

**Appendix B: Raw Notes, Group Exercises, and Evaluations from Workshop**

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## **Appendix B1: Information Summary from the Interagency Note Takers**

### **Why have an interagency team take notes?**

- Review of salient information from Day 1
- Set stage for Day 2 Steps number 2 and 4
- Encourage audience participation
- Demonstrate a collaborative effort, both in the Workshop and in the woods
- Capture an interagency, interdisciplinary, and individual perspective

### **Note takers:**

- Jim Harper, BLM
- Randy Smith, ODF
- Christy Cheyne, USFS
- Sue Livingston, USFWS
- Steven Andrews, OSU ad-hoc contributor

### **Attendee's take-home ideas or concepts provided by this Workshop:**

- (*We need to*) Think outside (*the owl*) circle
- Time is right for this Workshop
  - Recent large wildfires
  - Arising issues of owl habitats in dry forests
  - Fuels concerns vs. effects on owls
  - SEI report identified catastrophic fire as a concern for spotted owl recovery
  - NWFP core principles still apply today
  - There is currently more information on habitat associations than 10 years ago
  - NWFP 10 year monitoring report addresses owls and fire
  - Current planning for stand treatments
  - Biologists' concerns
  - Long-term beneficial effects
  - Fuel dollars are going to WUI projects. Biologists need to be in touch with those projects
- Choices are to do nothing and hope for the best or to begin to restore some semblance of historical range of variability
  - No action taken in the forest is a disaster waiting to happen
- Fish and Wildlife Service
  - Must consider how to minimize risk to catastrophic fire while still maintaining spotted owl populations
  - Has been averse to taking risks where owls are (e.g. LSR, owl circles, and NRF habitat). Need to put these areas on the table for discussion

- (*Recognition that there is a*) Contradiction of needing to treat areas while maintaining existing owl sites, as there are not many (*owl sites*) left on the east side
  - We cannot reduce fire risk and manage for owl habitat within the same stand
  - Must balance risk of loss of habitat to high severity fires against the loss of habitat due to treatments that result in unsuitable open conditions
- We need to be equally concerned about treatments in foraging habitat and not focus just on nesting habitat
  - Prey drives spotted owl biology. There is new information on prey relationships, but is still poorly understood
  - Most spotted owl nest trees on east side infected by Douglas-fir dwarf mistletoe. An important structure. Flying squirrels, woodrats and spotted owl use brooms for nests
  - Nest trees are probably not limiting; high canopy cover is important
- Landscape –
  - We don't have a sense of how well we are doing at the landscape level
  - (*there is*) no calibration on the definition of landscape
  - Heard 10,000 acres; 4th to 6th field watersheds; 5th field watershed; fire shed, forest wide
  - (*There is acknowledgement of a need to*) Prioritize areas (*to be treated for fuels reduction*)
  - Treat at landscape within and outside of owl habitat patches to reduce risk to loss of old growth
  - Put islands of denser vegetation in places on landscape where it is more appropriate and is more likely to be sustained through time
  - (*Fuels reduction and habitat improvement work needs to be*) Strategic
  - We are working at different scales
  - Need to treat landscapes, but temper with science and use science to connect the dots. Leads to strategic planning at the stand and landscape scale
  - Identify location on landscape where late-successional habitat is most sustainable.
  - Need to take a landscape view. There is not good data to track how much fuel treatment has occurred. We know little about landscape distribution and effectiveness of treatments
  - Assess alternatives to the current reserve strategy of the NWFP
  - Adjust land allocations to produce a lower risk pattern of reserves and matrix
  - Eliminate allocation boundaries and use entire landscape to achieve ecological goals.
  - Alternatives to allocations exist and may be more effective at achieving ecological goals

