PLANNING & MONITORING FOR WILDLIFE ON NATIONAL FOREST LANDS

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Meeting Land and Service Ethics and Carrying Out Our Mission

- Protect ecosystems by ensuring that proposed management activities promote conservation of biological diversity.
- Restore deteriorated ecosystems by ensuring their biological health, diversity, and productivity.
- Improve organizational effectiveness by ensuring that: the best science-based information is available; emphasis is placed on monitoring and evaluation; and findings are applied to improve the effectiveness of our actions.
- Provide multiple benefits to people within the capabilities of ecosystems by enhancing ecosystem productivity.

National Forest Management Act

- Section 6(g)(3)(B) states: "…provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives..."

- 36 CFR 219.3 defines diversity as "the distribution and abundance of different plant and animal communities and species within the area covered by a LRMP".

Species and Habitat Goals

Species Viability: Maintain and restore habitat to support viable populations of native plants, invertebrates, and vertebrate species. Reduce potential for invasive species establishment.

Plant and Animal Community Diversity: Maintain and restore the species composition and structural diversity of plant and animal communities to provide desired habitats and ecological functions.

Special Habitats: Maintain and restore the distribution and health of biotic communities in aquatic (such as springs, seeps, fens, bogs, and wetlands) and terrestrial (alpine, balds, prairie) habitats to perpetuate their unique functions and biological diversity.

Connectivity: Maintain and restore spatial and temporal connectivity for species within and between watersheds to provide physically and biologically unobstructed movement for their survival, migration, and reproduction.

Planning

Planning Strategy

Biological

- Spatial Planning Unit
- Population Objective & Priority Species
- Species Habitat Models

Design

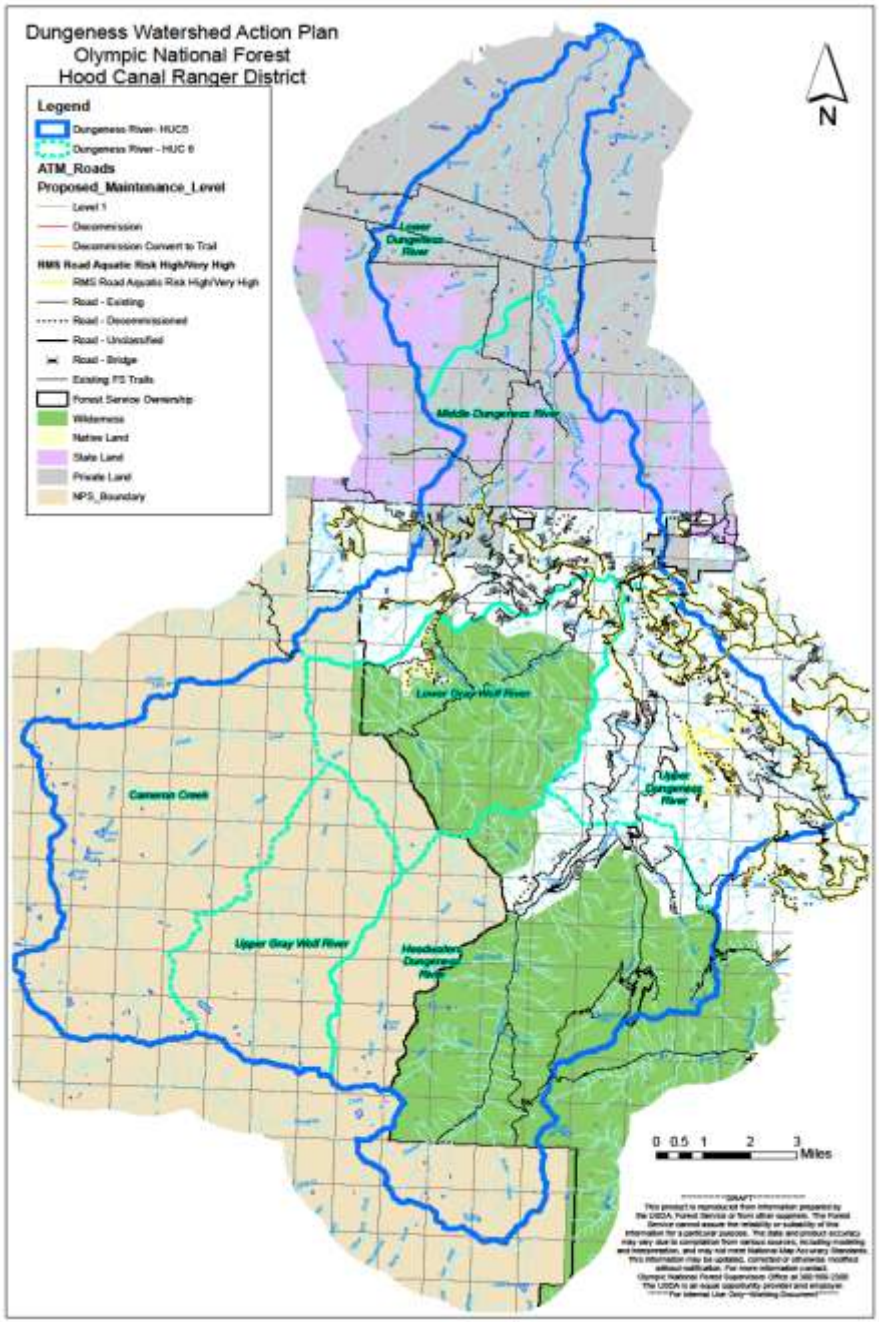
- Landscape Characteristics & Assessment
- Conservation Goals & Objectives
- Decision Support Tools

