



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
June 2014



Sustainable Harvest Topics

- February, March and April
 - Reviewed RCW's, Policy
 - 2004 and 2007 calculations
 - Review of past decade performance
 - Arrearage
- This Month
 - Key Modeling Assumptions
- Future Meetings
 - Arrearage options
 - Modeling assumptions
 - Sustainable Harvest Volume



Sustainable Harvest Calculation

Key Modeling Assumptions



Sustainable Harvest Calculation

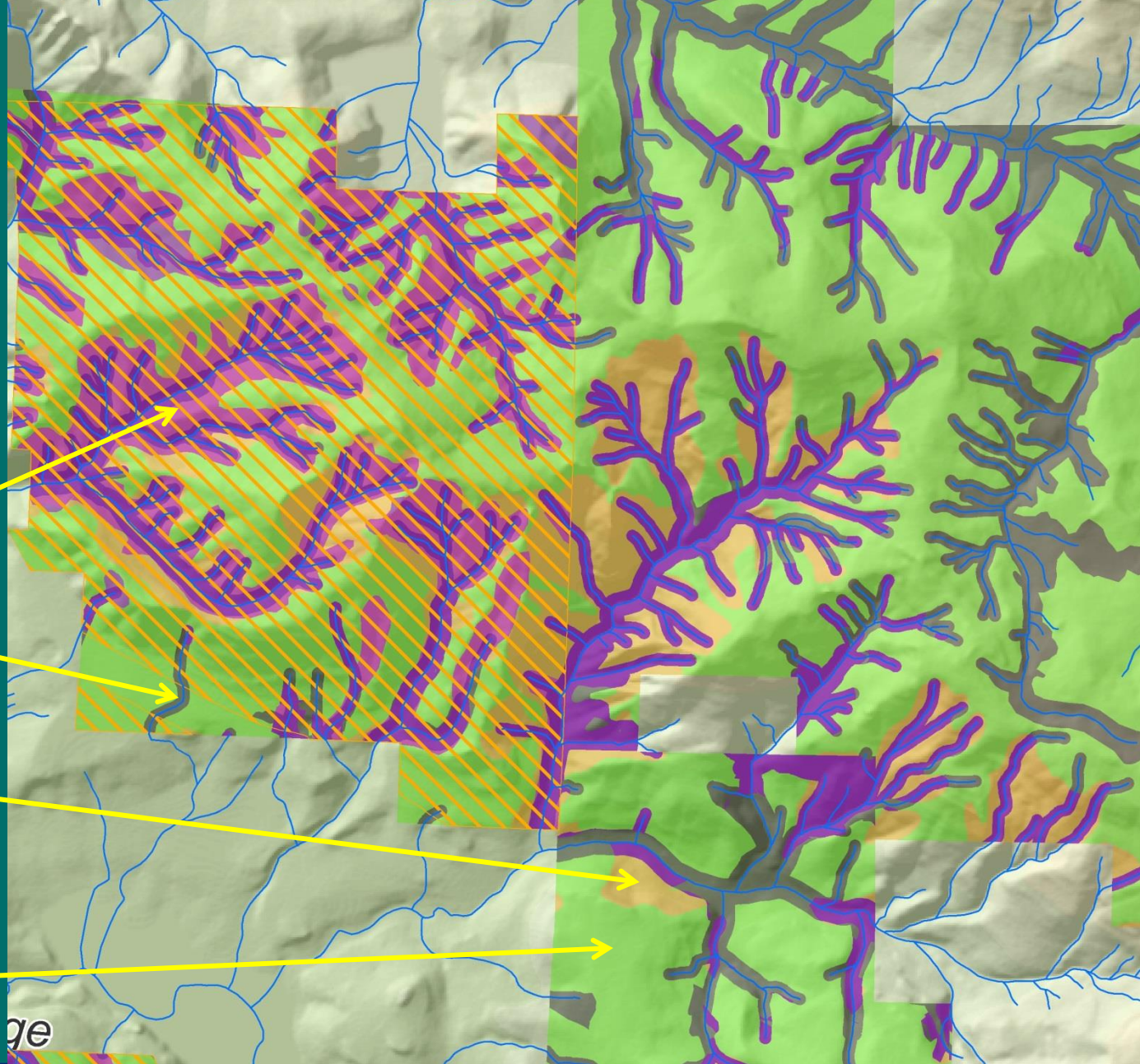
Modeling Assumptions

Sources:

- RCWs
- Policy for Sustainable Forests
- 1997 Trust Lands Habitat Conservation Plan



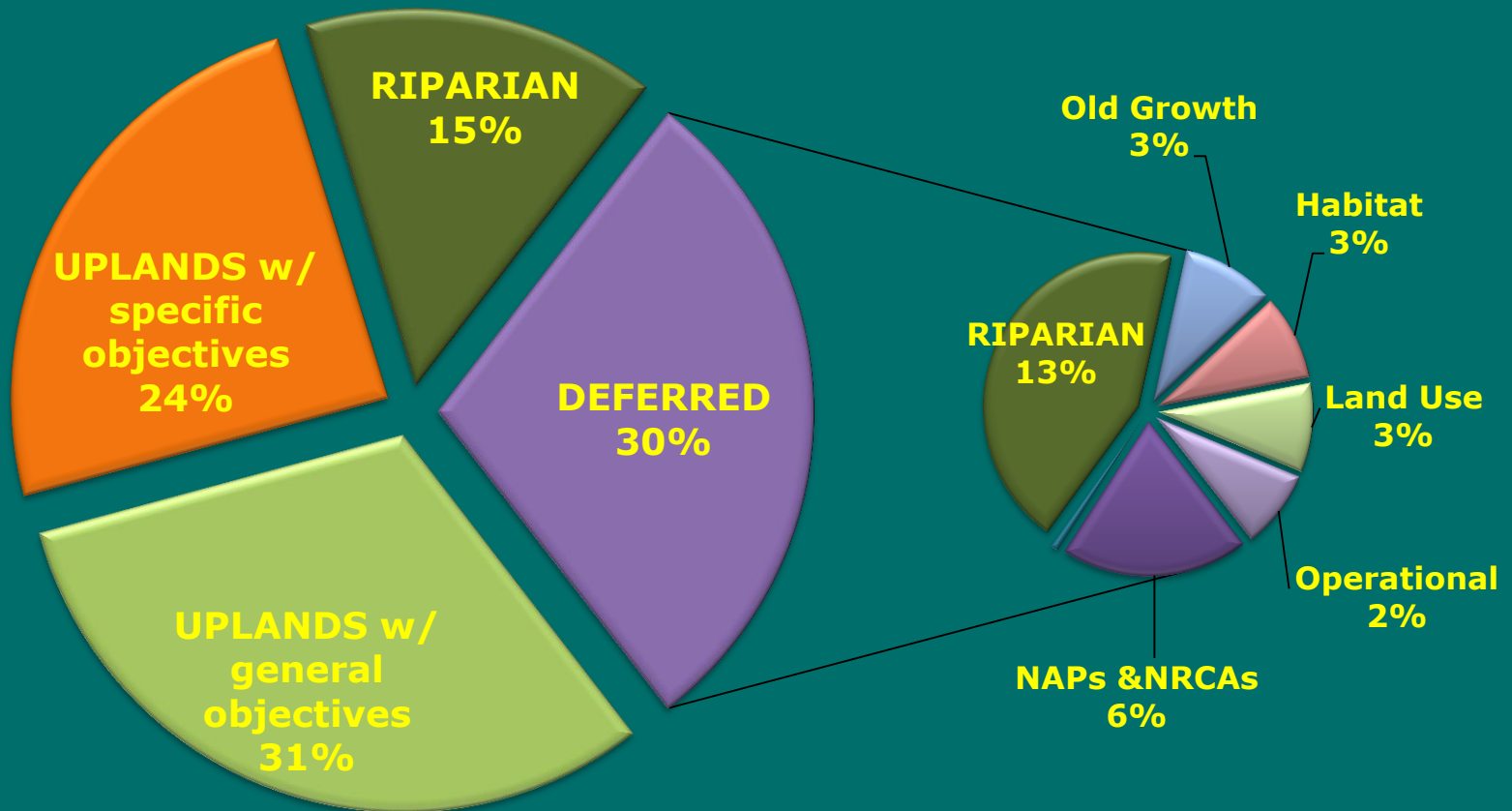
Land Classes



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

Sustainable Harvest Calculation

Land Classes



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)

