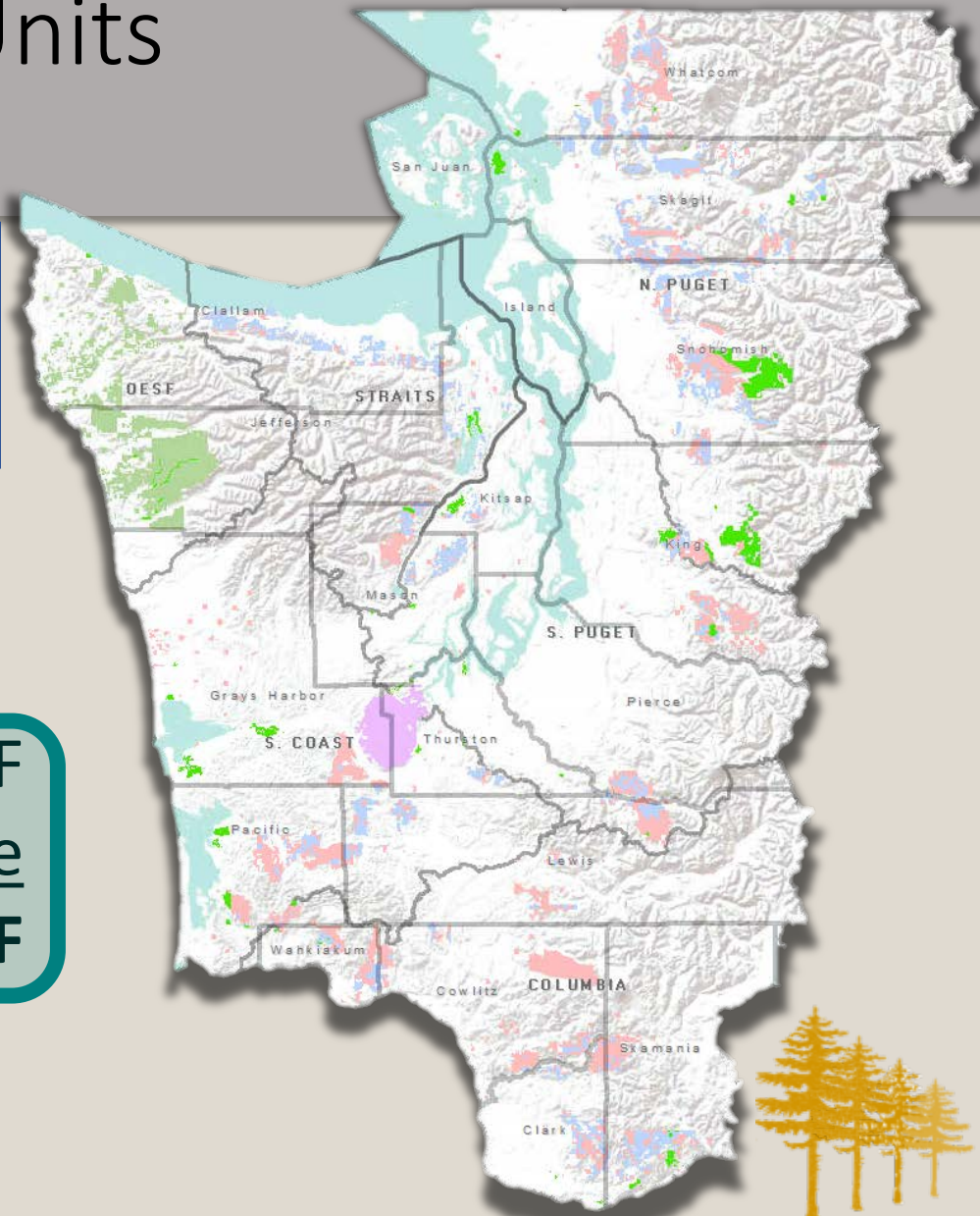