Delivery

- Program Objectives

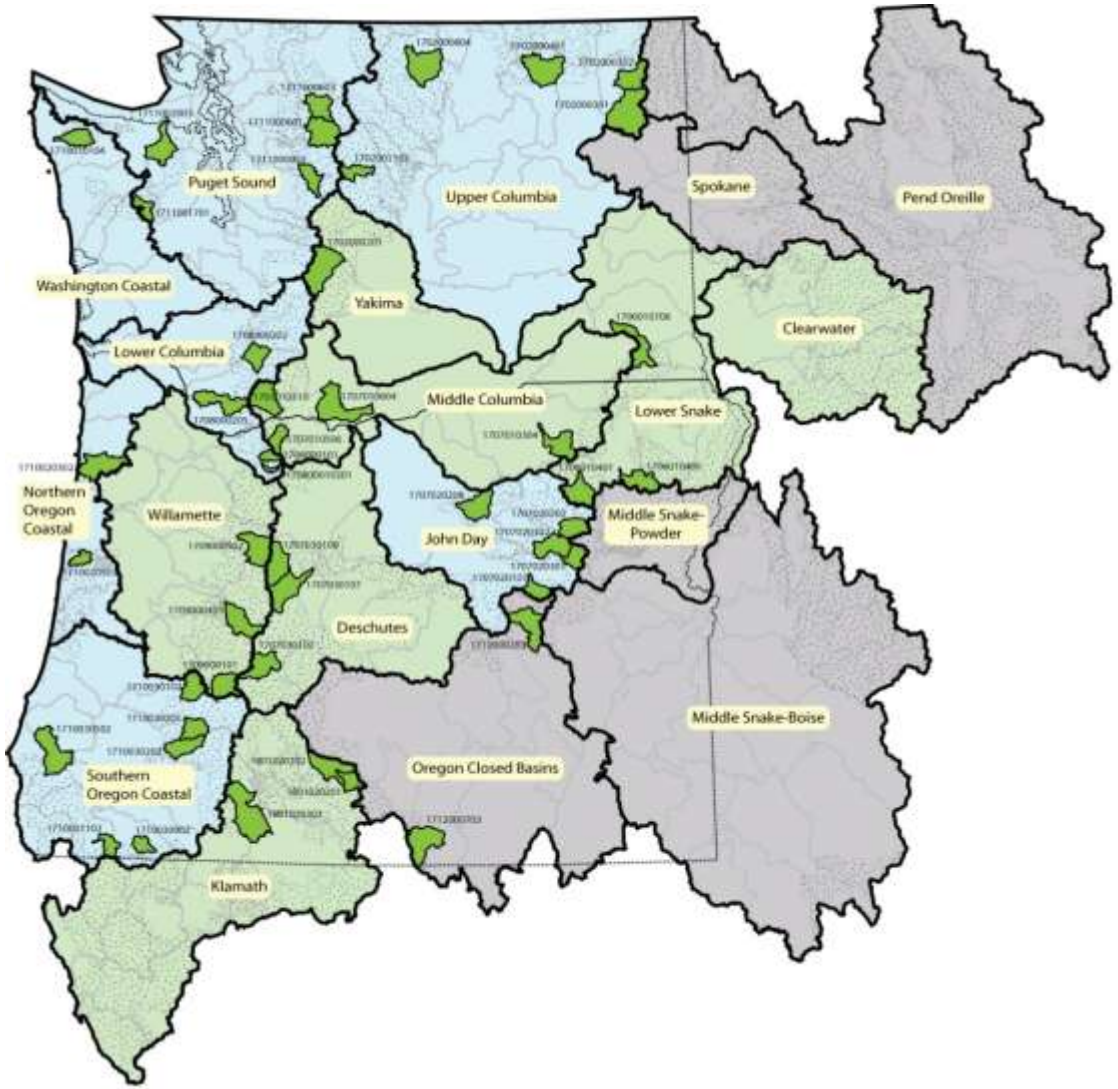
Considerations in Planning

- Population and habitat objectives
- Federal land contribution to recovery of listed species & conservation goals and objectives
- Juxtaposition to other land ownerships and their management
- FS land management direction (NWFP)
- What is the public asking/needing and is there public collaboration opportunities
- Scheduling and coordination with other management activities – near and long-term; species use and importance of habitat at critical periods
- Need for prioritizing restoration/enhancement opportunities –is there funding, how to incorporate multiple resource benefits
- Ability to adjust or alter the management scenario in an adaptive framework – not doing the same thing in all the same places every time