Riparian



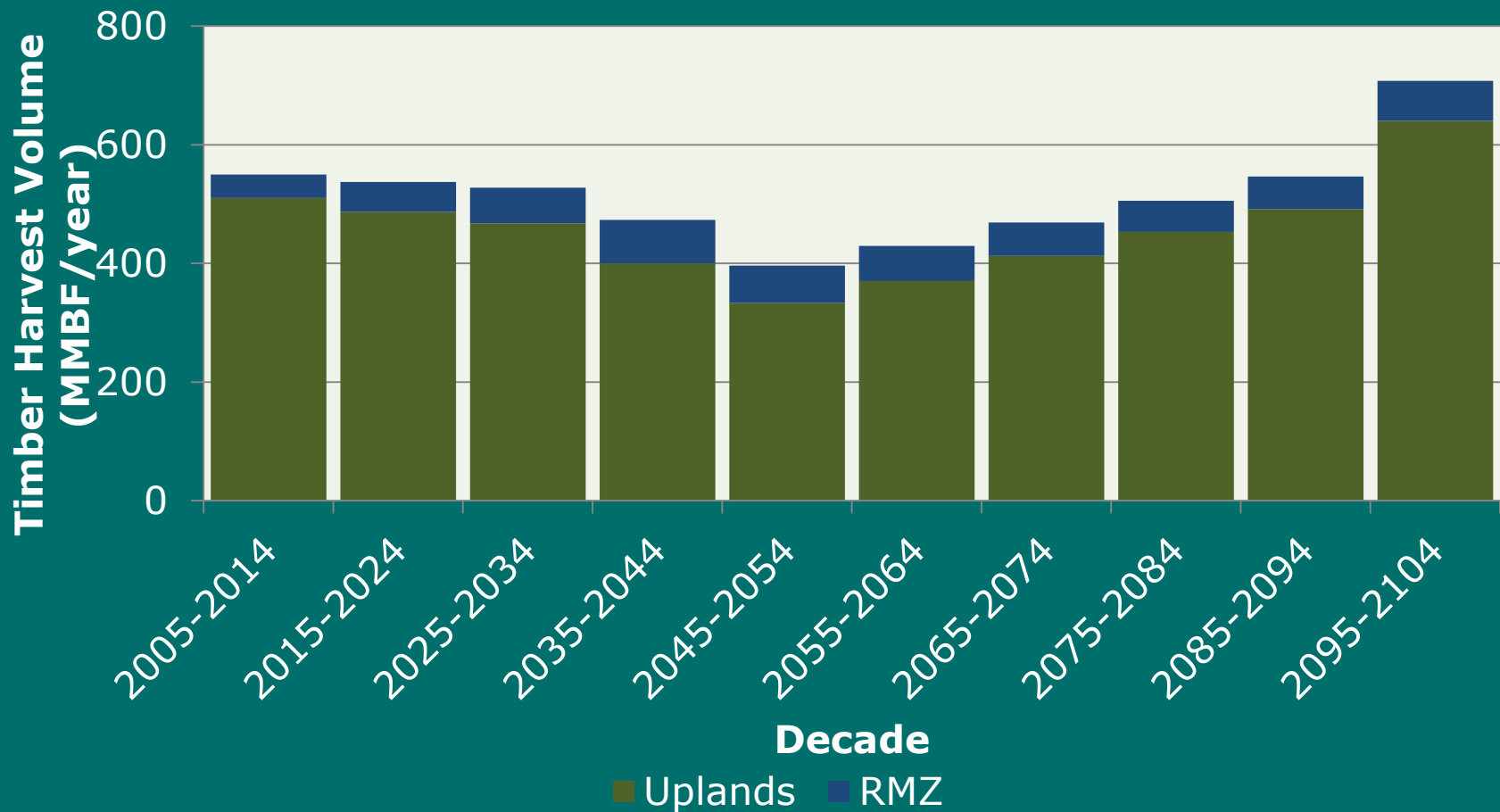
Riparian Forest Restoration Strategy

- Applies to Five Westside HCP planning unit (excluding the OESF)
- Riparian Management Zones (RMZs) delineated on streams (1-4) based on potential tree height
- Potentially unstable slopes within RMZ assumed deferred from harvest
- Desired Future Condition (DFC) determines silviculture strategy