- Manage the most productive site with highest sustainability for spotted owl habitat & manage surrounding areas to allow low severity fire
  - Low to mixed severity fire regimes are higher priority treatment areas on the landscape
  - Restoring dry site pine may enhance adjacent sites for spotted owl
  - Landscape-level strategies are needed and alternatives to the current allocations need to be considered especially in the drier provinces
  - Avoid eliminating habitat currently occupied
  - Manage fuels and habitat simultaneously; no touch areas and managed blocks...how do we calibrate the two?
- Fire Regime Condition Class
    - Use of fire regime condition class identifies WHAT to treat
    - Use of current fire risk information identifies WHERE to treat
    - Other issues fine tune WHEN and WHERE to treat
    - Fire regime is influenced by topography and aspect...can create a boom bust cycle of owl habitat over time in high severity regimes...less pronounced variance in mixed severity regimes
    - High priority to increase mixed severity fire regimes across area
    - Three condition classes are a measure of the departure of a stand from historical conditions/natural regime:
      - ✓ Class 1: within natural range of variability
      - ✓ Class 2: out of HRV
      - ✓ Class 3: extreme departure from HRV
- Approaches to reducing fuels
    - Repeated harvest
    - Repeated burning
    - Control ladder, raise the height to live crown, reduce the surface fuel flame length by reducing ground fuels and/or all of the above
- Stand level fire-safe principles
    - Reduce surface fuels—limits fire intensity
    - Reduce ladder fuels—keeps fire on ground
    - Keep large fire resistant trees
    - Reduce crown density—many eastside forests don't have crown bulk density issues
    - Reducing crown densities can be helpful, but it is NOT the place to start. Treat surface and ladder fuels first!
    - Use topographic differences in fire severity to indicate where to retain habitat patches
    - Fire severity has changed over time.
    - Historically multi-aged stands were common, reflecting a mosaic of fire severities;
    - In the Eastern Cascades
      - ✓ Shorter fire return, low severity regime with some variability.

- ✓ Fire extent was reduced; they buffer one another, a well and self regulated ecosystem due to natural fire return interval.
  - ✓ Logging of the fire tolerant trees has exasperated the situation.
  - A thinning from below to get merchantable material usually doesn't affect the height to live crown because the non-merchantable material remains to provide ladder fuels.
  - Regarding thinning treatments, no action is a disaster, thinning from above is a disaster. Low thinning is the way to do it. There are plusses and minuses to using prescribed fire or mechanical thinning to reduce understory densities.
  - Fuel treatment will be effective if we will be there with suppression crews fighting the fires and keeping them out of owl habitat. But the priorities and funding are going to WUI rather than more remote areas. So some kind of treatment will be needed within owl habitat to effect fire that gets into habitat
  - Islands of owl habitat in fire resistant matrix...smaller fires?
  - Fire breaks within the landscape...larger fires?
  - Reference conditions (pre-1900's) provide thoughts on potential treatments
- Short-term adverse impacts (*to owls*) can be mitigated by long-term beneficial effects of treatment (*to improve/expand habitat*)
  - Short and long-term risks to habitat remain and may be increasing
- Boundaries work beyond (*federal*) agency bounds(*include in discussions State agencies and private lands*) ODF
- (*We need*) Communication, collaboration, site specific information and informed implementation and flexibility
  - Communication - Early and often & with outside groups (*include NGOs*)
  - Make sure the project goals and purpose get to those who are implementing the project on the ground
- Calibration—developing a common understanding of words & phrases
- Commitment (*by agencies to personnel, projects*)
  - Long-term for funding, multi-agency, treatment continuation, monitoring
  - Fuels treatment will require multiple treatments
  - Fuel reduction treatments that mimic historic disturbance requires long term commitment by agencies
  - Monitoring and adaptive management
- Reality check (*is important to determine what actually can be accomplished on the ground based on the following:*

- WUI, Barred owl, outside groups may shut down the project, cost, commitment, availability of fire crews to protect owl habitat versus WUI, constraints on prescribed burn...air quality and spring burns
- Distrust (*of federal agencies*)
- Despite the best treatments implemented, in certain climatic conditions anything will burn
- It is okay to open up stands so they resemble Historic Range of Variability
  - Okay to do treatments (*in owl habitat and Late Successional Reserves*)
  - Site specificity (*will be important to owl centers as what is done in one area may not be the same treatment performed in another owl area*)
  - We are becoming more comfortable taking risks (*across the landscape and in owl habitat when it comes to reducing fuel loads*)
  - Do not be consistent for the sake of consistency (*as what works in one geographic area may not be good for another geographic area*)
  - Consistency for the sake of consistency is not good. Do what works for the individual site
  - Variation...what works in one area may not work in another (don't use cookie cutter)
  - Cookie dough and chip concept (*Brian Tandy's talk*)
  - Reference conditions are not necessarily a goal, but an aid to evaluate changes
    - ✓ Age structure
    - ✓ Diameter distribution
    - ✓ Stem density and basal area, etc
  - Change land-use allocations to reflect the relative risk of fires
  - Eliminate land-use allocations entirely
- Document what you do (*actions taken, why and how*) and reference (*peer reviewed*) science
- Uncertainties (*exist which we have no control over*)
  - West Nile Virus, global climate change, Barred owl
- We tend to be defensive about our treatments and their outcomes
- (*We*) Need to be adaptable and open to change. Recognize that there will be exceptions to the "rules."
- There needs to be an explanation of what constitutes owl habitat
  - What is the relative carrying capacity (*as in basal area*) of the owl sites (*and is that vegetation sustainable*)?