Dungeness Watershed Action Plan
Olympic National Forest
Hood Canal Ranger District
Legend
Dungeness River- HUC5
Dungeness River - HUC 6
ATM_Roads
Proposed_Maintenance_Level
Level 1
Decommission
Decommission Convert to Trail
RMS Road Aquatic Risk High/Very High
RMS Road Aquatic Risk High/Very High
Road - Existing
Road - Decommissioned
Road - Unclassified
Road - Bridge
Existing FS Trails
Forest Service Ownership
Wilderness
Native Land
State Land
Private Land
NPS_Boundary
N
Lower Dungeness River
Middle Dungeness River
Lower Gray Wolf River
Upper Dungeness River
Cameron Creek
Upper Gray Wolf River
Meadowdale Dungeness River
0 0.5 1 2 3
Miles

Focus Watersheds

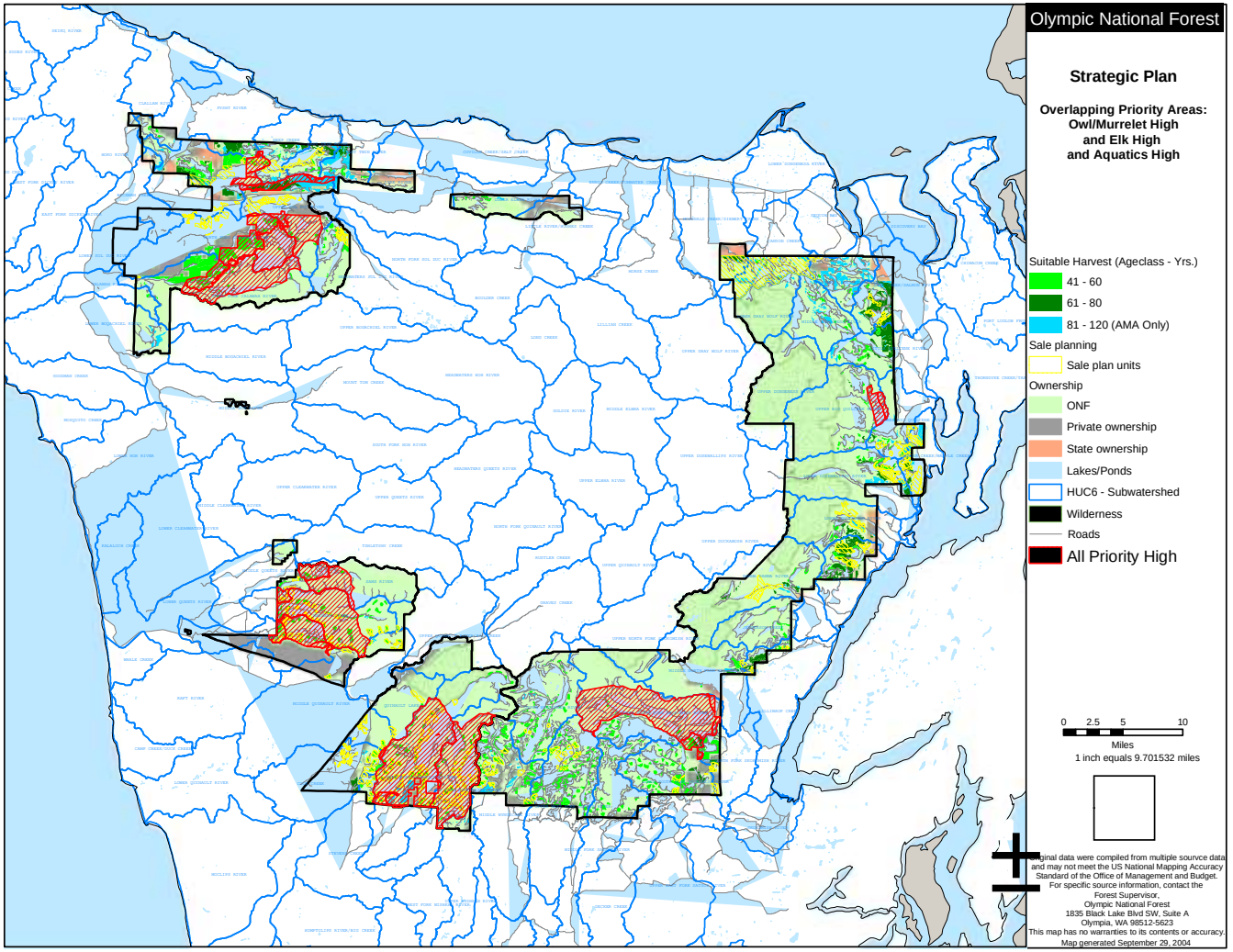
- Prioritizes restoration opportunities for aquatic species and habitats
- Focus on whole watershed, integrated treatments, high level of partnerships, and a full suite of treatments
- Puts watershed on a trajectory for recovery



Terrestrial Restoration and Conservation Strategy (TRACS)

- Identifies priority landscapes at the 5th field watershed scale within 13 ecoregions in OR and WA
- Identifies species, habitats, and watersheds that are Regional priorities for restoration, conservation, and habitat enhancement
  - Departure from historic condition or abundance
  - Strong public or FS management interest
  - Rarity
  - Ongoing threats
  - Historical use
- Guides planning and implementation; development of species and habitat conservation plans

Strategic Planning for Olympic National Forest



- Identify priorities for wildlife and aquatics (federal listed;) species of interest
- Identify restoration needs
- Identify opportunities to integrate projects to achieve multiple benefits