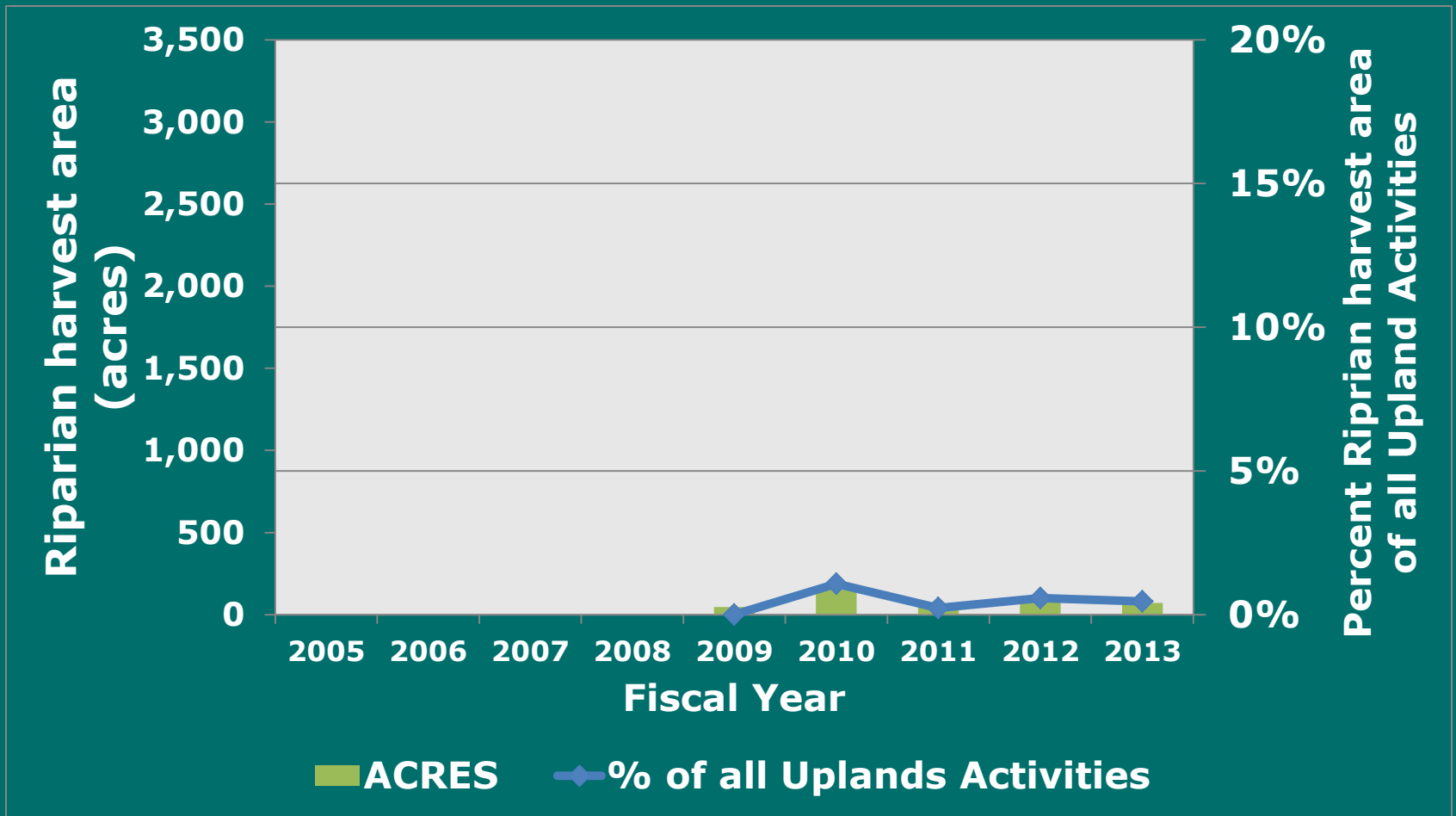


Riparian Harvest in 2005-2014

Sustainable Harvest Calculation



Riparian Harvests 5 Westside HCP Units Fiscal Years 2005 to 2013



Riparian Forest Restoration Strategy

- Model assumptions options
 1. 1997 Biological Opinion: no more than 1 percent of the riparian area per year (2007 SHC assumption)
- Or, linked to upland harvest; no more than:
 2. 5 percent,
 3. 10 percent or,
 4. 15 percentOf the upland harvest area



Marbled murrelet



Habitat Conservation Plan (HCP) Marbled Murrelets

- 1997 – Insufficient information to develop a long-term strategy.