**Appendix B2. Exercise 1 - Specialists Group Discussion**

Exercise 1 organized Workshop participants into four specialist groups: biologists, silviculturists, fuels planners and managers to gather ideas and approaches on how to manage spotted owl habitat in the dry forests within the owl’s range. The exercise had participants from each specialist group answer three questions, which are listed below. The following table is a summarization of answers provided by each specialist group for each question.

<i>(1) List prescriptive activities that would meet objectives of managing for spotted owl habitat (NRF &amp; dispersal) while reducing the risk of habitat loss</i>	
Biologists (Group 1)	<ul style="list-style-type: none"> <li>• Need for surface fuels reduction in and adjacent to spotted owl habitat (thin from below, reduce ladder fuels and litter accumulation)</li> <li>• Emphasize treatments surrounding spotted owl habitat</li> <li>• Some treatment may be possible in spotted owl habitat depending on condition</li> <li>• Break up the landscape</li> <li>• Rotation of treatments throughout landscape</li> <li>• Scale needs to be defined to determine place in larger picture</li> <li>• Dispersal habitat should not be uniform across landscape, NRF should be included</li> <li>• Shaded fuel break/Fuel Management Zone</li> <li>• Prescription should be appropriate for fire regime</li> <li>• Focus treatment to promote prey base.</li> <li>• Heavy handed treatments (i.e., shelterwood, seed tree) may be appropriate in some cases, whereby large structure is kept.</li> <li>• Appropriate treatment depends on location (slopes, North sides, lower slopes, ridge tops, ignition sources, topography)</li> <li>• Design treatments for larger landscape (e.g. Klamath Plan)</li> </ul>
Biologists (Group 2)	<ul style="list-style-type: none"> <li>• Thinning, slash busting, prescribed burning (include piles), splats</li> <li>• Wildland Fire Use plans – allow wildfire to burn under prescribed conditions</li> <li>• Manage for eastside prey – woodrats, flying squirrels, voles, rabbits</li> <li>• Pruning – culture young Douglas fir</li> <li>• Create 1-4 acres gaps – “Doughnut cuts”</li> </ul>
Silviculturists	<ul style="list-style-type: none"> <li>• Fuels treatments of ground fuels may improve resiliency to fire and may continue to be habitat.</li> <li>• Areas of treatment and no treatment need to be identified on the landscape.</li> <li>• Intensify efforts to keep large tree components and foster replacements.</li> </ul>

	<ul style="list-style-type: none"> <li>• Pre treat and thin around large trees.</li> <li>• Growing big trees is the same for wildlife as for timber.</li> <li>• To develop habitat, we'll probably have to mimic disturbance.</li> <li>• Avoid the artificial size limit (e.g. 21 inch dbh) without biological rationale.</li> </ul>
Fuels Planners	<ul style="list-style-type: none"> <li>• Assemble group, visit site, clarify objectives</li> <li>• Include Non governmental organizations</li> <li>• Understand habitat objectives</li> <li>• One prescription does not fit all situations.</li> <li>• Work in concentric circles (thinning, mechanical, underburn, no treatment, variable intensities of treatments).</li> <li>• Use modeling tools and Fire Regime Condition Class (GIS, Farsite, Behave)</li> </ul>
Managers	<ul style="list-style-type: none"> <li>• Collaborative design of projects at start</li> <li>• Deferred question to specialists</li> </ul>
<i>(2) Given the existing threats to owl habitat and distribution of Land Use Allocations (LUA), what are your recommendations for managing owl habitat across the landscape?</i>	
Biologists (Group 1)	<ul style="list-style-type: none"> <li>• Think outside of LUA. Think big. Landscape scale planning.</li> <li>• Prioritize range wide level of threat</li> <li>• Identify core habitat</li> <li>• Look at fire risk.</li> <li>• Prioritize at all scales</li> <li>• Look where fire starts occur. Locate defensible positions.</li> <li>• Protect best functional and remnant habitat.</li> <li>• Look at owl site history, stability, productivity.</li> <li>• Identify short and long term potential of site to support owl habitat (e.g. forest productivity)</li> <li>• Consider relationship of site to neighbors (owls and land owners) and Wildland Urban Interface</li> <li>• Prioritization should look across ownerships and consider natural range of variability within the landscape</li> </ul>
Biologists (Group 2)	<ul style="list-style-type: none"> <li>• Manage for owl habitat where it can be grown and maintained for longer time periods (e.g. Wet mixed conifer PAGs), regardless of LUA.</li> <li>• Use flexibility within the NWFP to manage habitat for owls.</li> <li>• Get funding from multiple resources (timber, WUI) for treatment</li> <li>• Treat Matrix adjacent to LSR to break up fuel continuity on large scale.</li> <li>• Herringbone approach to break up fuels discussed in Finney et al.</li> <li>• Where managing for owl habitat, large downed wood retention should be by size class NOT tonnage.</li> <li>• Need clear priorities for treatment at all scales (region, Forest</li> </ul>