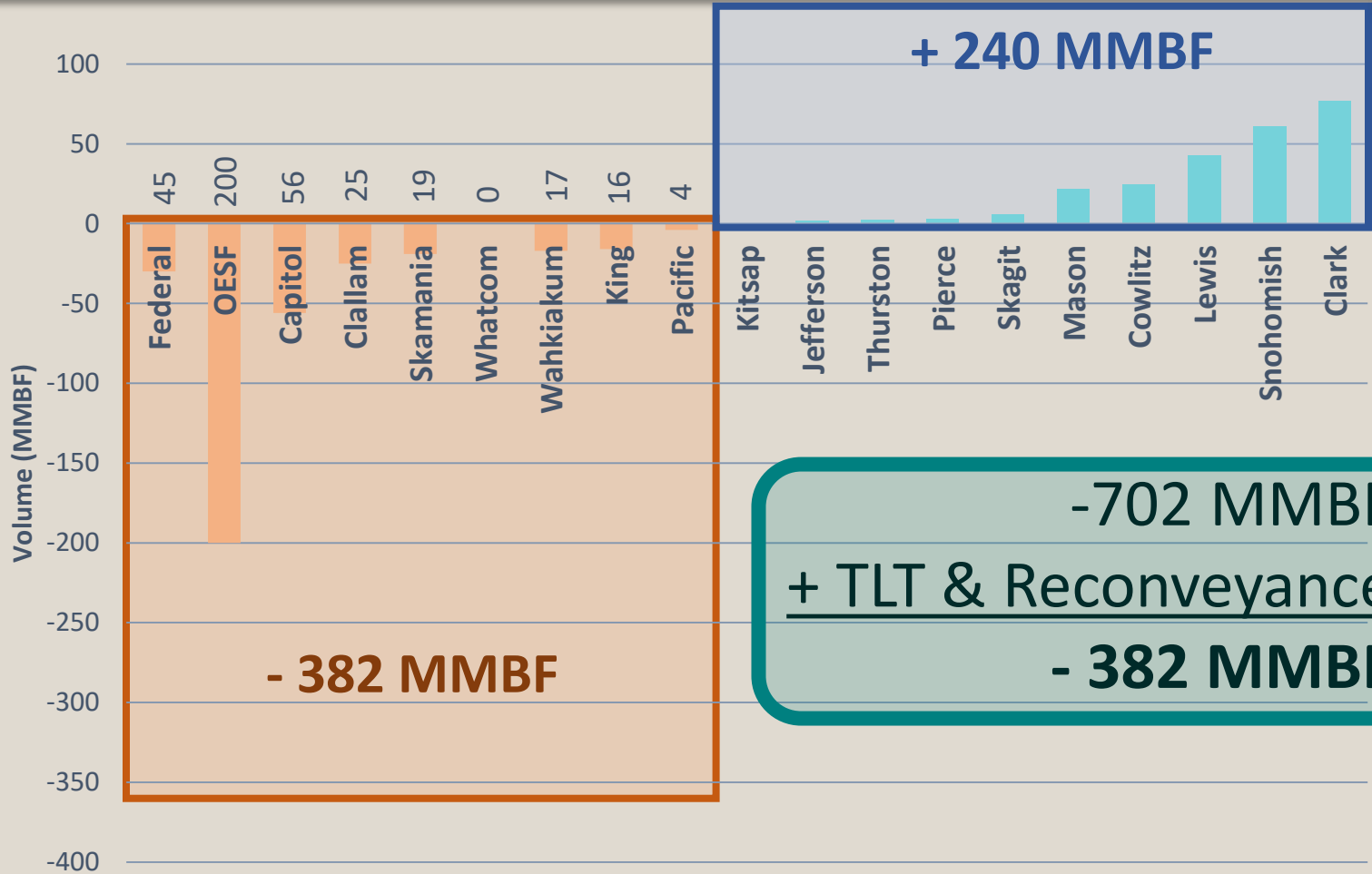
Arrearage in Sustainable Harvest Units

