Implementing the Northern Spotted Owl Conservation Strategy for the Klickitat HCP Planning Unit

Scott D. McLeod

Washington State Department of Natural Resources

10/04/2005 1:01 pm

WA Department of Natural Resources

- Manage lands to produce revenue for designated beneficiaries
- 2.1 million acres of forestland
- FY2007 and FY2008 revenues from timber sales exceeded $200,000,000
- All species Habitat Conservation Plan

Loop Timber Sale post-thinning

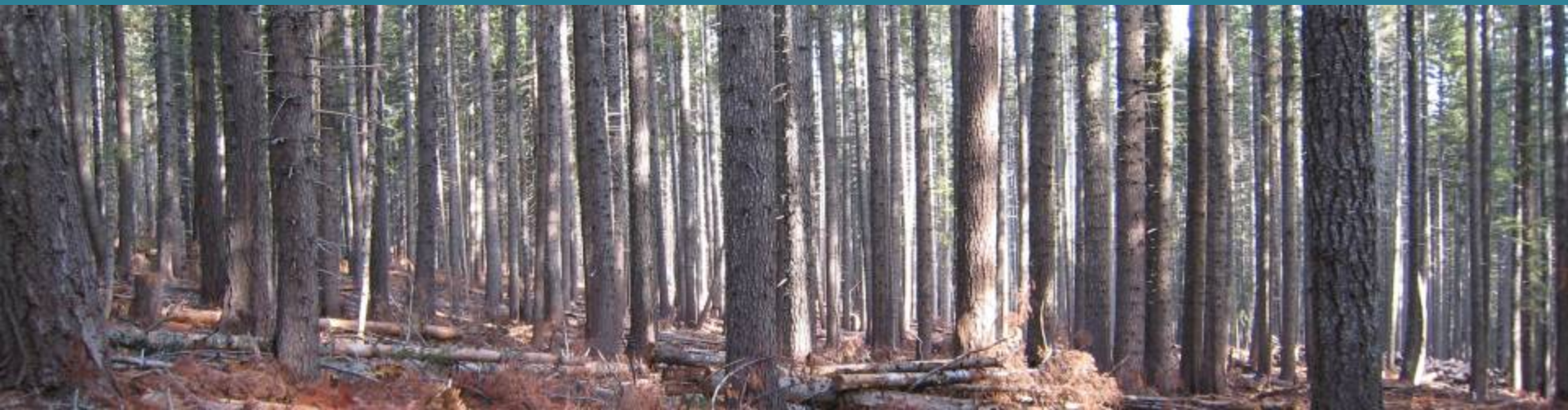
HCP Conservation Objective

Provide habitat that makes a significant contribution to:

- demographic support,
- maintenance of species distribution and
- facilitation of dispersal.

Issues With Original HCP Strategy

- Some designated NRF areas not ecologically suited for growing habitat
- Forest health issues
- Adjacent landowners managing habitat in ways not anticipated in the mid-1990s



Ecological Underpinnings

- Recognize potential conflicts between habitat targets and natural disturbance processes
- Acknowledge that forest health problems are destroying habitat regardless of protection efforts
- Understanding the role of succession and the transitory nature of designated habitat
- *Active* management is required

Adaptive Management

- More historic forest cover types
- Active management at landscape level to promote habitat development
- Shifted habitat requirement to landscapes where NRF habitat can be grown & sustained
- Provided specific nest site protection
- Retain large legacies
- Address forest health issues

Silvicultural Prescriptions

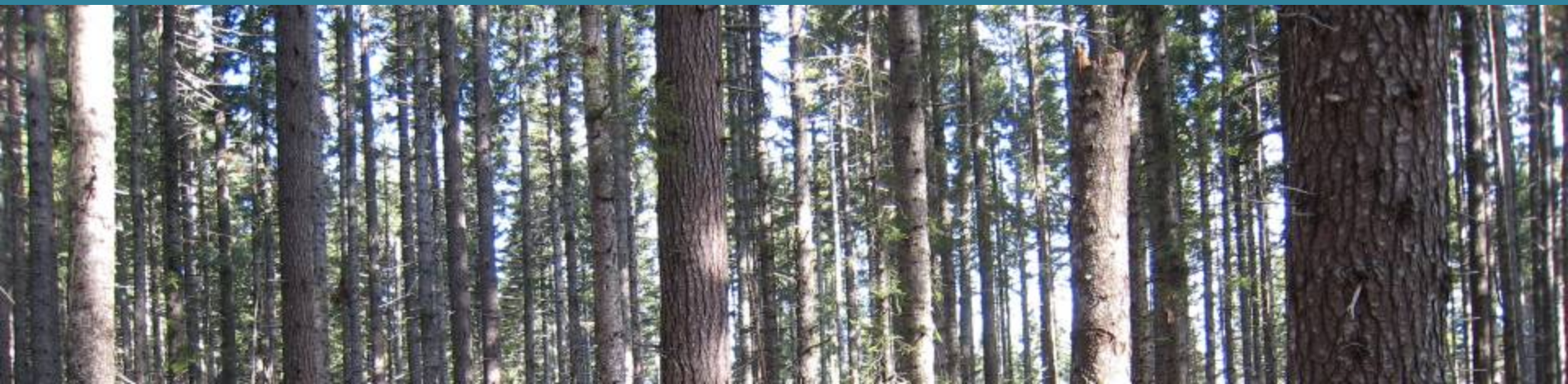
- The art and science of managing forests to accomplish objectives
- Rotational prescriptions with threshold targets:
  - Meaningful
  - Measurable
  - Use caution with surrogates
- Identify post-harvest and expected future
- Stand average conditions and stand variability

HCP Landscape Strategy

- Use landscape units larger than WAUs
- Conduct long-term planning
- Focus on habitat development
- Manage for site potential based on plant association
- The Stand is the operational unit

HCP Habitat Development Strategy

- Stand management will be used to:
  - Move young stands toward habitat more quickly
  - Enhance structural complexity of mid-age and older stands
- Final harvest prescriptions will retain important structure



HCP Desired Future Condition Strategy

- Re-name Dispersal
  - Dispersal areas now called DFC areas
  - Habitat definition is same (40 trees per acre, 11 inches DBH, 50% canopy cover, 60 feet tall)
  - DFC management should create more complex, sustainable habitat
- Manage each vegetation series for 50% mature DFC by sub-landscape

Dispersal

- Canopy closure of 58%,
- 135 trees per acre
- >11” DBH
- top height of 65 feet.

DFC

- Canopy closure of 60%
- 110 trees per acre
- >11” DBH
- top height of 100 feet.

Pre-Thinning **Post-Thinning**

Learning Process of Small Steps

- Western spruce budworm
  - multi-canopies
  - species composition
- Down woody debris levels
  - No real reduction in fire hazard
  - Lost revenue due to waiting too long
- Stand density still too high
  - Little hope for seral species to establish
  - Competition too high for vigorous large trees

Stand Objectives and Natural Processes

- Consider site carrying capacity
  - One size won't fit all
- Forest Health - sustainability
  - Targets should not inadvertently aggravate
  - Problematic conditions include: multi-story stands, shade tolerant species, over dense stands
- Caution when using point observations to set stand level target conditions
- Pay attention to silvics

10/04/2005 1:01 pm