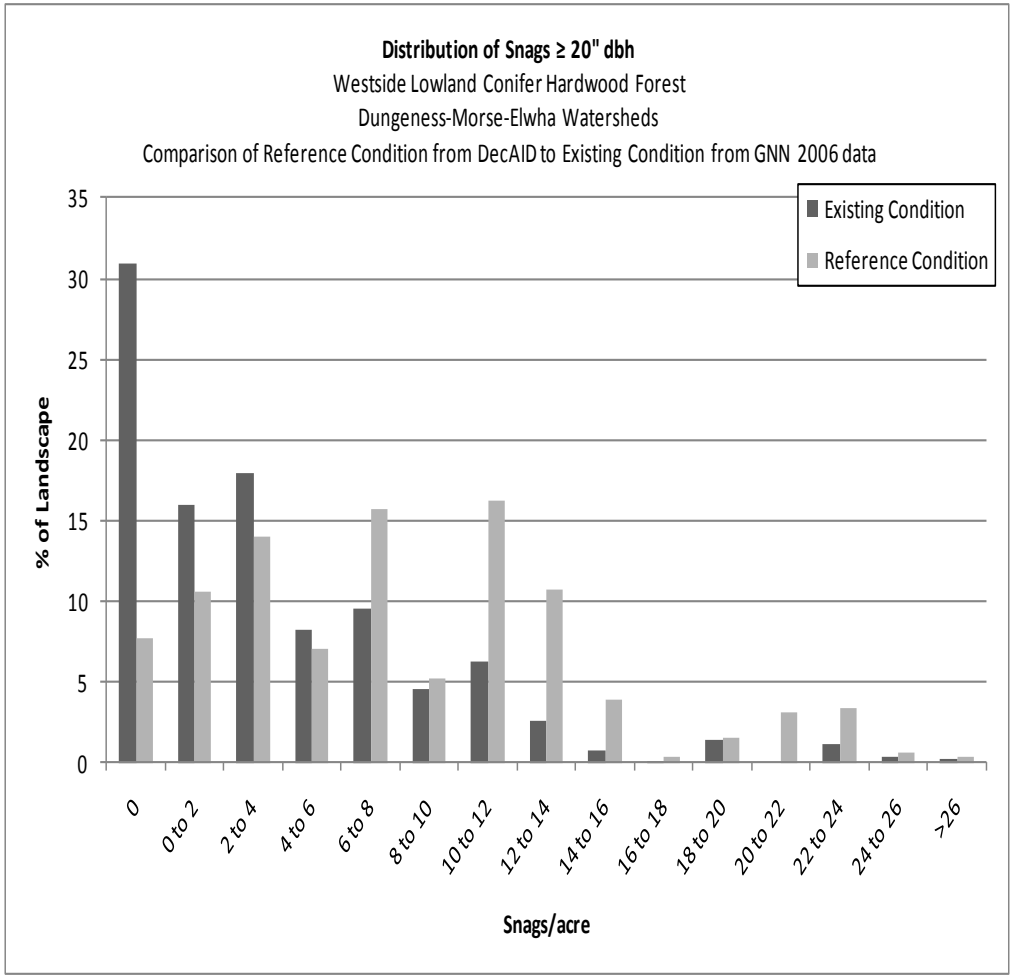
Variable Density Thinning

Skips
¼-1+ ac

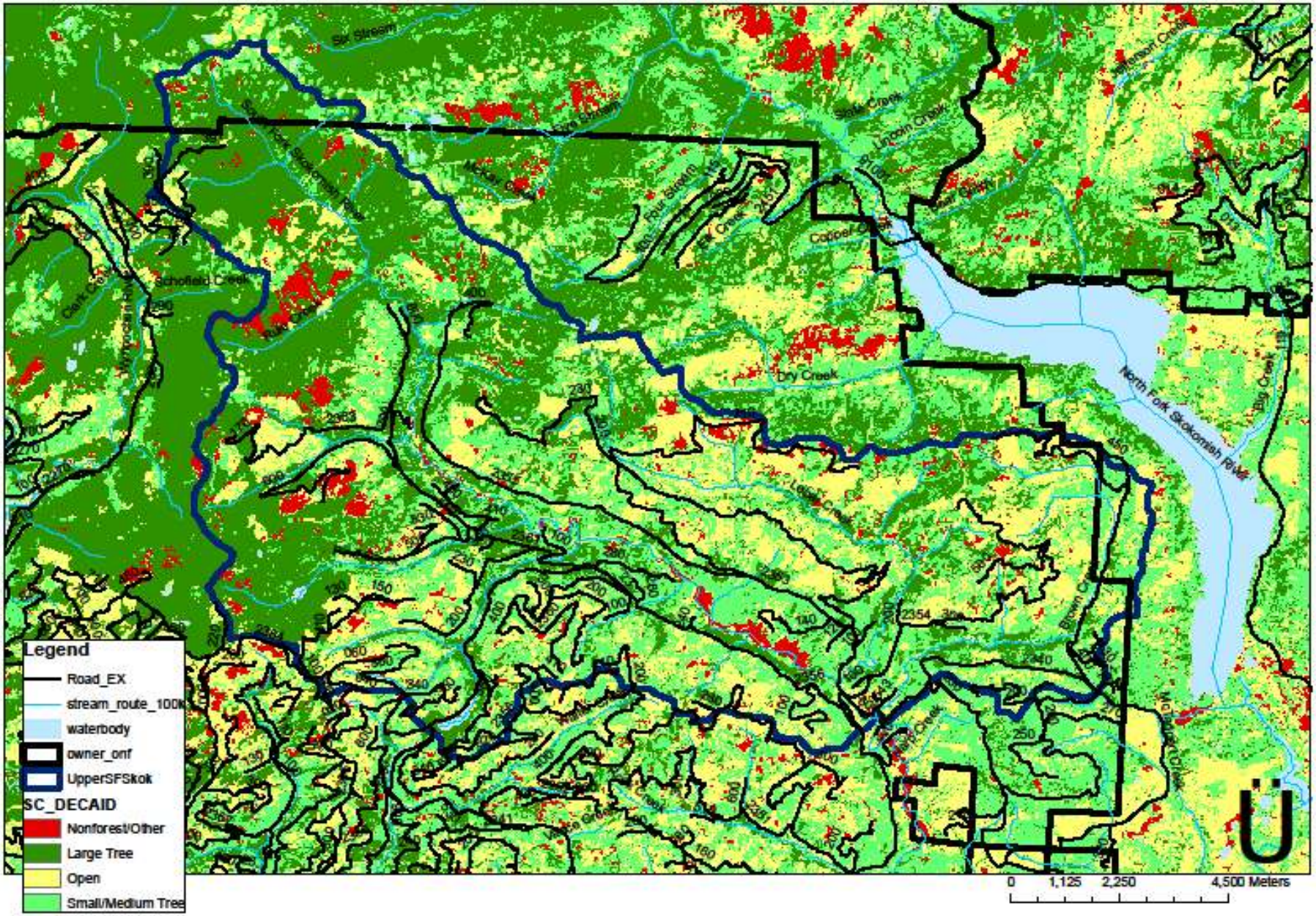
Gaps
<0.25 ac LSR
<5 ac AMA

DecAID

- Decayed Wood Advisor for Managing Snags, Partially Dead Trees, and Down Wood for Biodiversity in Forests of Washington and Oregon. Version 2.10
- Compares current snag and down wood condition to reference condition
- Oregon and Washington
- Use of GNN, ecology plot, FIA, CVS data sets
- 5th field watersheds
- Comprehensive literature and research for wildlife species dependent snags and down wood

