



WASHINGTON STATE DEPARTMENT OF
Natural Resources

Peter Goldmark - Commissioner of Public Lands

Western Washington Sustainable Harvest Calculation

For forested State Trust Lands
A Report to the Board of Natural Resources

Kyle Blum and Angus Brodie
May 2016



Sustainable Harvest Calculation



This Month:

1

Overview of SHC Rules and Guidance

2

Policies that effect the Land Base

3

Financial Assumptions

Sustainable Harvest Calculation



This Month:

1

Overview of SHC Rules and Guidance

2

Policies that effect the Land Base

3

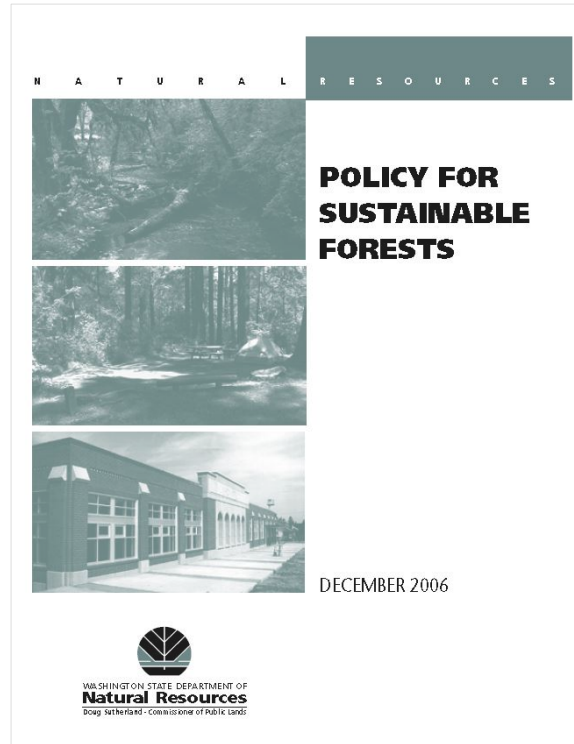
Financial Assumptions

Sustainable Harvest Calculation

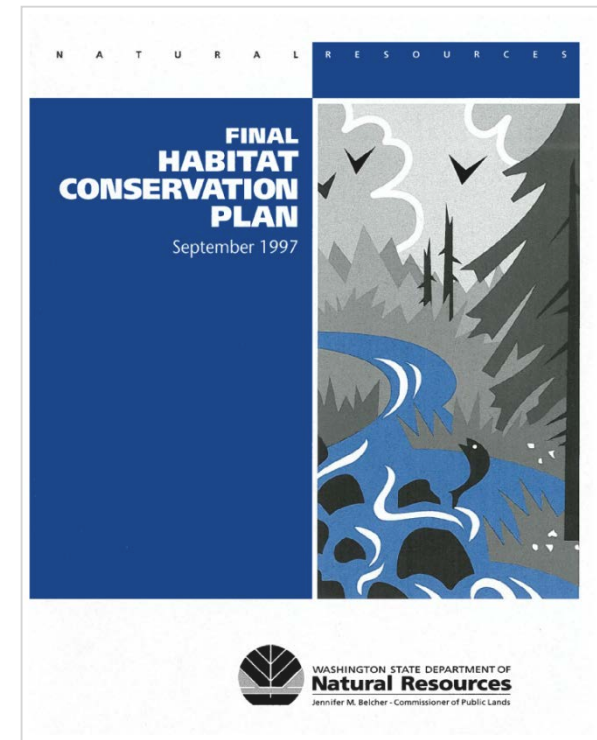
RCW



PSF



HCP



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

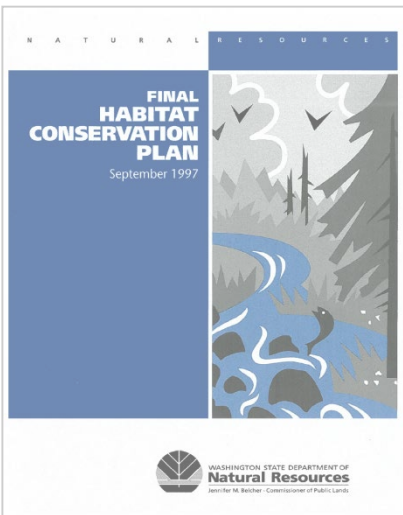
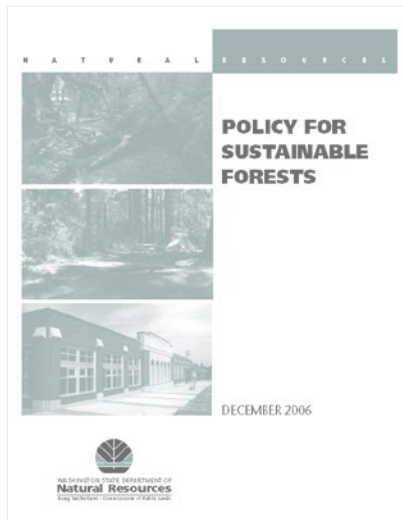
79.10.120 – Multiple use