FY 2005-2014



Arrearage in Sustainable Harvest Units

2005-2014



Board Direction on Arrearage

(November 2017)

Develop and analyze a preferred alternative that **addresses the arrearage volume of 462 MMBF** and meets the following criteria:

- Address the trust and beneficiary revenue impacts caused from the shortfall of harvest in the sustainable harvest units with deficits
- **Add the volume that was transacted through Trust Land Transfer or state forest lands reconveyance programs** to the sold volume for each sustainable harvest unit for the previous planning decade
- The resulting total shortfall of volume from sustainable harvest units with deficits would be **382 MMBF**.



Arrearage Options in the Sustainable Harvest Level Final Environmental Impact Statement

- A. 702 MMBF / 5 years
- B. 462 MMBF / 10 years
- C. 462 MMBF / 1 year
- D. 382 MMBF / 10 years**
- E. No specified arrearage quantity

← Preferred
Alternative



Riparian



Riparian Conservation Objectives

Five Westside HCP Planning Units

- 1. To maintain or restore salmonid freshwater habitat*
- 2. To contribute to the conservation of other aquatic and riparian obligate species*



Riparian Forest Restoration Strategy



Implements 1997 HCP Riparian Conservation Strategy

Guides foresters in how and when to treat stands to achieve desired future conditions in riparian management zones

Riparian Thinning



In the 2004 planning decade, riparian and wetland management zones of state trust lands on the west side were then identified as encompassing 470,000 acres or 32% of the land base.

Projected harvest for the planning decade was 394 mmbf, or 7% of total volume.

Only 39 mmbf (10% of projected harvest volume) was harvested.

Riparian Thinning

Causes

- Late implementation of the Riparian Forest Restoration Strategy procedures (2006)
- Financial crisis in 2007 -2009



Riparian Influence on Volume

(five west-side planning units)

