Methow, Grouse Flats and Sinlahekin/Scotch Forest Rehabilitation Projects



Requesting Commission Approval

Project sizes exceed the 2015 Delegation of Authority to the Director

Threshold = One Million Board Feet (roughly 200 log trucks)

Implementing the Forest Management Strategy (Approved June, 2014)

- Ramped up from one to four foresters
- Project work increasing.
 - 2015: Pend Oreille, Ferry, Okanogan, Yakima and Kittitas (hazard trees) counties
 - 2016: Anticipate projects in Pend Oreille, Ferry, Okanogan, Kittitas, Yakima, Garfield, Klickitat and Cowlitz counties.

Strategy Priorities

- Maintain or improve ecological integrity
- Restore habitat, especially for priority species
- Reduce risk (severe wildfire, insects and disease)

Fire dependent, dry forests of Eastern Washington tend to rank highest.

Two Projects Have the Same Goal: Restore Overstocked, At-Risk Forests







Fire Behavior in Dry Forests: Managed vs. Not



Colockum Tarps Fire. komonews.com



Prescribed fire following restoration thinning: Sinlahekin Wildlife Area

Fire Effects in Untreated, Fire-Dependent Forests: Wooten 9 Years Later



Methow Restoration Project Description

- Funding Source: Recreation and Conservation Office (RCO) Grant
- Acres treated: 655
- Timber Volume: 3 million board feet harvested from three units
- Activities:
 - Thinning (pre-commercial and commercial)
 - Fuel treatments including prescribed fire
 - Roads
 - Existing roads will be maintained or improved
 - Some new spurs will be built
 - Road abandonment will be double that of new road construction

Methow Prescription

- Leave 30-40 trees per acre including
 - All trees that are >125 years old
 - The largest, most vigorous trees
 - Trees with forks, broken tops, or large branch platforms
 - Ponderosa pine (>90% of the leave trees)
- Restore spatial diversity
 - Retain trees in "clumps and gaps"
 - Retain 1-3 acres of larger, complex patches per 100 acre
 - Protect snags

Grouse Flats Restoration Project

- Funding Source: Timber revenue
- Schedule: Winter through Summer of 2016
- Acres treated: 340
- Timber volume: 3 Million Board Feet
- Activities:
 - Thinning (pre-commercial and commercial)
 - Fuel treatments: pile burning or prescribed fire (if feasible)
 - Roads
 - 2.8 miles of temporary spurs will be built then abandoned.
 - Existing roads will be maintained or improved

Grouse Flats Prescription

Very similar to the Methow project but varies as follows:

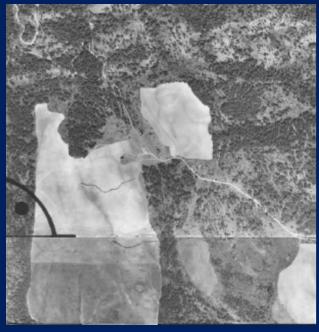
- More trees will be retained (30-60 per acre)
- Includes a 30-acre patch cut to address a severe mistletoe infestation.
- Western larch favored where not infected with mistletoe
- Grand fir will be removed where it has invaded dry forests



Heavy Douglas-fir mistletoe infestation in Grouse Flats WMA

Visuals: Grouse Flats Forests Not Resilient

Fire exclusion and pre-WDFW timber management have led to dense, disease and fire vulnerable forests





1971 2015

Ground View: Grouse Flats Current Conditions

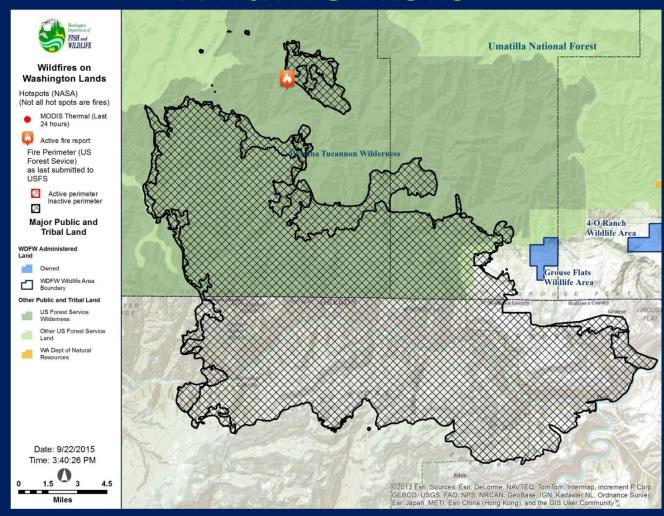




2012 View of Rising Tree Mortality



2015 Fire Season Illustrates Wildfire Risks



First Two Projects: Harvest Methods and Timing

- Ground based harvesting equipment (Likely feller-bunchers and rubber tired skidders)
- As much as possible operations will occur on snow and frozen ground but some summer operations will be necessary





Similar Recent Projects

2008-2014: Sherman Creek – Restore open, clumpy structure

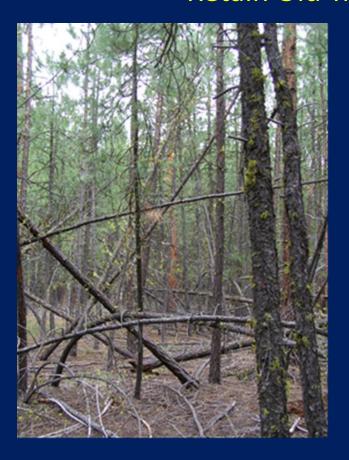




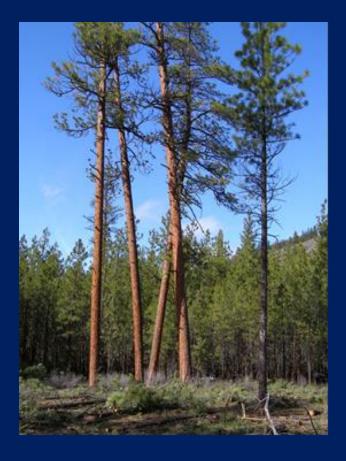


Methow 2012

Retain Old Trees When Present







Project Example: Sinlahekin

Increase resiliency when thinning is coupled with prescribed fire









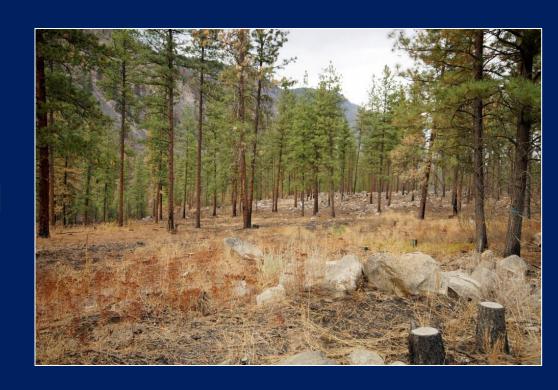
Forest Health

- Fire-Dependent Ecological Systems
- Century of Fire Suppression— Extensive Fuel Load
- Reduced Timber Harvest
- ClimateChange/Drought
- Insect/Disease
- Catastrophic Fire;
 Public Sentiment



Forest Health

- OR....
- Healthy Forests
- Restore Managed
 Disturbance:
 Prescribed Fire and
 Timber
 Management
- Healthy Wildlife
- Fire-Wise Communities



East Blue Lake - Sinlahekin Wildlife Area

No Treatment Before the Okanogan Complex Fire



East Blue Lake – June 2003



East Blue Lake – September 2015

Blue Lake (West) - Sinlahekin Wildilfe Area

Restored Prior to the 2015 Okanogan Complex Fire



February 2011 – Untreated



May 2013 – After Thinning and Prescribed Burn

Blue Lake (West) - Sinlahekin Wildlife Area

Mild Wildfire Behavior and Beneficial Effects



June 2015 – Post-Rx Burn Revegetation



September 2015 – Post-Okanogan Complex Fire

Sinlahekin/Scotch Creek Post Fire Project



Sinlahekin/Grouse Flats Restoration Project Context

- Part of largest fire in state history (>304,000 acres)
- More than 5,000 acres of WDFW forest burned
- Areas previously thinned <u>and treated with prescribed fire</u> helped protect the Northern half of the Sinlahekin.
- Hope to treat up to 400 acres
 - Some already partially restored (burned badly between thinning and planned prescribed fire) and some not previously thinned
 - Some areas burned very intensely but some less so

Challenges With Post Fire Restoration Projects

- Worst market conditions possible
 - Burnt wood is worth less and mills will not take pulp wood
 - Race against beetles and rot
 - Wood glut (300 million board feet) and depressed prices
 - Contractor shortages and high costs
 - Competing with others with different mandates and fewer constraints
- Less ability to select desirable trees and distributions
- Increased risks associated with a disturbed environment
- Potential social concerns

Sinlahekin/Scotch Creek Restoration Project

- Funding Source: RCO grant
- Schedule: ASAP Winter/Spring 2016
- Acres treated: Up to 400
- Timber volume: <3.2 Million Board Feet
- Activities:
 - Commercial Thinning
 - Fuel treatments:
 - Pile burning and firewood giveaway.
 - Small trees will require additional treatment later
 - Roads: Minimal work anticipated

Sinlahekin/Scotch Creek Restoration Project Goals

Still working to

- Maintain or improve ecological integrity
- Restore habitat, especially for priority species
- Reduce risk (severe wildfire, insects, disease, etc.)

Restoration needs still exists, in some ways they have increased

- We still have too much biomass and need to reduce it to break the cycle of uncharacteristically intense fire. We will remove as much excess biomass as we can while it is still feasible.
- Restore forest structure and species composition where possible to protect what's left and encourage recovery.
- Address hazard trees (roads and campsites)

Sinlahekin/Scotch Creek Prescription

- Leave trees per acre (We may also have to leave all pine)
 - Near total mortality areas 5-10 (live or dead)
 - Higher survival areas 15-25
- Leave tree characteristics
 - Larger trees with the greatest chances of survival
 - Trees with forks, broken tops, or large branch platforms
 - Ponderosa pine favored over Douglas fir
- Restore spatial diversity
 - Retain trees in clumps, gaps and larger patches if possible
- Snags
 - We may have to leave all dead pine
 - Subsequent mortality will generate additional snags
 - Snags can be topped along roads

Recent Similar Post-Fire Project Methow 2014

We have a lot fewer live trees to work with in some areas





Questions