- Interim strategy – 5 steps
 - Step 1. Defer harvest of suitable habitat
 - Step 2. Conduct habitat relationship studies
 - Step 3. Release low quality habitat
 - Step 4. Survey higher quality habitat
 - Step 5. Develop a long-term conservation strategy



Marbled Murrelet

Sustainable Harvest Assumptions

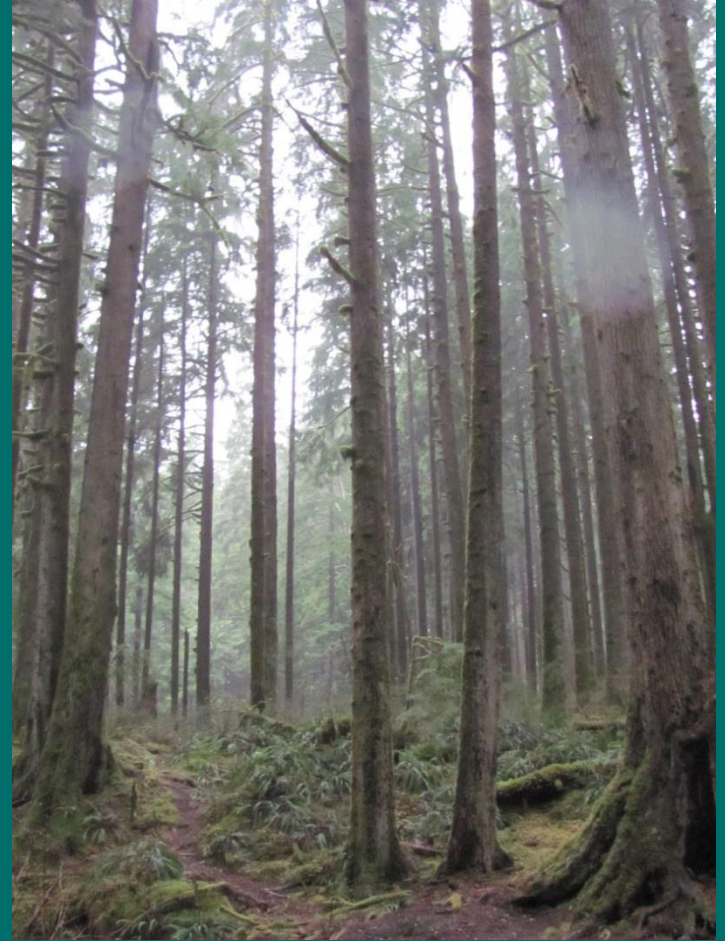
- SHC 2004/2007
 - Assumed long-term strategy would be based on occupied sites
 - Long-term harvest deferrals of occupied sites w/o buffers
~ 50,000 acres
 - Short-term harvest deferrals until 2007 of reclassified and suitable habitat ~ 98,000 acres