	level and by LSR).
Silviculturists	<ul style="list-style-type: none"> <li>• Favor “early seral”, “fire-resilient” tree species.</li> <li>• Difficult to manage LSRs and Matrix differently.</li> <li>• Need to treat landscape without land allocations and according to range of vegetative conditions in context of wildlife habitat needs.</li> <li>• Focus on areas where you are most likely to succeed; areas that may have been habitat historically (at least for some time).</li> <li>• Majority of landscape should be resilient to fire and large tree dominated.</li> <li>• Large scale strategy should be developed to keep large trees on the landscape.</li> <li>• Density for insect resistance may be even lower than effective fuels treatment. Need to recognize potential impact of bugs.</li> </ul>
Fuels Planners	<ul style="list-style-type: none"> <li>• Need good risk assessments.</li> <li>• Implementation at a landscape or fireshed scale.</li> <li>• Work across administrative boundaries.</li> <li>• Pursue stewardship projects.</li> <li>• Develop a 50-100 year plan for habitat management.</li> <li>• Maintain habitat where most likely to persist.</li> </ul>
Managers	<ul style="list-style-type: none"> <li>• Simplify LUAs or erase lines.</li> <li>• Should we treat LUAs as intended?</li> <li>• Treatments and activities need to better align with goals and intentions of LUAs.</li> </ul>
<i>(3) What do you believe are information needs at both the stand and landscape level in managing owl habitat?</i>	
Biologists (Group 1)	<ul style="list-style-type: none"> <li>• Where is the NRF located?</li> <li>• Habitat use patterns.</li> <li>• Better ground-truthed data specificity for projects.</li> <li>• Better definition of what constitutes habitat.</li> <li>• Monitoring data on effects of projects on owls. How does alteration of habitat affect owl use of stands and landscape?</li> <li>• Need controlled pre and post treatment studies.</li> <li>• Historic range of owl.</li> <li>• Historic fire regime</li> <li>• Fire behavior for proposed treatment area.</li> <li>• Are vegetation layers of nesting roosting and foraging habitat designed for management or are we meeting the needs of the owl?</li> <li>• Owl surveys – need current locations in “chosen” locations not carte blanche.</li> <li>• Need barred owl information.</li> <li>• Improve demographic studies and incorporate into management actions.</li> </ul>

<p>Biologists (Group 2)</p>	<ul style="list-style-type: none"> <li>• Need owl surveys long-term; pre and post treatment</li> <li>• Define eastside owl habitat at a local scale. Local NRF and dispersal definitions with justification. One definition does not fit all habitats across eastside range of the owl.</li> <li>• Need more information on prey habitat types and needs.</li> <li>• Need to determine where priorities of fuels treatment and managing habitat for owls intersect.</li> <li>• Priorities should be set spatially and temporally.</li> <li>• Need updated stand exams with habitat information.</li> <li>• Need to determine where sites are most capable of sustaining owl habitat.</li> </ul>
<p>Silviculturists</p>	<ul style="list-style-type: none"> <li>• Need more details on dispersal versus core habitat for owls.</li> <li>• Basal area, trees per acre, tree composition, canopy information, downed logs and snags.</li> <li>• Articulate and quantify what the biologists consider owl habitat.</li> <li>• Needs for future modeling - Photo series, stem maps</li> <li>• Need review of on-site treatments that worked, disturbance regime, development history, prey habitat information, interagency agreement on what to do (Interagency IDT teams).</li> </ul>
<p>Fuels Planners</p>	<ul style="list-style-type: none"> <li>• Need consistent vegetation layers.</li> <li>• Monitoring is critical – need funding for long term monitoring.</li> <li>• Biologists need fire training experience to understand fire behavior and effects.</li> <li>• Fuels planners need clear, concise Desired Future Condition descriptions (e.g. What is the Historic Range of Variability of owls?) Where were owls prior to fire suppression and how many were there?)</li> </ul>
<p>Managers</p>	<ul style="list-style-type: none"> <li>• Need to communicate with upper management about needs for accomplishing goals (i.e., dollars, skills, people, and time).</li> <li>• Education aspect is critical (public, congressional representatives, etc.).</li> <li>• Clarify management’s role in these.</li> <li>• Need information on barred owls and other non-habitat effects, landscape level effects include connections between project and landscape, how much fuels reduction is needed, how to increase longevity of forests, owl population numbers across landscape.</li> </ul>