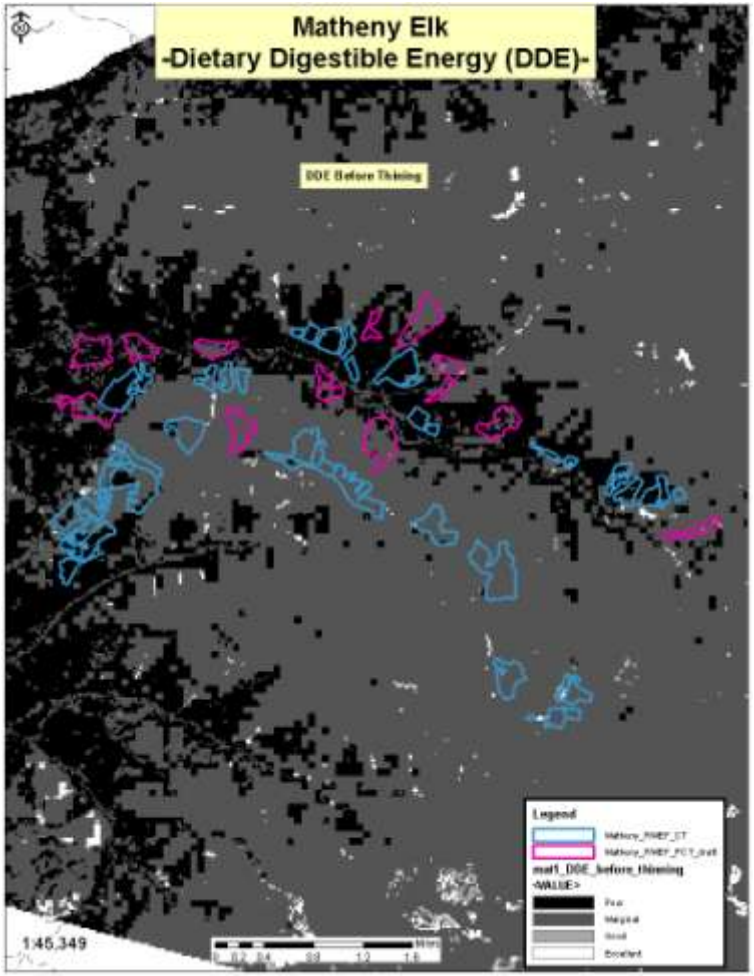


Upper South Fork Skokomish River DecAID Structural Conditions

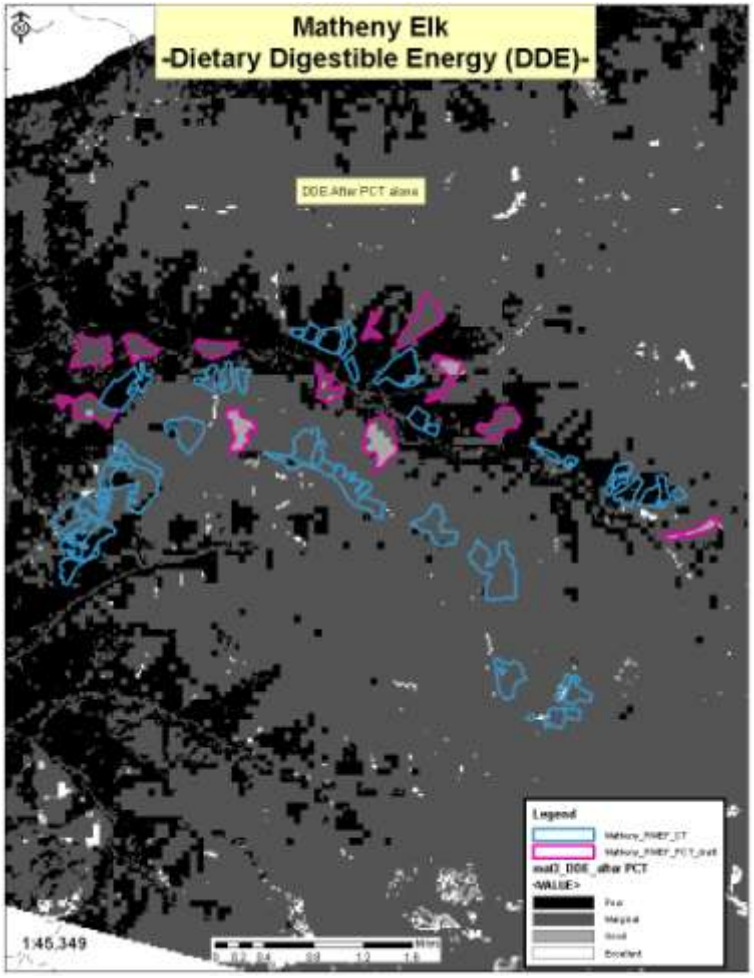


Elk Habitat Selection in Western Oregon and Washington

Before **PCT**



After **PCT**



Age Class

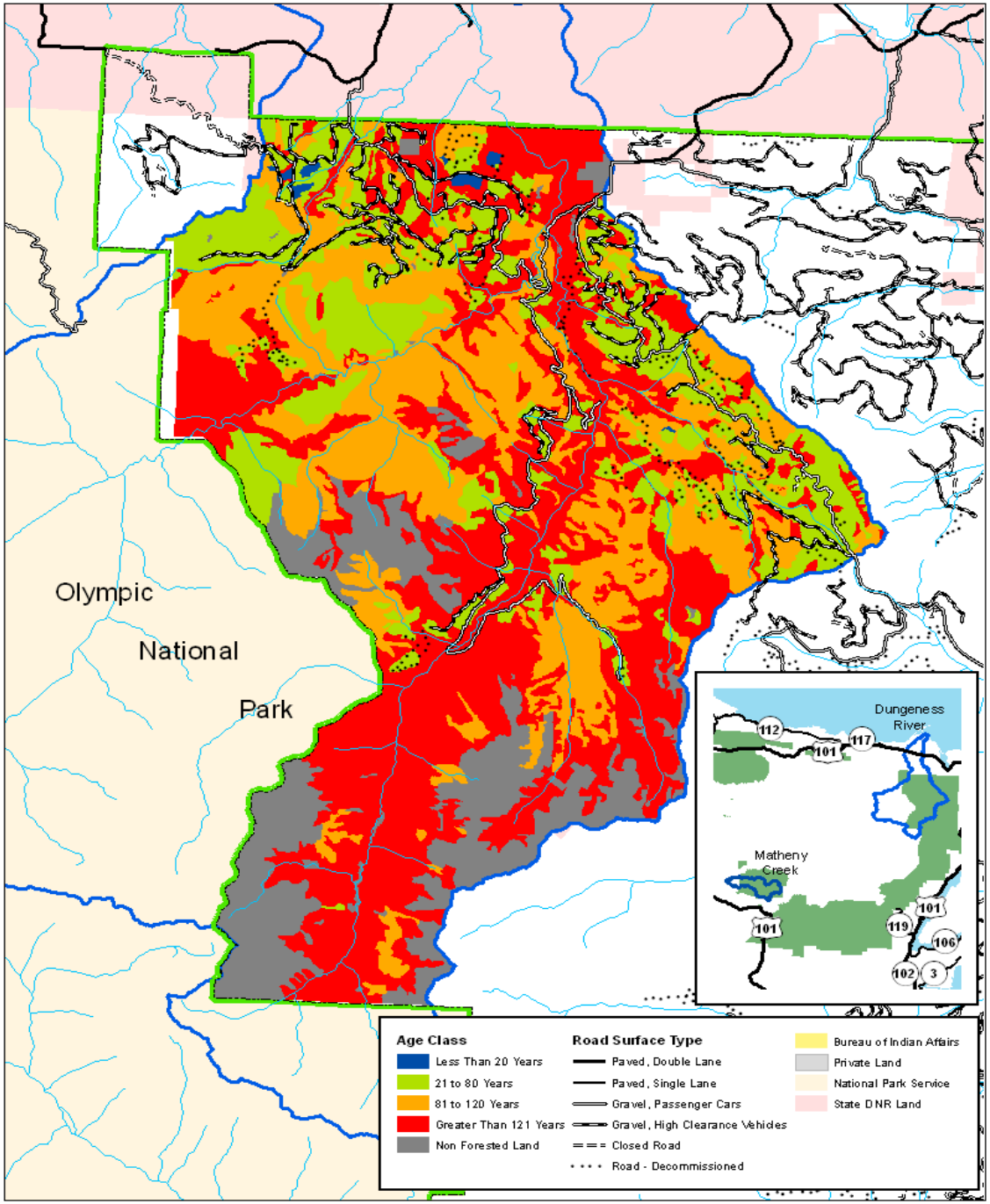
<20 years

21-80 years

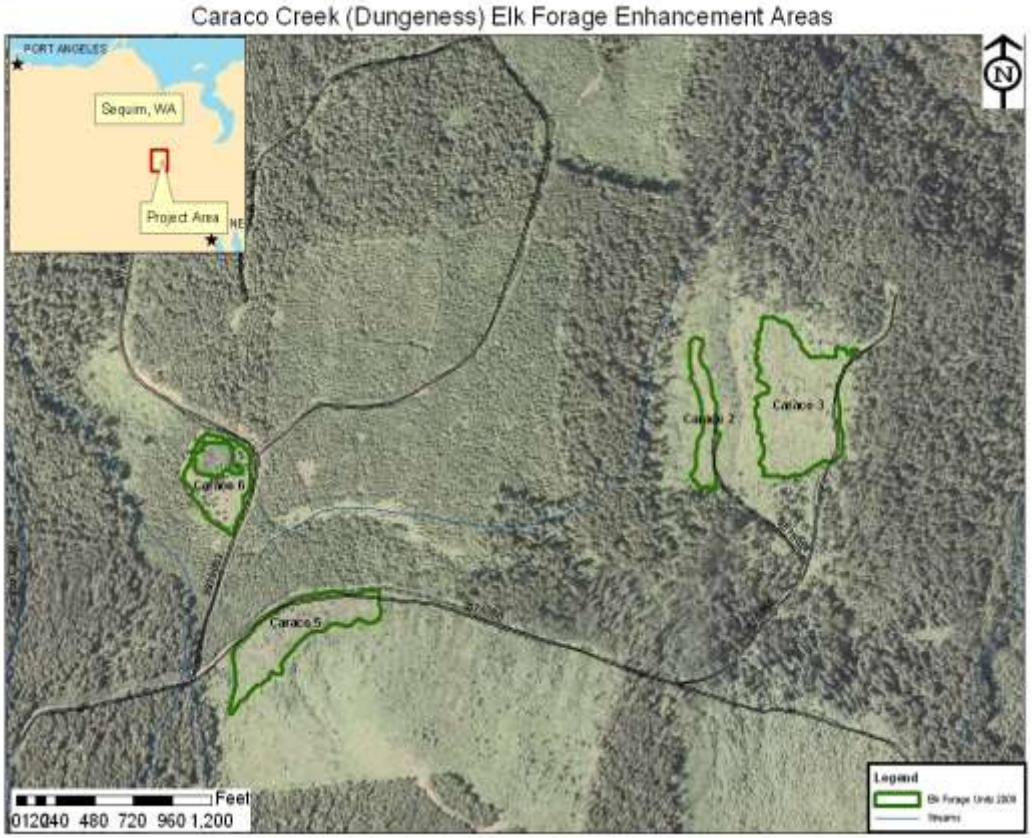
81-120 years

>121 years

Non-forest

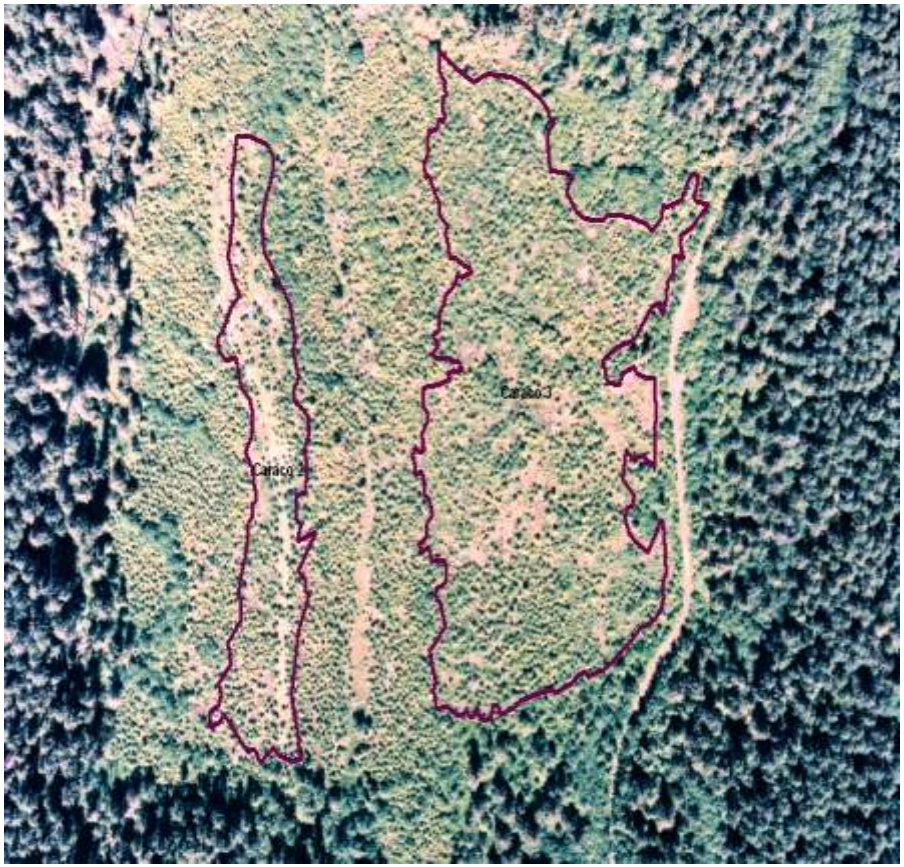


Photos for WA050317
(JPEGS filed separately in folder for WA050317)



The Caraco Creek Elk Forage Units are located in the Dungeness River Valley near Sequim, WA and are part of larger scale efforts to improve elk habitat on both private and public lands in this watershed.