Marbled Murrelet

Sustainable Harvest Assumptions

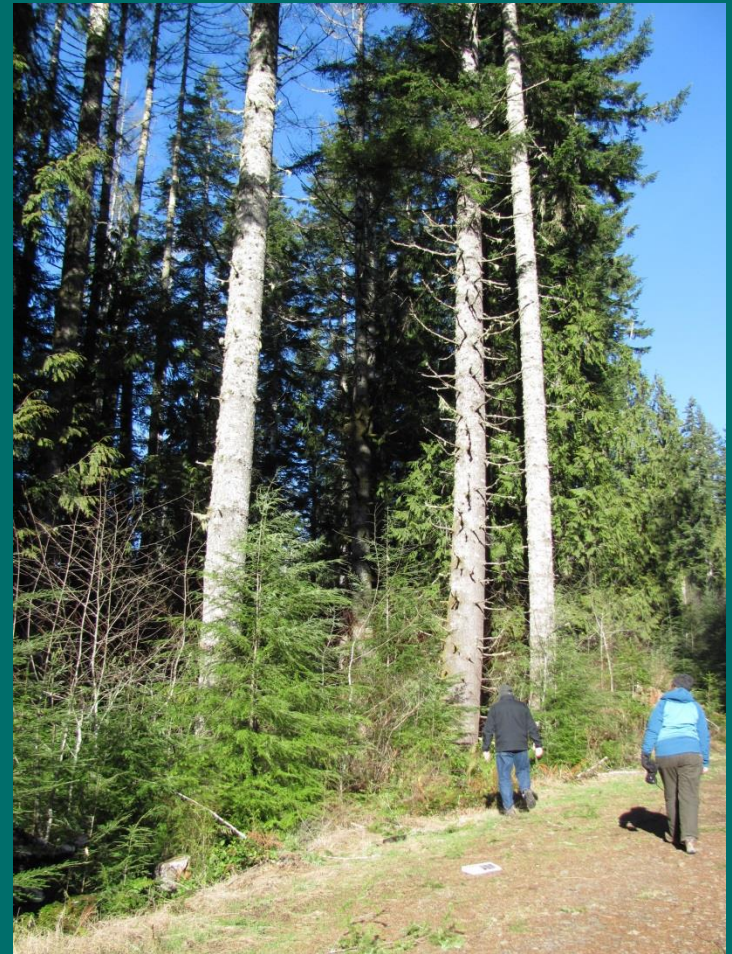
- SHC 2014
 - Long-term harvest deferrals of occupied sites, surveyed unoccupied habitat, and un-surveyed habitat ~ 145,000 acres



Marbled Murrelet

Modeling Assumptions Options

- Management Options for 100 m buffers on occupied sites
 - ~ 33,000 acres
- Potential Options**
1. Thinning only
 2. 165ft no harvest
 3. 328ft no harvest