### **Appendix B3. Exercise 2 - Interdisciplinary Team Habitat Map Analysis**

For Exercise 2 we introduced the following Problem Statement: We recognize that dry forest ecosystems have declining spotted owl populations and increasing fuels accumulations. The trend in forest succession will continue to increase the risk of habitat loss. How can we minimize these risks while maintaining adequate amounts of suitable habitat for the spotted owl across the landscape?

The four specialist groups (biologists, silviculturists, fuels planners and managers) were each randomly divided into eight Interdisciplinary Teams (ID Team). Each ID Team was to work through a provided hypothetical exercise.

The Purpose and Need of the exercise was to develop/share treatment concepts, approaches, techniques and tools that stress fuels reduction to reduce fire risk while maintaining adequate amounts of spotted owl suitable habitat across the landscape both temporally and spatially.

The provided hypothetical example included Two Maps. The first map (Figure 2 in Appendix A3) showed Plant Association Groups (PAG) including mixed conifer dry, mixed conifer wet, and Ponderosa pine dry, spotted owl nest sites, and the 1.2 mile radius, nesting, roosting, foraging habitat (NRF), and roads and drainages. The second map (Figure 3 in Appendix A3) was a Digital Ortho Quad with 200' topographical lines.

The instructions were to:

- Assume typical Eastside Dry Forest structure
- Assume all visible treatments are early seral, all NRF is late seral, and the remainder is mid-seral
- Assume all areas are at high risk of fire due to dense understory and ladderfuels
- State any assumptions your group makes
- Build on the information we heard yesterday, and in Steps 1 and 2

Each ID Team was to describe actions they would implement to protect the productive spotted owl nest site, and report out their findings, including their rationale and important principles and practices they would utilize in treating landscapes to benefit spotted owl habitat. Each group will report out to the larger group.

Summary and Outcomes

- regional interaction,
- exposure of details of implementation,
- exposure of treatment types, concepts,
- collaborative
- will be able to see differing or similar approaches among regions
- will gain better understanding of evolution of regional thinking

The ID Teams utilized a variety of proposed treatments to reduce fire risk while maintaining adequate amounts of spotted owl suitable habitat across the landscape both temporally and spatially. Most of the teams agreed to treat owl reserves and buffers, but to minimize or avoid adverse impacts to NRF within these areas. The following are the notes from the flipcharts and maps of each of the eight ID teams.

### Interdisciplinary Team Notes

#### **Interdisciplinary Team 1.**

The Team had broad agreement on the basic concepts

Assumptions for the Case Example:

- Upwind stands are high intensity/low frequency fire regimes (Mountain Hemlock)
- Most fire starts will be downwind
- Fire pattern will be apparent on the ground, and will give some insight into how the landscape works

Treatments

- Western Hemlock stands to the west are high cost/low payoff for treatment
- Treatments in Ponderosa pine types will be needed to break up fuel connectivity and restore historic range of variability
- Lodgepole stands are probably not sustainable: hot spots for treatment (slashbuster and burn)
- Treatments in wet mixed conifer would focus on developing NRF characteristics and saving legacy trees
- Create conditions to hold the ridge south of the owl center would be a good thinning objective
- Wet mixed conifer is probably overstocked, even outside of NRF

The ID Team disagreed about what should be done in the core.

Information marked on the Map

- Proposed Patch cuts within Lodgepole pine wet within the 1.2 mile radius area
- Heavily treat mixed conifer wet habitat outside and adjacent to the 1.2 mile radius area using pre-commercial thin and prescribed fire.
- Thin between units in the mixed conifer dry and the Ponderosa Pine dry habitat outside the 1.2 mile radius
- Thin a swath of mixed conifer dry on the ridgeline

#### **Interdisciplinary Team 2**

Agreed that entering core owl reserves and buffers may be necessary.