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 Calculation



This Month:

1

Overview of SHC Rules and Guidance

2

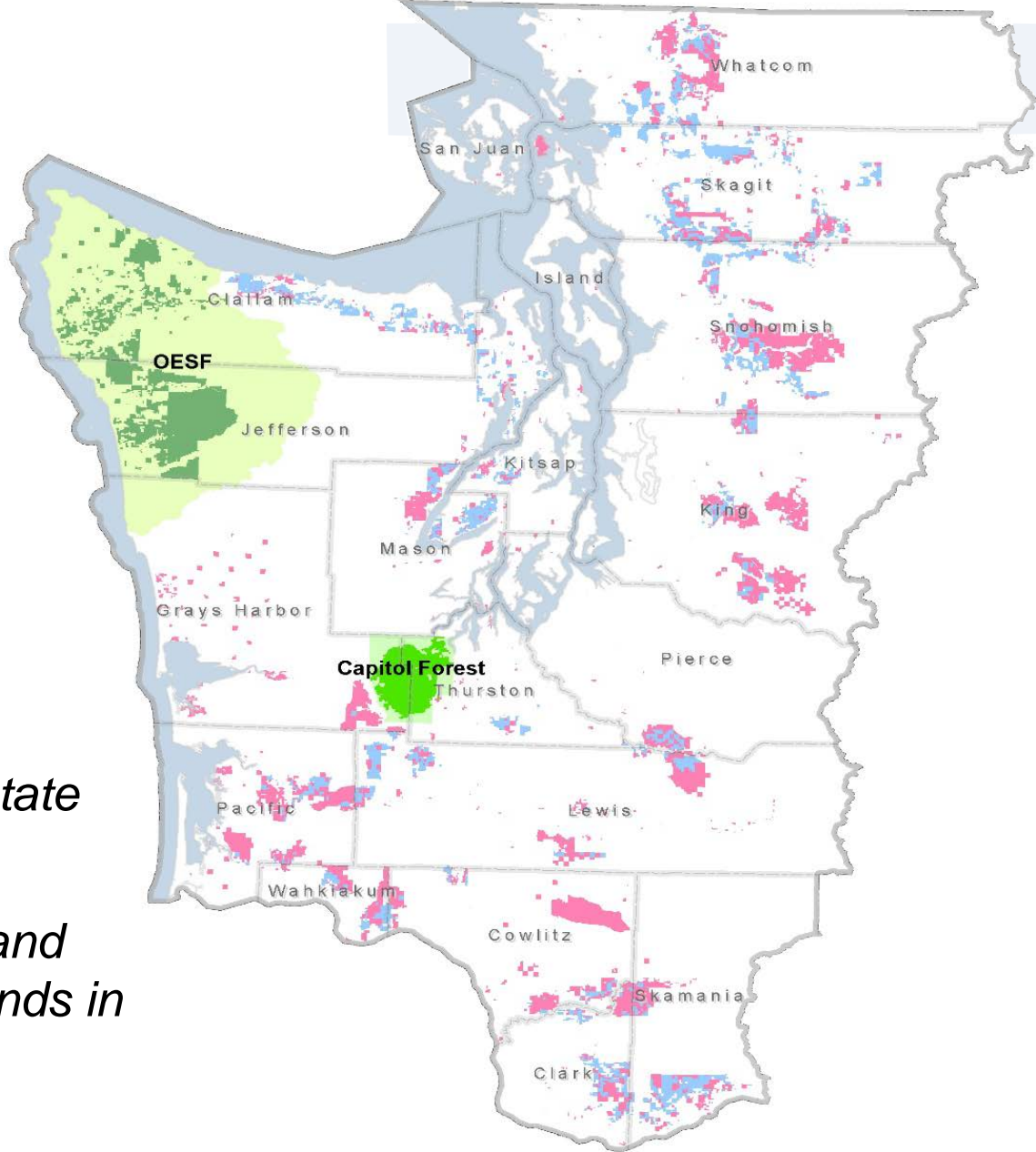
Policies that effect the Land Base

3

Financial Assumptions

Sustainable Harvest Units

20



- | | |
|----|---|
| 1 | <i>Olympic Experimental State Forest (OESF)</i> |
| 1 | <i>Capitol State Forest</i> |
| 17 | <i>County beneficiaries of State Forest Trust lands</i> |
| 1 | <i>Federally granted trusts and State Forest Purchase lands in Western Washington</i> |



