

# Impacts of Riparian Harvest on the Sustainable Harvest Calculation

A report to the Board of Natural Resources

presented by

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October 17, 2016



### Purpose

 To compare riparian scenarios by their relative effects on harvest levels.

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The following scenarios are for comparative purposes only. These numbers should only be viewed in the context of this exercise, as further choices around the Sustainable Harvest Calculation will influence final volume levels.

#### **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, 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

## Riparian Harvest Over Time





### Management costs by harvest type

	Cost per acre			
Harvest Type	Direct	Indirect	Silviculture	Total
Variable retention harvest	\$795	\$1,519	\$753	\$3,057
Non-riparian thinning	\$795	\$1,519	\$0	\$2,314
Riparian thinning	\$1,000	\$1,519	\$0	\$2,519



## Riparian Management

### 2 strategies within the Habitat Conservation Plan

- 1. Riparian Forest Restoration Strategy (5 Westside HCP planning units)
- 2. Olympic Experimental State Forest Land Plan



# Riparian Scenarios

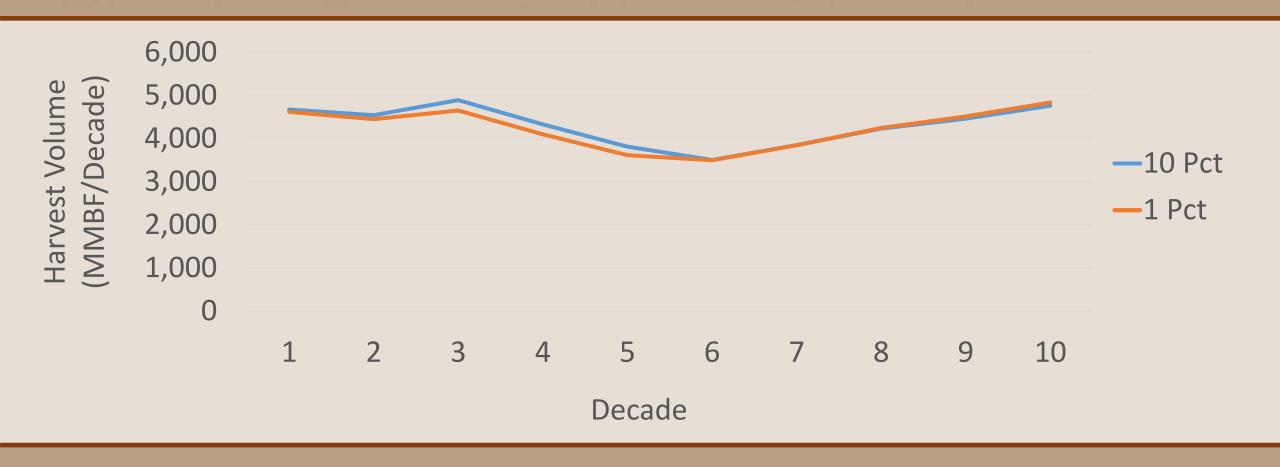
**Options** 

1% of upland harvests

10% of riparian land base