Before

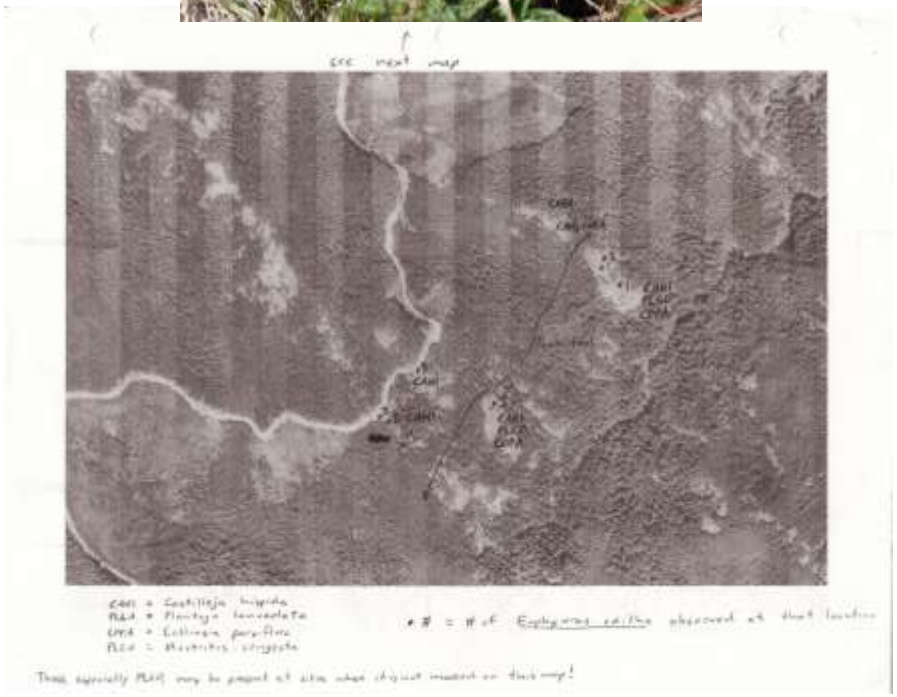


After

Incorporating Climate Change

- Olympic Climate Change Case Study – Halofsky et al. In press. USDA, Forest Service. General Technical Report.
  - Hydrology and roads
  - Vegetation
  - Wildlife
  - Fish
  - Projected climate change effects
  - Current and expected vulnerabilities
  - Adaptation strategies and actions
- Climate Change and Forest Biodiversity: A Vulnerability Assessment and Action Plan for National Forests in Western Washington. 2011. Aubry et al. Available at http://ecoshare.info/2011/05/09/climate-change-and-forest-biodiversity/
- A vulnerability assessment of forest tree species and non-forest habitats is underway across the Pacific Northwest. A summary report will be completed in 2012.

Taylor's Checkerspot



Monitoring

Monitoring

- Provides a landscape-level adaptive approach to managing populations through a suite of management decision-support tools
- Needs to be designed to measure the change that is occurring over time to assess progress towards the overall goal
- Validate and check assumptions
- Provides information if on the right track. The ultimate measure of successful habitat management is the positive response of the target species
- New Draft Planning Rule – monitoring is a key part of feedback loop and includes adaptive management

Scale of Monitoring

- 2 geographic scales:
  - At the level of the managed forest, National Forest District, provides a local assessment of the status and trends of species.
    - PNW Research Station - Olympic Habitat Development Study
    - Created snag inventory and use – Olympic NF
  - At the larger scale, Forest Service Region, a state, or a province, will permit evaluation of geographic patterns of various attributes of a species.
    - PNW Research Station - NSO Demography Study
    - Oregon and WA Bat Grid

Olympic Habitat Development Study

- 8 study sites within AMA
- 30-70 year old stands
- Evaluate VDT, CWD, understory establishment
- Amphibians, flying squirrel, songbirds, small mammals

Pacific Fisher

Created Snag and Downed Wood


Questions?