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
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 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

Decade

- 2005-2014
- 2015-2024
- 2025-2034
- 2035-2044
- 2045-2054
- 2055-2064
- 2065-2074
- 2075-2084
- 2085-2094
- 2095-2104

Timber Harvest Volume (MMBF/year)

- Uplands
- RMZ
Riparian Harvests 5 Westside HCP Units
Fiscal Years 2005 to 2013

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>ACRES</th>
<th>% of all Uplands Activities</th>
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Percent Riparian harvest area of all Upland Activities
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 percent
  Of the upland harvest area
Marbled murrelet
1997 Trust Lands
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
    - \( \sim 50,000 \text{ acres} \)
  - Short-term harvest deferrals until 2007 of reclassified and suitable habitat
    - \( \sim 98,000 \text{ acres} \)
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
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WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands