CLIMATE CHANGE ADAPTATIONS
AND THE
OKANOGAN-WENATCHEE NATIONAL FOREST

North Cascadia Adaptation Partnership
Wildlife Workshop
University of Washington

Very Important Partners

- Dr. Dave W. Peterson – Research Forest Ecologist – Wenatchee Forestry Sciences Lab

- Dr. Paul Hessburg – Research Landscape Ecologist – Wenatchee Forestry Sciences Lab

- Dr. Dave L. Peterson – Research Ecologist, Pacific Wildland Fire Sciences Lab, Seattle

- Dr. Crystal Raymond – Research Biologist, Pacific Wildland Fire Sciences Lab, Seattle

Background

- NWFP and East-side Screens
- Forest Plan Revision Forever
  - Interim policies
- Species Viability and Recovery
  - Northern Spotted Owl
    - Sustainability of LS habitat
  - Grizzly Bear
    - Interim access management policy
    - White-bark pine
  - Canada Lynx
    - Boreal forest habitats
      - LCAS Interim Policy
  - Restoration of Dry Forest Habitats
    - White-headed Woodpecker as a focal species
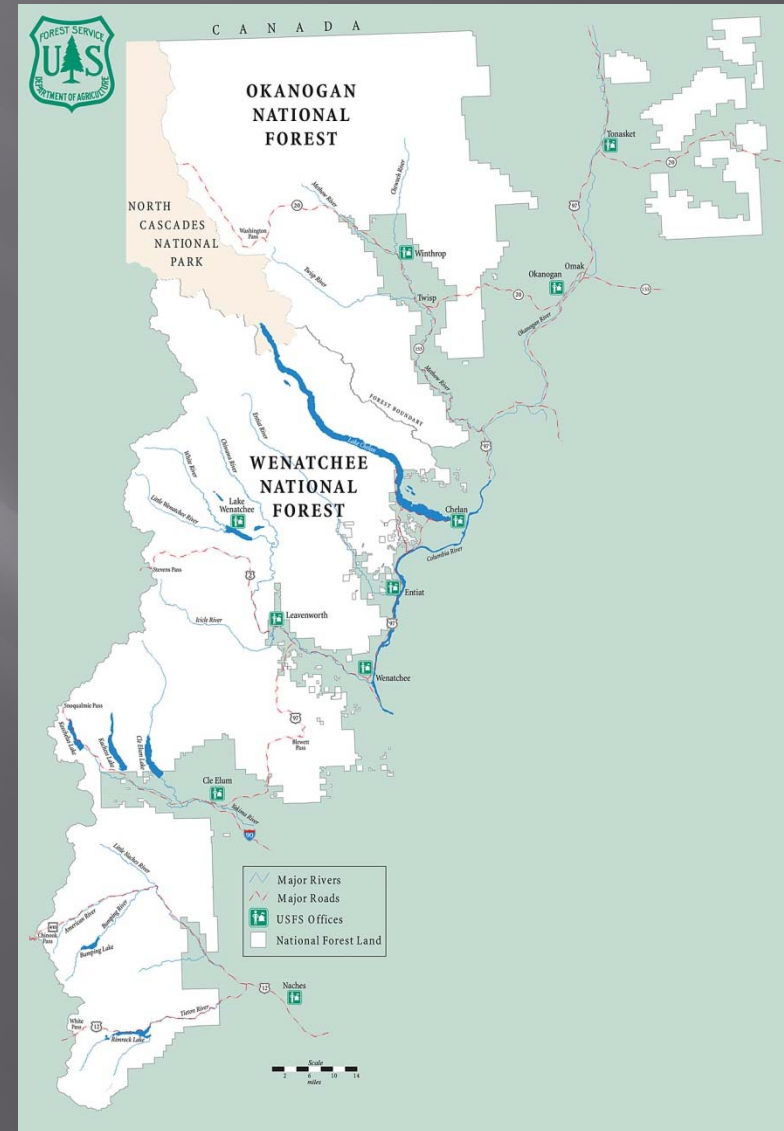
Presentation Outline

- Some Key Resource Vulnerabilities
  - 2008 Colville and Okanogan-Wenatchee Workshop
- Adaptations to Address Vulnerabilities
  - Forest Restoration Strategy
    - Landscape Evaluation
    - Patch Level
 - Adaptive management commitment

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Some Key Vulnerabilities

- Altered Hydrologic Regimes
  - Influences a broad-array of aquatic and social resource values:
    - Wetland and Riparian Habitats
- Altered Disturbance Processes (fire, insects and diseases, etc.)
  - Influences a broad-array of ecological and social resource values:
    - Sustainable wildlife habitats, especially late-successional, boreal forest, white-bark pine