Land Base



Deferrals

Riparian / Wetlands

Northern Spotted Owl

Marbled Murrelet

Multiple Species

Other Policies

Natural Areas Preserves and Natural Resource Conservation Areas

Old Growth

Northern Spotted Owl – High Quality

Riparian areas

- Desired Future Condition
- Potential Unstable Slopes

Potentially Unstable Slopes

Land Base



Deferrals

Riparian / Wetlands

Northern Spotted Owl

Marbled Murrelet

Multiple Species

Other Policies

Riparian Conservation Strategy

- Riparian Forest Restoration Strategy in the 5 Westside HCP units
- OESF

Land Base



Deferrals

Riparian / Wetlands

Northern Spotted Owl

Marbled Murrelet

Multiple Species

Other Policies

Nesting, Roosting, Foraging

Dispersal

OESF



Land Base



Deferrals

Riparian / Wetlands

Northern Spotted Owl

Marbled Murrelet

Multiple Species

Other Policies

Interim Strategy

Long Term Conservation Strategy



Land Base



Deferrals

Riparian / Wetlands

Northern Spotted Owl

Marbled Murrelet

Multiple Species

Other Policies

Bats

California wolverine

Common loon

Gray wolf

Harlequin duck

Northern goshawk

Oregon silverspot butterfly

Pacific fisher

Pileated woodpecker

Vaux's swift

Balds

Cliffs

Caves

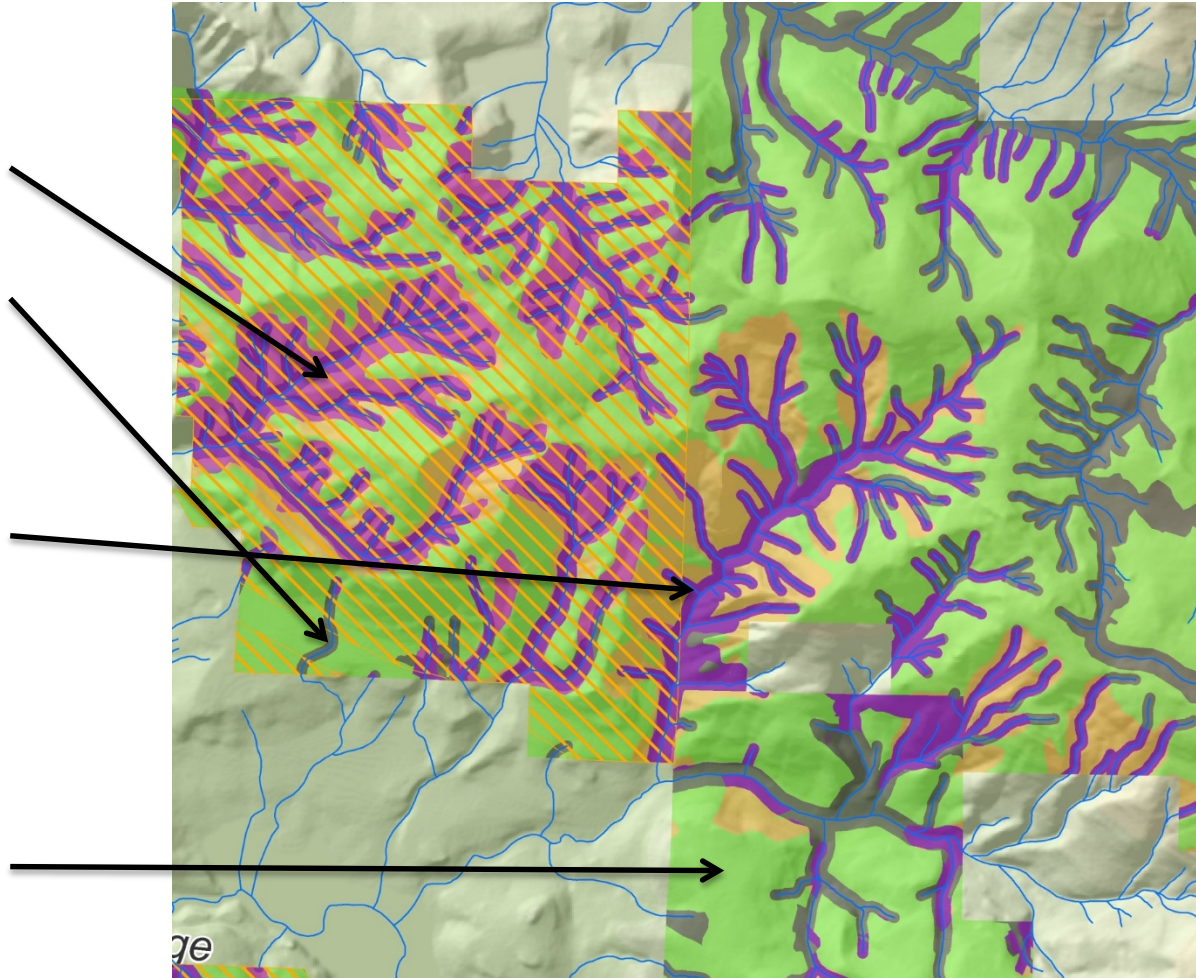
Mineral Springs

Oak woodlands