They established the following objectives:

- Protect owl sites maintain 40% suitable habitat in 1.2 mile circle and 60 percent suitable habitat in 100 acre core.
- Promote growth of suitable habitat, inside and outside of owl circles
- No treatment of existing NRF within 1.2 mile circle

#### Assumptions for the case example

- Assume NRF habitat will be viable through next rotation.
- Assume fire will come from west based on vegetation and storm tracking

#### Treatments

- Prioritize mid-seral treatments in south and west
- Push for growth prescription in early seral, will favor fire climax species.
- Treat NRF outside of circles – maintain 60 % canopy and structural components for NRF
- Manage in mid-seral to reduce fire hazard and promote development of late seral
- Aggressive fuel reduction in lodgepole
- Manage Ponderosa pine for Goshawk and White headed woodpecker – open (not NRF)
- Mixed conifer dry – manage to maintain historic open pine
- In adjacent home ranges manage to develop late seral in mix conifer dry

Map was essentially unmarked except for a Fire Management Zone (FMZ) treatment on the ridgeline

### **Interdisciplinary Team 3**

Objective: Protect Core

#### Assumptions

- Dominant wind pattern from NW flow
- East Cascades habitat
- Few owls and remnant NRF in patches adjacent to activity center
- Assume no budget restrictions

#### Priority areas for treatment

- Treating NRF adjacent to core first to drop fire to ground before reaching core
- Then treat mid-seral adjacent to NRF northwest of core

#### Treatment – Phase 1 Treat 4,000 acres

- Ground fuel treatment first in NRF, hand cut, handpile and than burn
- Adjacent to NRF in mixed conifer wet, lodgepole and mixed conifer dry Aggressive canopy removal in mid-seral to reduce potential for crown fire in adjacent NRF.
- Variable density thinning from below

#### **Interdisciplinary Team 4**

Objective:

- Maintain NRF functionality

Assumptions:

- Primary risk is lightning ignition to the southwest
- Model on 97 percentile weather with ¼ mile fire spotting

Treatment:

- Treat non-NRF to provide for fire recidivism and accelerate development of NRF
- No regeneration harvest needed – target to leave desired species
- Commercial thin, pre-commercial thin and slash treatment – masticate
- NRF – Treat to maintain as NRF, and reduce fire risk - remove some small material to 9” WF
- Next – more treatment

#### **Interdisciplinary Team 5**

Main message from Step 2

- prey
- Interagency Groups
- Protect, maintain, and develop habitat where it can be sustained long term (be proactive)
- Some work can be done in core areas
- Insect and disease should also be included

Assumptions:

- Fire would move in from the west through the Lodgepole pines
- Owl Circle - Assuming functioning as owl habitat now

Treatments:

- Incorporate fire breaks
- In mixed conifer wet prioritize areas for treatment for those that are essential now, and long term for later treatments
- Ponderosa Pine yellow – treat to move to owl habitat quickly

#### **Interdisciplinary Team 6**

(no fire/fuels planners in this Team)

Issues – understanding maps, and limitations of time

Assumptions:

- No roads west of activity center, assume roadless/wilderness

Concerns for activity center; looks like less than 40% NRF

- Protect existing habitat in activity center, but still treat
- Look for opportunities for restoration
- Treat outside NRF, develop future options
- Ponderosa Pine may have best opportunities

Treatments

- “Cookie dough chip” approach
- Light treatment in NRF within activity center and southwest of activity center (Concerns of light treatment?)
- Fall burn in lodgepole (heli-torch)
- Use existing roads, and openings
- Treat existing openings and old units
- Big tree component treatments
- Use roads as fuel breaks and for access

Map Information – treatment within 10 acre core, cookie dough with chips” treatment just outside of 100 acre core within NRF in 1.2 mile radius, Pre-commercial thinning and masticate, and patches of treatment including prescribed burn in patches Southwest of activity center

### **Interdisciplinary Team 7**

Factors:

- Prevailing wind – west to east
- Drainages
- North facing slopes
- Lack of roads
- Long-term boundaries - access
- West side may not be economical or feasible due to roadless areas

Treatments

- Potentially focus on south facing slopes for treatment
- Plantations – thin and underburn (40-50 years old)
- Concentrate dry mix conifer for fuel treatment

### **Interdisciplinary Team 8**

Treatment Objectives

- Maintain and grow large trees
- Could not place home range in context to landscape; so concentrated on home range

Assumptions:

- All land open for treatment

- Fires move from west to east
- Projects need to be self supporting
- No WUI present
- Market for biomass

#### Treatments Outside Core

- Maintain existing NRF use light thin
- Mid-seral use a variable thin to maintain and grow large trees
- Early seral - thin to grow large trees
- Fuels treatment after thinning

#### Treatment in Core

- Light thin of mid-seral
- No treatment in NRF
- Fuels treatment where ever we thin

## **Appendix B4. Exercise 3- Group Landscape Scale Discussion**

*Objective:* Address fuels reduction and owl habitat protection at a landscape level.