The climate is changing…what can resource managers do?
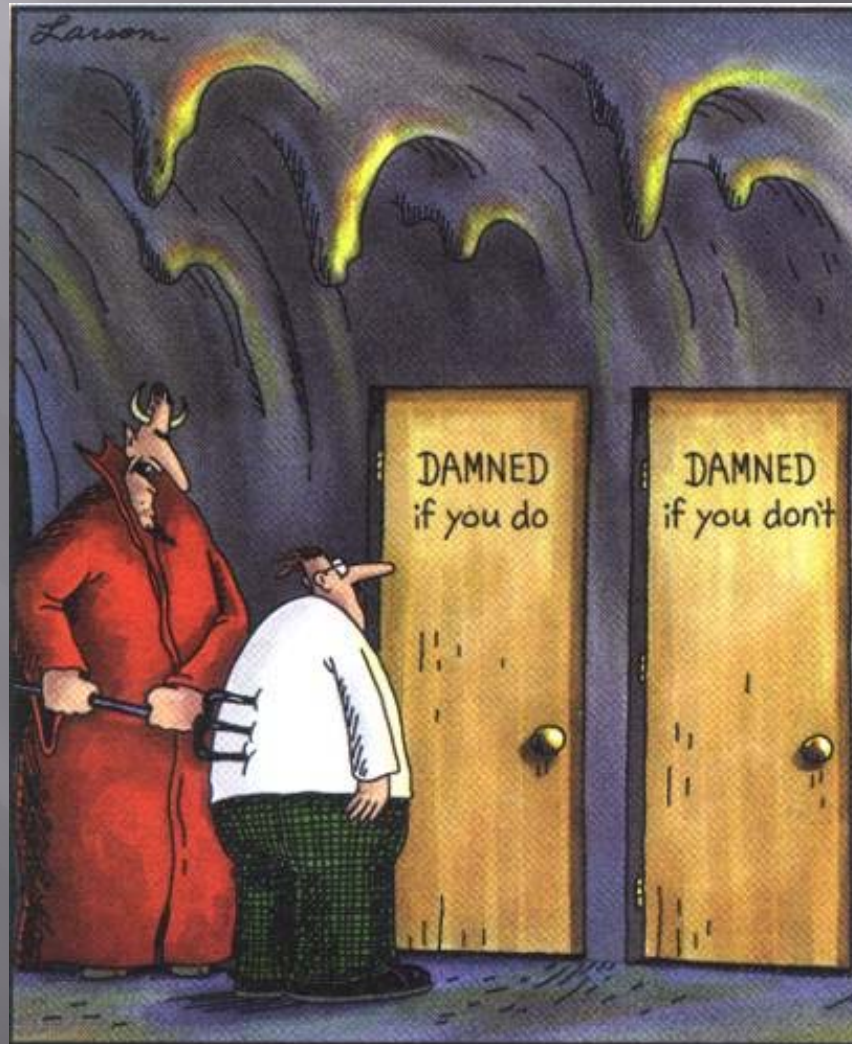
"C'mon, c'mon—it's either one or the other."

RESOURCE ADAPTATIONS

Forest Restoration Strategy

Ecosystem Restoration Vision

We are recognized as leaders in forest landscape restoration, which improves the health, resiliency, and sustainability of natural systems. We believe restored landscapes provide improved terrestrial and aquatic systems, minimize risk of uncharacteristically severe wildfire, sustain local communities and economies, and contribute to the quality of life.

- Through our efforts, landscapes will become more resilient to changing climates and disturbances and will behave in a manner that restores natural processes, patterns, and functions.

- We will work collaboratively and strategically across landscapes to double our restoration footprint within the next 10 years.

- We will focus on desired restoration outcomes and measure our success with landscapes that are restored and resilient.

- We continue to adapt strategies based on new science, changed conditions, and monitoring.

Forest Restoration Strategy

Terrestrial Systems

Disturbances

Wildlife Habitats

Vegetation

Aquatic Systems

Aquatic Habitat

Distribution and Population Status

Aquatic/Road Interactions

Compare to Reference Conditions
-Historical and Future Range of Variability

Forest Restoration Strategy

- Landscape Evaluation (EMDS)
  - Watershed
  - Across ownerships
  - Historical and Future Range of Variability
    - Vegetation
    - Disturbances (fire, insects and disease)
    - Wildlife Habitat Connectivity and Sustainability
  - Priorities for treatments to create more resilient landscapes

Forest Restoration Strategy

- Aquatics/Riparian Habitats and Roads
- Component of the Landscape Evaluation
  - Linked to the Minimum Roads Analysis
  - Implementing tools from NetMap
  - Priorities for restoration to create more resilient watersheds and reduce risk to infrastructure (eg., roads and trails)
  - Progress Tracked through the Aquatic Condition Framework

Patch Level

- Large and Old Trees
  - Interim Policy for NWFP area
  - East-side Screens
- Spatial Variability
  - Desired Conditions for the arrangement of large and old trees

Adaptive Management

- Annual Reviews and Updates to the Forest Restoration Strategy
- Annual Forest Leadership Team
  - Review of relevant science
  - Lessons learned from monitoring
  - Lessons learned from implementation
  - After Action Reviews
  - Decisions to make changes
- Identification of Key Monitoring Topics
  - Restoration treatments in Riparian Reserves
  - Restoration treatments in spotted owl habitat
  - Baseline monitoring for the TAPASH Collaborative

LIMITATIONS

Until You Spread Your Wings,
You'll Have No Idea How Far You Can Walk.

Questions? Comments?