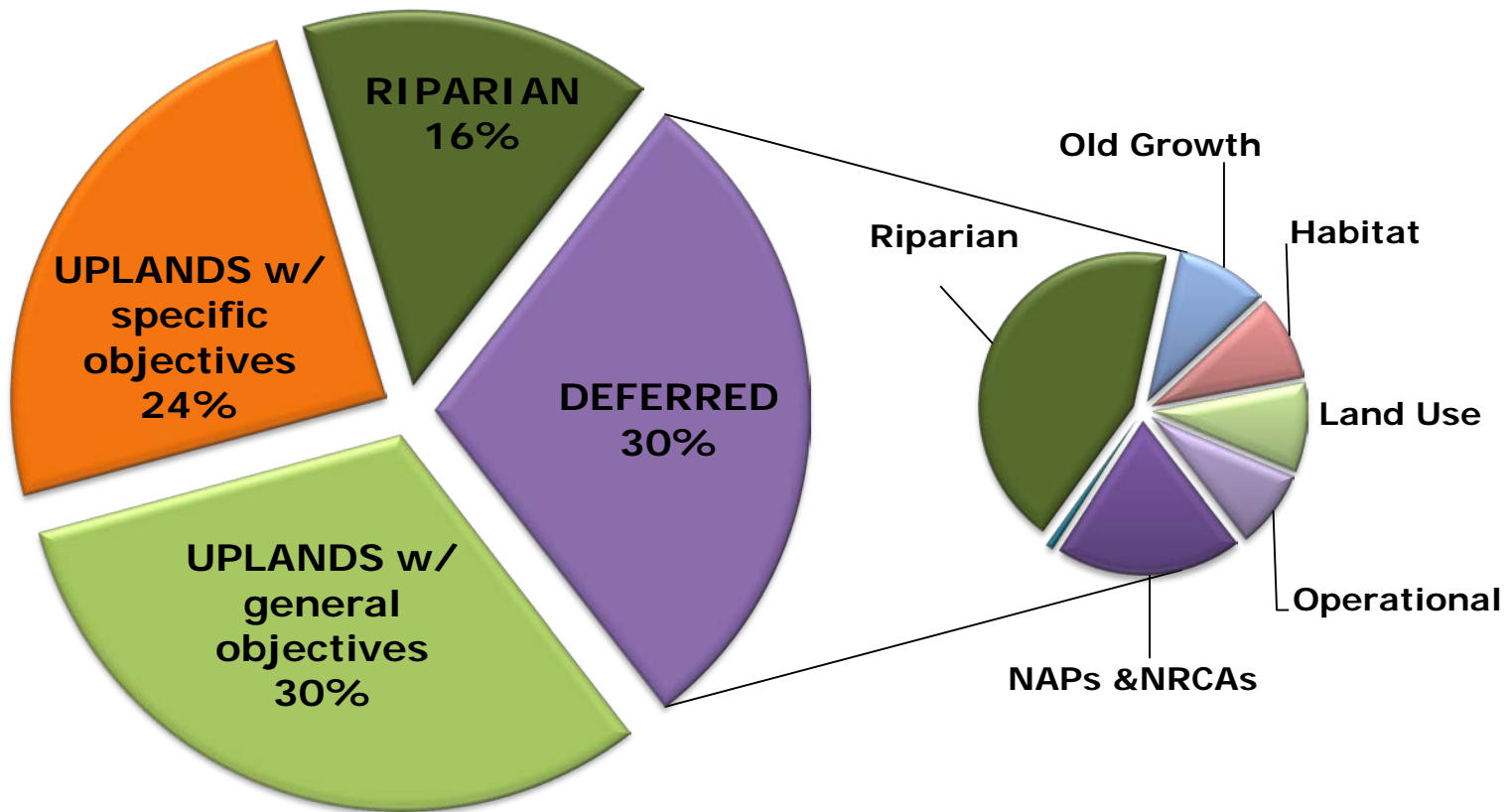
Talus

Land Base

- Deferrals
- Riparian
- Uplands with specific objectives
- Uplands with general objectives



Land Base



Total forested area of DNR-managed lands in western Washington = 1.46 million acres
Includes Natural Area Preserves (NAPs) and Natural Resource Conservation Areas (NRCAs)

Land Base



Deferrals

Riparian / Wetlands

Northern Spotted Owl

Marbled Murrelet

Multiple Species

Other Policies

Unstable Slopes

Cultural Resources

Special Features

Neighbors

Visual Impacts

Sustainable Harvest Calculation

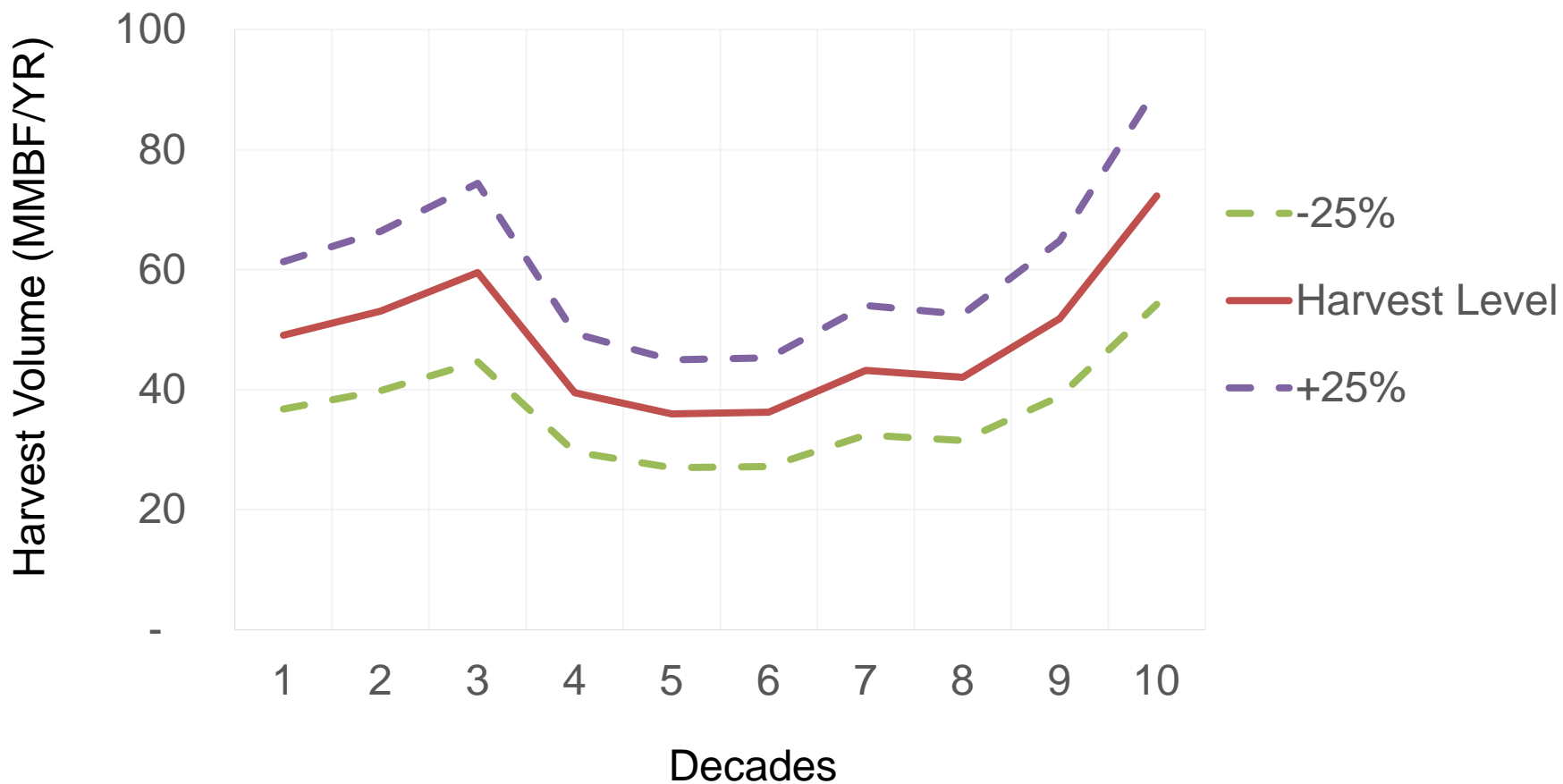


This Month:

- 1 Overview of SHC Rules and Guidance
- 2 Policies that effect the Land Base
- 3 Financial Assumptions

Harvest Flow Control

Capitol Forest Example



Optimizing Economic Value

“The department will analyze the financial characteristics of forest stands *in order to optimize the economic value of forest stands and timber production over time*, in calculating the sustainable harvest level,....”

Policy on Definition of Sustainability
for the Sustainable Harvest Calculation
Policy for Sustainable Forest, 2006, page 29



Management Fees

Legislative Ceiling

Board Decision

32%

RMCA

31%

27%

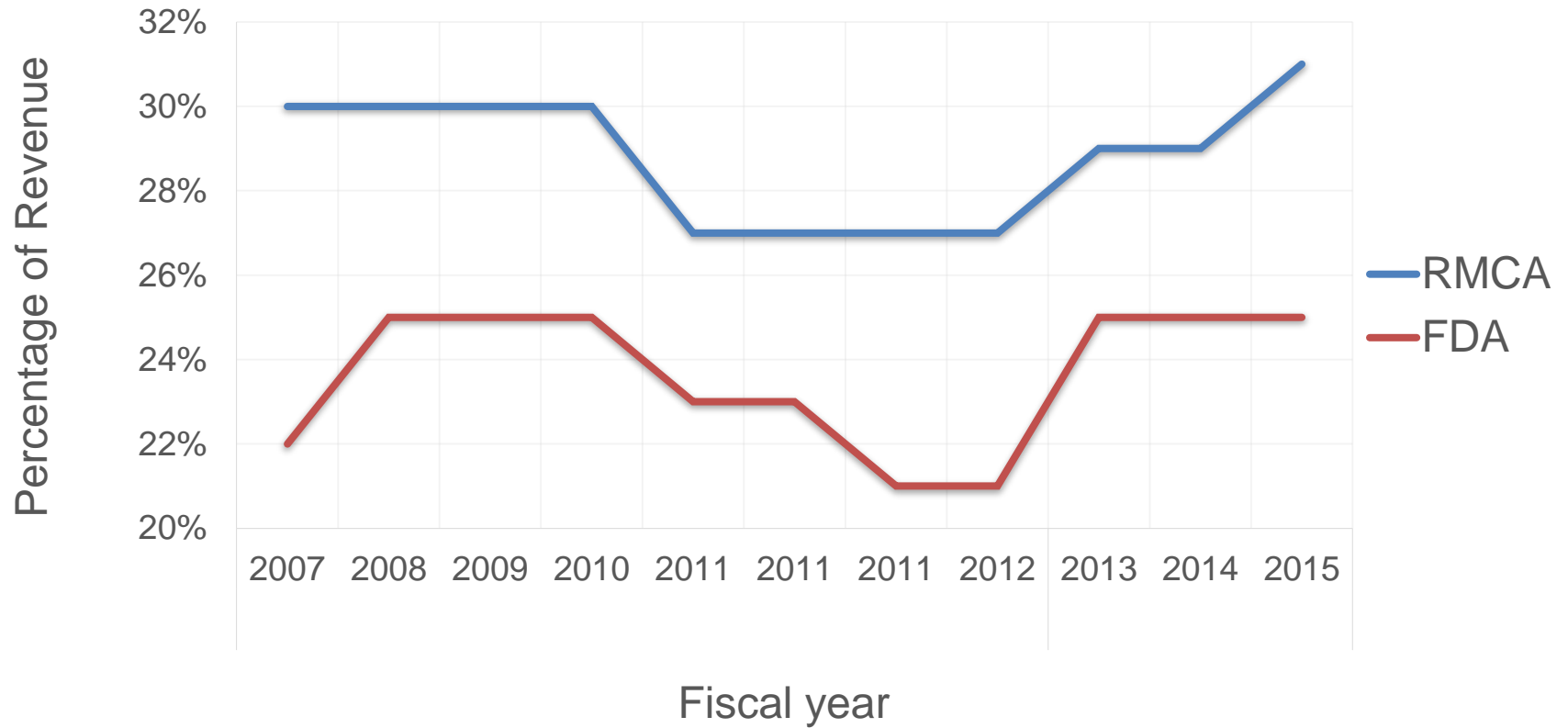
FDA

25%

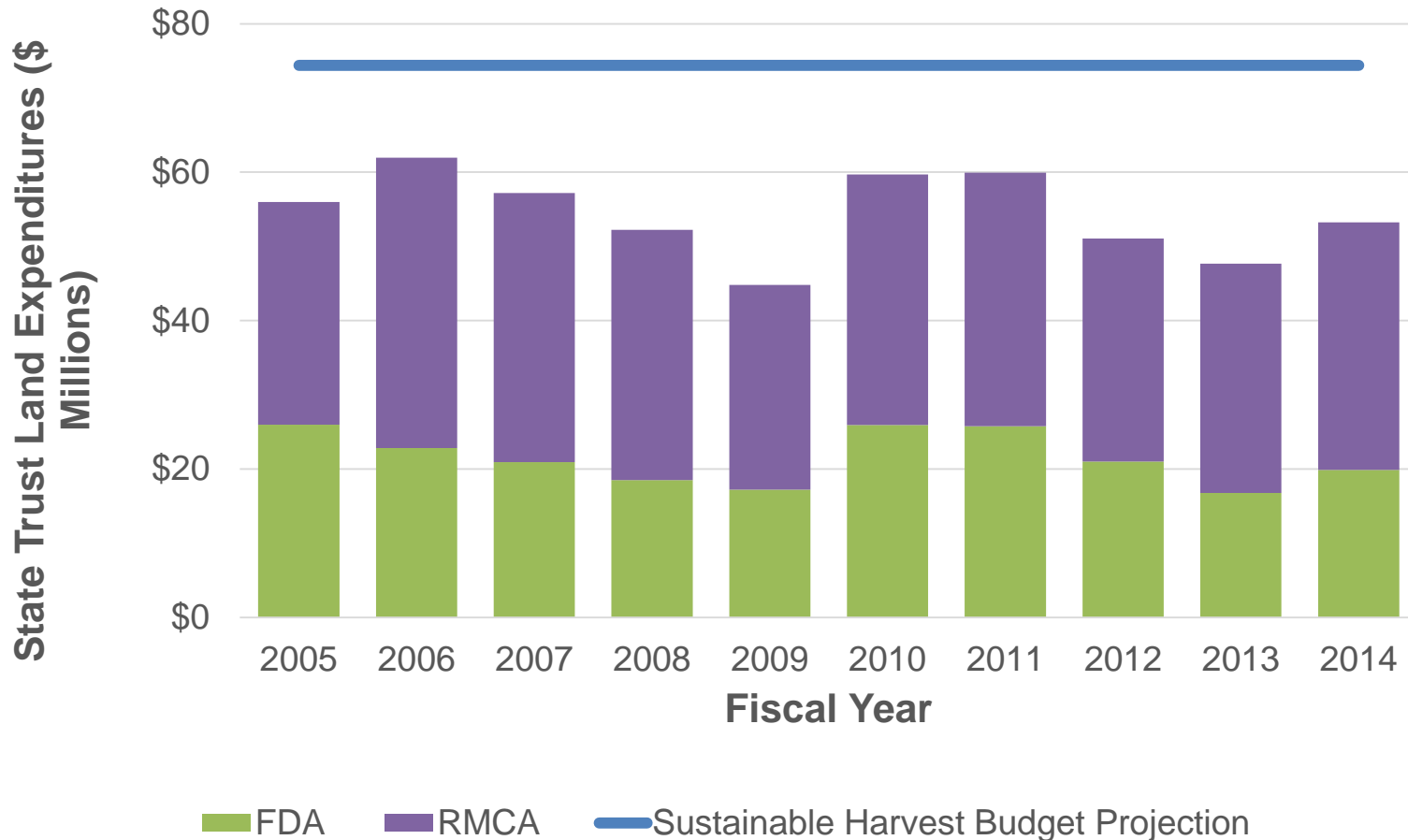


Management Fees