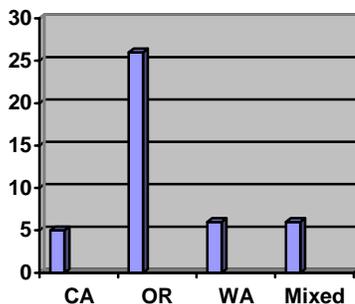
*How many Step 4 questionnaires turned in?* 50

*Geographic Area representation:* CA = 5, OR = 26, WA = 6, Mix = 6

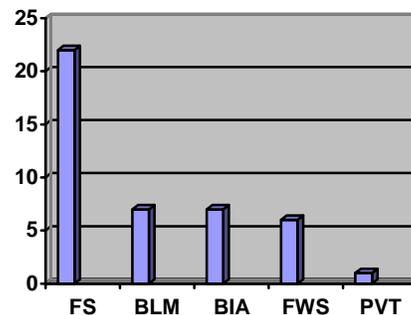
*Agency affiliation:* FS = 22, BLM = 7, BIA = 7, FWS = 6 PVT = 1

*Specialist:* Managers = 4, Silviculturists = 7, Wildlife Biologists = 28, Fire/Fuels = 3,  
6 forms w/o above information

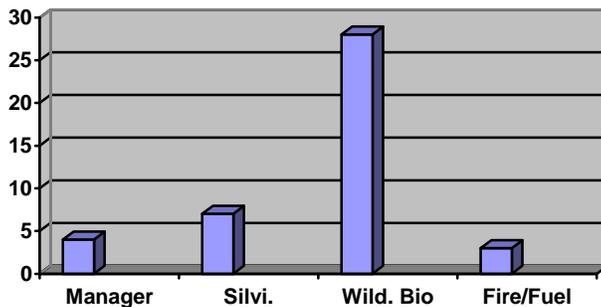
**Figure 1. Geographic Area representation**



**Figure 2. Agency Affiliation**



**Figure 3. Specialist's representation**



The following is a summary of participant's responses to a series of questions. Many participants provided similar answers to questions. Those similar responses were synthesized into a single bullet point.

*Question 1. Do we need to reduce fuel loads within owl habitat to conserve the owl?*

The majority of respondents (33) said yes to this question. Most of the others said "maybe" and only one said no. Those that said yes or maybe indicated the following qualified answers (please note that similar responses were combined into a single bullet):

- Need to be strategic, situational, and flexible in doing treatments
- Considerations for time and scale are needed; need to "cycle" habitat
- Concentrate on "drier" sites as first priority

- Not all habitat needs or should be treated all at once
- Be conservative near spotted owl site centers
- Balance short-term effects with long-term effects
- Treating too much too fast could be detrimental; have limited habitat left
- Need a long-range plan and landscape perspective
- Need to know the carrying capacity of landscape for owls

*Emerging themes from Question 1 suggest:*

1. yes, fuel loads need to be reduced within owl habitat to conserve it.
2. Not all habitat should be treated ...need to be strategic and prioritize fuels treatments
3. A larger landscape context to guide treatments would be beneficial in several respects (creating efficiencies, setting priorities, securing funding, etc)
4. We should continue to exercise caution in doing treatments

*Question 2. Do we need to reduce fuel loads within owl habitat to achieve overall fuels management objectives?*

This question received a relatively more mixed response from Workshop participants. Twenty-nine respondents indicated “yes” to this question, whereas 16 said “maybe”, while 5 stated “no.”

Those that answered “yes” and “maybe” had the following to say:

- Insect and disease mortality is also a concern
- Healthy Forest Initiative (HFI) has a role
- Stands outside of natural range of variation (NRV) and outside fire return interval need to be identified
- Fuels objectives are poorly understood, need ecological reasons for treating
- Objectives need to be integrated as a larger landscape strategy
- Need to “breakup” landscape to control fuels/fire
- Recognize that not everywhere or everything needs to be treated...PRIORITIZE
- Schedule treatments on a rotational basis; insulate LSRs
- Recognize treating nonhabitat
- Maybe we cannot afford short-term adverse effects?
- Current funding driving treatments and objectives...not necessarily compatible with resource needs
- Remember we are managing forest, not just producing owl habitat
- Its all about context (we need it)...related to landscape pattern and function
- No work within owl circles, treat LSRs, treat areas adjacent to owl habitat first
- Maybe too much focus on WUI...which may be the easier stuff to treat
- Similar to question 1, need to be strategic and have a landscape perspective

*Those that answered “no” provided the following:*

- Depends on resources and funding
- We may have excess owl habitat in some areas

*Emerging themes from Question 2 suggest:*

- Yes, to achieve overall fuels management objectives, we need to treat owl habitat
- Need to work in the more difficult areas...lots of work to be done outside of WUI
- Fuels reduction should have better defined objectives and be ecologically based
- Need to promote healthy forests, using Healthy Forest Initiative, natural range in variability, and other tools, concepts...its more than just providing for owls
- Need more landscape context to guide treatments

*Question 3. Should landscape strategies be developed to reduce fuel loads in and adjacent to owl habitat?*

Nearly all of the respondents (47) said “yes” to this question. At least two people said “no”, with the reasons being that we currently don’t know enough from a stand treatment perspective to work in NRF habitat and landscape strategies (SPLATs or Fireshed) currently exist.