## Riparian Scenario Harvest Levels



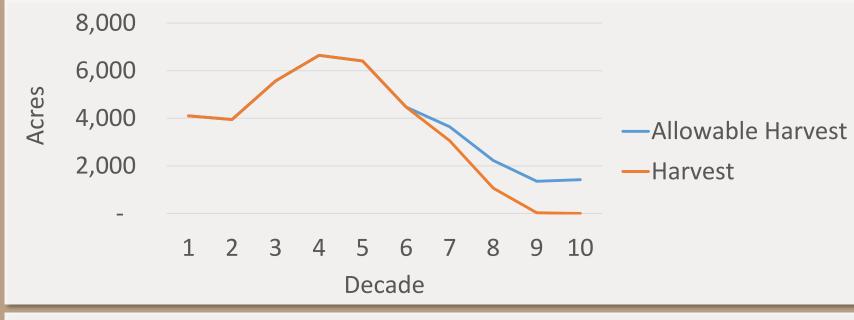


# Riparian Scenarios

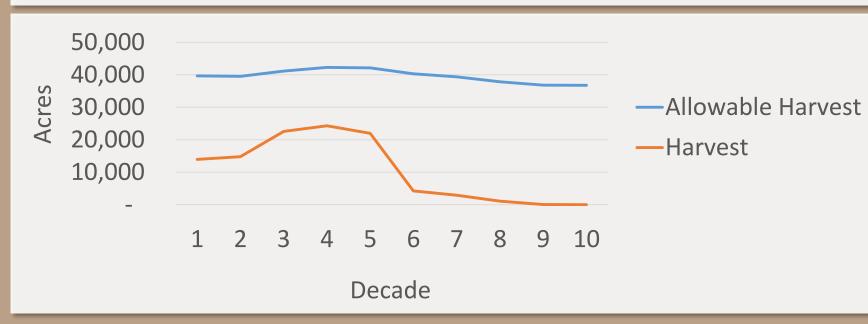
Options	Allowable Harvest (Decade 1)	Riparian Harvest Acres (Decade 1)	Riparian Harvest Volume (Decade 1)
1% of upland harvests	4,104 acres	4,104 acres	87.6 mmbf
10% of riparian land base	39,642 acres	13,966 acres	206.8 mmbf



1% of Upland Harvest



10% of Riparian Land Base

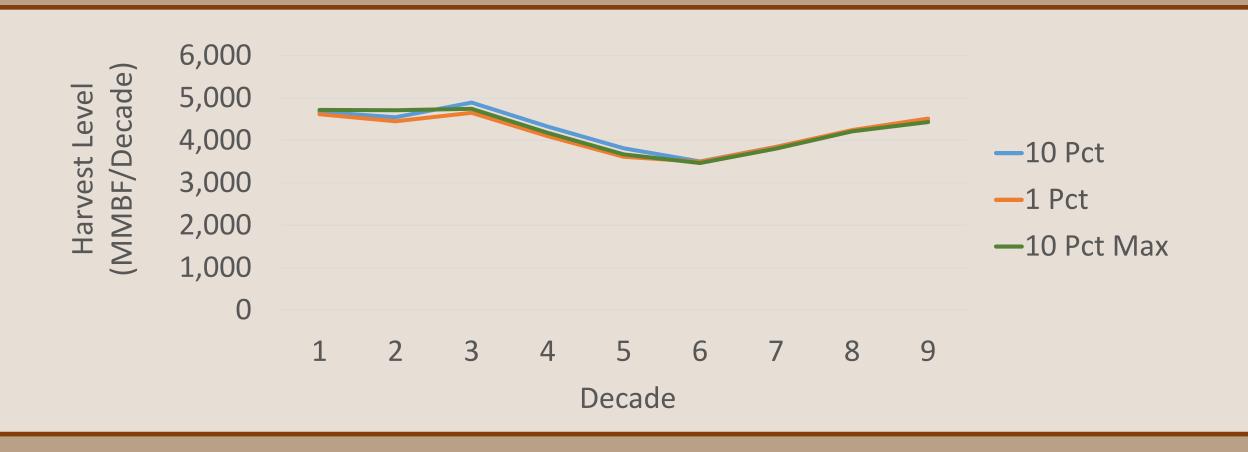


#### What if the model maximized the 10% allowable harvest?

	Decade 1		10 Decade Total	
*Volumes in MMBF	10% Option	10% Option Max	10% Option	10% Option Max
NPV	\$1,133 million	\$1,112 million	\$5,072 million	\$5,015 million
Total Volume	4,674	4,720	43,063	42,690
VRH Volume	3,868	3,706	39,141	39,075
Non-Riparian Thinning Volume	599	587	2,207	2,199
Riparian Volume	206	426	1,715	1,415



## Riparian Scenarios Harvest Levels





### Scenario overview\*

Variable	Range between scenarios (mmbf/year)		
Marbled Murrelet	98		
Arrearage	21		
Riparian	5		

<sup>\*</sup>Scenarios were ran with different model configurations, so comparisons between variables may be close but not exact.



#### In Conclusion

This presentation was to compare riparian scenarios by their relative effects on harvest levels.

\*

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