MMLTCS and SHC
A report to the Board of Natural Resources

presented by

Angus Brodie and Andy Hayes
September 5, 2017
Visual representation:

Selection of alternative

- Work on SDEIS
- Work on HCP Amend.

Release Supplemental DEIS
- 60 day Public Comment Period

Work on Final EIS

Release Final EIS

Submit HCP Amendment To USFWS
- 60 day Public Comment Period

Work on Final Amendment

Submit Final HCP Amendment To USFWS

Timeline:
- **2017**
  - Sep: Work on Final Amendment
  - Apr: Submit HCP Amendment To USFWS
  - July: Selection of alternative
- **2018**
  - Apr: Release Supplemental DEIS
  - July: Work on Final EIS
- **2019**
  - Feb: Release Final EIS
Why the new timeline?

- Preferred Alternative delayed until September
- Added Supplemental DEIS
- Added 60-day comment period
Arrearage
The difference between 2005-2014 planned volume and sold volume:
462 MMBF
The arrearage analysis, required by RCW 79.10.330, requires the department to determine which course of action provides the greatest return to the trusts.

To provide the greatest return to the trust the analysis identified the sustainable harvest units where the sustainable harvest level was not achieved, and for those units totaled the difference between the volume planned and the volume sold.

The sum of those equals 702 MMBF.
Preferred Alternative

Options:

A. 702 MMBF / 5 years
B. 462 MMBF / 5 years
C. 462 MMBF / 1 year
D. Include in the inventory
E. 702 MMBF / 10 years (BNR preferred alternative?)
Riparian
Arguments for separating riparian harvest volume from the Sustainable Harvest Level

• The primary purpose of the Riparian Forest Restoration Strategy is ecological.

• Treatment viability fluctuates greatly, based on forest conditions, markets, access, costs, and other factors. Conducting unviable treatments provide no benefit to the trusts.

• A target within the Sustainable Harvest Level may result in increased upland harvest to avoid arrearage, if riparian targets are unable to be met.
Thin riparian areas up to 1% of the decade’s thinned or harvested non-riparian area within the 5 west-side planning units.

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

Thin riparian areas according to the Riparian Forest Restoration Strategy and report harvested volume periodically to the board, separate from the Sustainable Harvest Level.

**New**
(As discussed in the August BNR meeting)
Preferred Alternative

Options:

A. 1% of the decade’s thinned or harvested non-riparian area
B. 10% of the total riparian area
C. Report riparian volume separate from Sustainable Harvest Level
Marbled Murrelet
Principles from August BNR Work Session

- Meter all the impact over 50 years.
- Meter the impact in strategic locations.
- Emphasize conservation in strategic locations.
- Mitigation will equal impact of take. Any additional level of mitigation will represent “risk” of the strategy as a result of uncertainties in data or the science of future events.
- Build an alternative that is optimal for conservation and examine if it has a significant disproportionate impact on any trust beneficiary. If it does, then alter the alternative to reduce the impacts to reflect the “reality” of the department’s legal framework.
Impact Mitigation

î: Impact to take
Impact Mitigation

ε: Additional uncertainty, risk

î: Impact to take
\( \delta \): Additional mitigation, above and beyond what’s required by ESA

\( \epsilon \): Additional uncertainty

\( \hat{i} \): Impact to take
$\delta$: Additional mitigation, above and beyond what’s required by ESA

$\epsilon$: Additional uncertainty

$\checkmark$: Impact to take

Impact  Mitigation
Mitigation = i + $\epsilon$

$\epsilon$: Additional uncertainty

$\hat{i}$: Impact to take
Three new alternatives based on Principles

1. Meter all the impact over 50 years.
2. Meter the impact in strategic locations.
3. Emphasize conservation in strategic locations.
4. Mitigation will equal impact of take. Any additional level of mitigation will represent “risk” of the strategy as a result of uncertainties in data or the science of future events.
5. Build an alternative that is optimal for conservation and examine if it has a significant disproportionate impact on any trust beneficiary. If it does, then alter the alternative to reduce the impacts to reflect the “reality” of the department’s legal framework.
Conservation Approaches

- Conserves all occupied sites
- Meters all impact over fifty years

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<th>Impact</th>
<th>Mitigation</th>
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<tr>
<td>Adjusted Acres</td>
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<tr>
<td>Real Acres</td>
<td>49,000</td>
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First Decade Harvest Volume

10-Decade NPV
Pros:

• Holds existing habitat
• Marbled murrelets currently using it can continue to use it
• Reduces short term impact
• Bridges habitat gap until other habitat develops

Cons:

• With high site fidelity, future impacts to murrelets still possible
• Operational impacts that lead to financial impacts
Three new alternatives based on Principles

2

• Meter all the impact over 50 years.

• **Meter the impact in strategic locations.**

• **Emphasize conservation in strategic locations.**

• **Mitigation will equal impact of take. Any additional level of mitigation will represent “risk” of the strategy as a result of uncertainties in data or the science of future events.**

• Build an alternative that is optimal for conservation and examine if it has a significant disproportionate impact on any trust beneficiary. If it does, then alter the alternative to reduce the impacts to reflect the “reality” of the department’s legal framework.
Conservation Approaches

- Conserves all occupied sites with buffers
- Identifies strategically important areas
- Meters HQ habitat in strategic locations over 2 decades
- Adds conservation areas for mitigation
- Adds acres for uncertainties

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<tr>
<td>Real Acres</td>
<td>42,500</td>
<td>44,000</td>
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First Decade Harvest Volume

10-Decade NPV
Conservation Approaches

- Conserves all occupied sites and buffers
- Identifies strategically important areas
- Meters HQ habitat in strategic locations over 2 decades
- Adds X new SHAs to balance mitigation
- Adds X real acres for uncertainties
Three new alternatives based on Principles

3

- Meter all the impact over 50 years.

- Meter the impact in strategic locations.

- Emphasize conservation in strategic locations.

- Mitigation will equal impact of take. Any additional level of mitigation will represent “risk” of the strategy as a result of uncertainties in data or the science of future events.

- Build an alternative that is optimal for conservation and examine if it has a significant disproportionate impact on any trust beneficiary. If it does, then alter the alternative to reduce the impacts to reflect the “reality” of the department’s legal framework.
Conservation Approaches

- Conserves all occupied sites with buffers
- Identifies strategically important areas
- Meters HQ habitat in strategic locations over 2 decades
- Adds conservation areas for mitigation
- Adds acres for uncertainty

Approaches to reduce impact on hardest hit counties

- Reduce conservation areas
- Adjust metering or conservation of HQ habitat

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Skamokawa Special Habitat Area

State Forest Transfer Trust Land

Occupied Sites and Buffers

High Quality Habitat

Low Quality Habitat

Decade 0

Decade 5
Do any of these options reflect the Board’s direction on a preferred alternative?

A. One of the existing alternatives
B. Option 1 – meter all the take
C. Option 2 – balance take and mitigation, plus uncertainty
D. Option 3 – balance take and mitigation, plus uncertainty, and reduce impact to selected trust beneficiaries
Next Steps

Take preferred alternative and produce:

1. Supplemental Draft Environmental Impact Statement
2. Habitat Conservation Plan Amendment