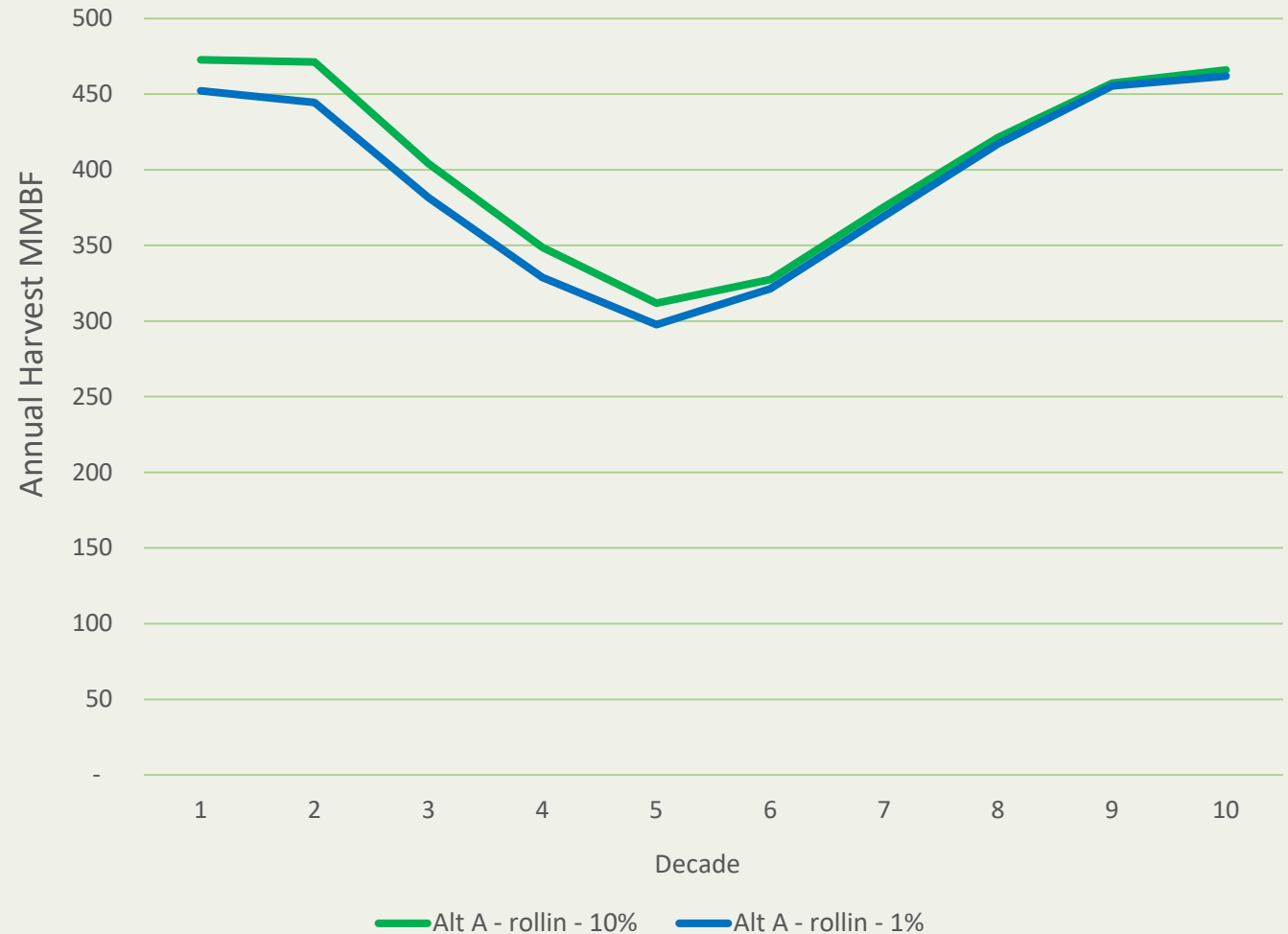
Up to 10% of riparian area

Riparian areas cover ~334,000 acres. This option would set riparian thinning area maximum at 33,400 acres for the decade.

Up to 1% of upland harvest

E.g. If DNR harvests 100,000 acres outside of riparian areas, this option would set the riparian thinning maximum at 1,000 acres for the decade.

Riparian Options across 100 Years



— Board Direction on Riparian Thinning —

(November 2017)

Develop and analyze a preferred alternative that assumes no riparian harvest volume is included in the sustainable harvest level for planning decade.



Riparian Options in the Sustainable Harvest Level

Final Environmental Impact Statement

1% upland harvest

Thin riparian areas up to **1%** of the decade's thinned or harvested **non-riparian area** within the 5 west-side HCP planning units.

10% riparian areas

Thin riparian areas up to **10% of the total riparian area** in the 5 west-side HCP planning units.

No specific level

Thin riparian areas according to the Riparian Forest Restoration Strategy, **do not include riparian volume when setting the sustainable harvest level** – Volume harvested during implementation will count towards attaining Sustainable Harvest Level.

Marbled Murrelet



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**



Components by Alternative

A **B** **C** **D** **E** **F** **G** **H**** **HCP****
 Amendment

Occupied sites	✓	✓	✓	✓	✓	✓	✓	✓	✓
Occupied site buffers	✓		✓	✓	✓	✓	✓	✓	✓
Habitat under interim strategy	✓					✓*			
Marbled murrelet management areas						✓	✓		
Emphasis areas			✓		✓		✓		
Special habitat areas			✓	✓	✓		✓	✓	✓
High quality P-stage habitat (>=.47)			✓		✓		✓		
Low quality NSO Habitat						✓			

*Includes old forest habitat, old forest buffers, and high quality adjusted habitat in OESF

** Includes a delay of the harvest of habitat during the first decade, otherwise known as “metering”

The Amendment



- Murrelet specific conservation

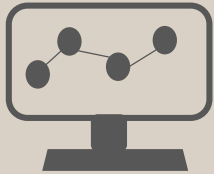


- Existing conservation

- Restrictions in conservation areas



- Metering



- Monitoring

- Reporting



The Amendment – by the numbers

Land Area	Acres
Occupied Sites (388)	59,000
Occupied Site Buffers	33,000
Special Habitat Areas (20)	47,000
Existing Conservation	567,000

Habitat	Acres
Current (2019)	207,000
Habitat conserved	168,000
Habitat released	39,000
Total Habitat in 50 years	272,000
Habitat Grown	104,000
Net increase in Habitat	32%

Acres by alternative

Thousand Acres of Long-term Forest Cover (LTFC)



	A	B	C	D	E	F	G	H	HCP Amendment
Existing conservation that may provide benefits to marbled murrelets	567	567	567	567	567	567	567	567	567
Marbled murrelet specific conservation	33	9	49	51	54	176	75	37	37
Total approximate acres	600	576	617*	618	621	743	642	604	605*

** Totals may not add up due to rounding*