Management Fees By Fund

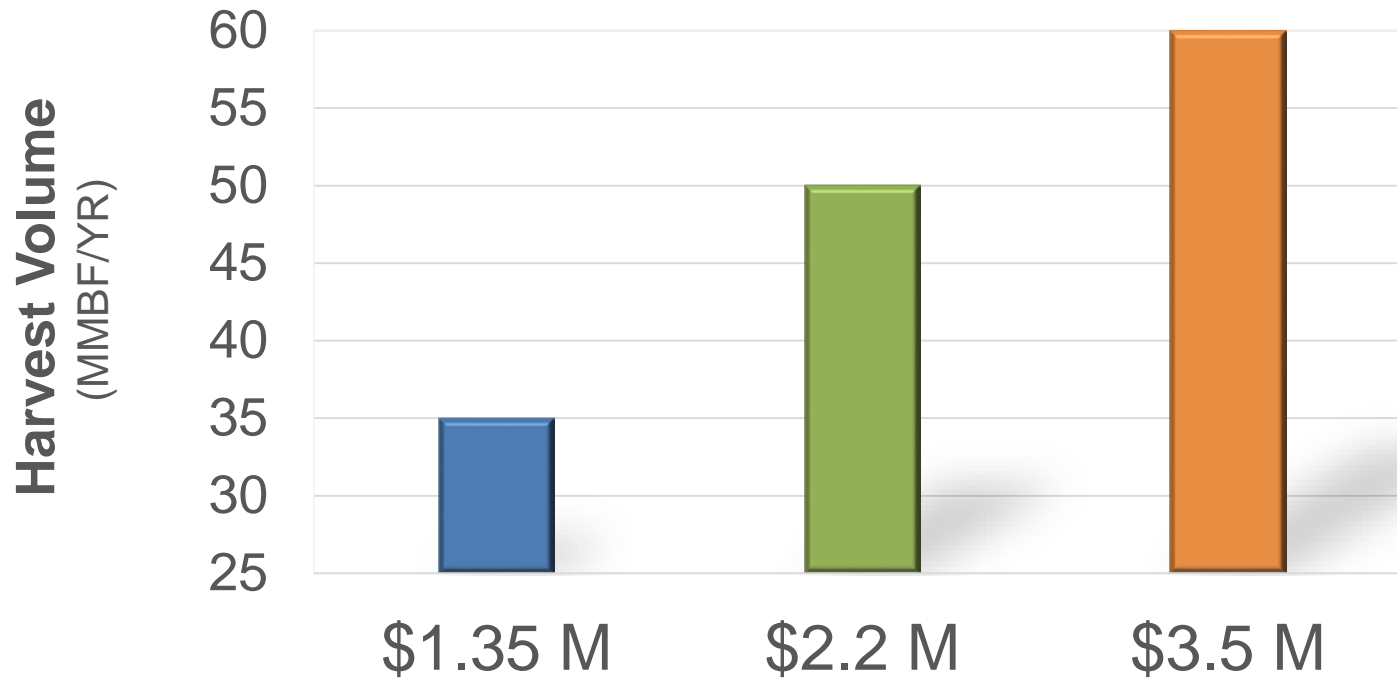


Management Fees



OESF Example

Decade 1 harvest under different annual budget scenarios



Westside Forestry Expenditures

1 fiscal year from '13-15 biennium

\$47,000,000

Direct	Timber Sales	\$13,672,000	46%	
	Silviculture	\$7,844,000		
Indirect	Informatics	\$3,208,000	23%	
	HCP	\$997,000		
	Research & Monitoring	\$1,049,000		
	Seed Orchard/Seed Planting	\$974,000		
	Transactions	\$871,000		
	State Lands Infrastructure	\$617,000		
	Title and Records Office	\$549,000		
	Leasing & Rights of Way	\$2,479,000		
	Facilities	\$3,217,000		31%
	Region Admin Adjustments	\$2,581,000		
Information Technology	\$2,555,000			
Executive Management	\$1,387,000			
Legal Affairs	\$1,096,000			
Miscellaneous	\$1,379,000			
Law Enforcement	\$846,000			
Financial Management	\$566,000			
Human Resources	\$532,000			
Communications	\$316,000			



Summary of Financial Assumptions

Costs

- Direct costs
 - Timber sales (\$/acre)
 - Silviculture (\$/acre)
- Indirect costs

Prices

- Stumpage price by species

Other

- Discount rate



Upcoming Presentations

Marbled Murrelets

Updates to Analytical Framework

Impacts & Mitigation Outputs

NSO Habitat

Sensitivity Analysis

Dr. Peery's Model

Sustainable Harvest Calculation

Alternatives for the Draft EIS





WASHINGTON STATE DEPARTMENT OF
Natural Resources

Peter Goldmark - Commissioner of Public Lands