Proposed Marbled Murrelet Management area - Skamokawa

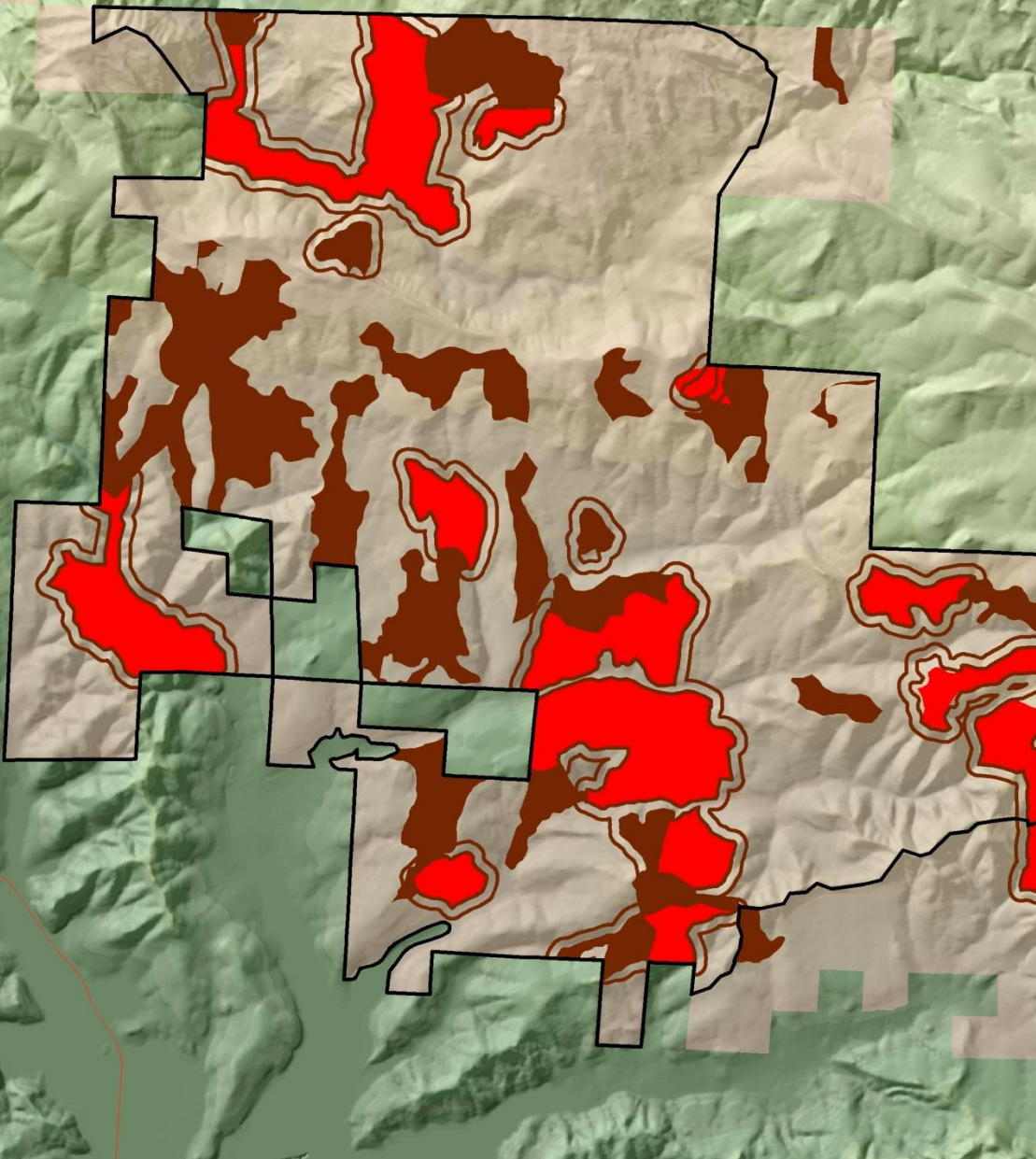
Red = surveyed, occupied sites

Brown = surveyed unoccupied habitat (reclassified habitat)

Pink = non-habitat DNR managed lands

Brown line = buffer

Black line = proposed marbled murrelet management area



Marbled Murrelet

Modeling Assumptions Options

- Management of non-habitat in proposed Marbled Murrelet management areas:

- ~77,000 acres

Potential Options

1. No management restrictions
2. No harvest activities
3. Thinning only
4. Some regeneration harvest allowed, metered over time



Sustainable Harvest Topics

- February, March and April
 - Reviewed RCW's, Policy
 - 2004 and 2007 calculations
 - Review of past decade performance
 - Arrearage
- This Month
 - Key Modeling Assumptions
- Future Meetings
 - Arrearage options
 - Modeling assumptions
 - Sustainable Harvest Volume





WASHINGTON STATE DEPARTMENT OF
Natural Resources

Peter Goldmark - Commissioner of Public Lands