Those that answered “yes” had the following to say:

- NRF and connectivity values can still be an objective along with breaking up fuels
- Should be part of an overall owl-landscape strategy for east Cascades forests
- Yes, especially if the owl site is active and productive
- Need to keep owl prey species in mind and the distinction between nesting, roosting and foraging
- Need to think about developing future habitat
- Need to consider more the risks along with prioritizing sites, vulnerable ones and hazardous areas
- Need to have broad scale context before landscape planning
- Each 6<sup>th</sup> field HUC needs a strategy and priorities set and “edged” mapped with adjacent HUCs. Some advocate for Forest-wide or Provincial level
- Landscape planning should include other resource needs beyond owls
- Landscape plans need to limit the potential spread of fire and protect current sites – add to Watershed Assessment documents
- Recognize (reality check) on how much treatments actually can be done
- Only way it will be successful is at a landscape scale and part of overall forest management strategy
- Should be tied to an owl recovery plan or something similar (a document to guide where and when)
- Need an hierarchy of owls and habitat... 1) need maintain, 2) need restored
- Interdisciplinary development of a strategy would seem the best approach...need to construct which habitat to develop

*Emerging themes from Question 3 suggest:*

- Overwhelming, respondents believe a landscape approach should be developed for reducing fuel loads in and adjacent to owl habitat

- Integrated (of resources values) and interdisciplinary teams (including USFWS) should work cooperatively to develop the landscape strategy
- A larger scale context needs to be set to tie a landscape strategy to. For example, either at a Forest or Provincial level, maintenance and restoration priorities should be spatially identified. District or small scale plans can tier to these, with their own complimentary priorities.

*Question 4. If you answered yes to #3, at what scale should landscape strategies be developed (watershed, FS Ranger District/BLM Resource Area, FS Forest/BLM District, Province)?*

- Three Levels of planning: PAG, Forest or BLM Resource Area, watersheds (for fine tuning)
- Aggregate watersheds to account for dispersal and connectivity
- Forest-wide (i.e., Tribal forest); however, Tribal council could have problems collaborating with outside agencies
- Scale of the budget; second – scale of how far fire can go in a day
- Start at watershed level then build up to district then Forest
- Owl range – Forest – District- fire regimes - watershed
- Forests need to talk to each other
- District or Forest scale at a minimum – large enough for owl meta-population
- Nested approach – starting with province
- Tiered – province then District
- Scale of predominant disturbance
- All of the scales...what would happen to spotted owl viability if most of the habitat burned in 20 yrs?

*Emerging themes from Question 4 suggest:*

- Need to start with coarse scale strategies at the province scale, moving toward finer scale strategies at watershed scale – however connected among the Forests. Do not design at a broad scale, do this at watershed scale.
- Start with owl range – need coarse strategy to identify restoration and maintenance areas for owl habitat. Then look at subprovince and 5<sup>th</sup> field watershed. Need to have hierarchy template applied throughout this sequence at the appropriate level of detail.

*Question 5. Outline the next steps that the Forest Service, Fish and Wildlife Service, and BLM need to take to minimize the loss of owl habitat across its range due to fuel build up.*

- Adopt spotted owl recovery plan or at least have some provincial planning in the meantime
- Develop strategy to increase budgets
- Build public/interest group support
- Fill in science gaps/monitoring and inventory

- Convene expert groups (mix of scientists, program leaders, field folks) to identify existing habitat that should be maintained at the scale (5<sup>th</sup> field) so that local units can geographically locate where to apply their knowledge. Scale this down from the province and identify Phase I and II (short and long term maintenance)
- Fund T. Spies for an Eastside GIS analysis for forest management options along with restoration and maintenance options at a province level
- Need bigger picture to tier to.
- Look for partnerships for funding and planning
- Maintain existing owl sites; treat around them for a while, then treat the sites.
- Maintain the large trees (takes too long to grow them back)
- Convene group of specialists develop tiered approach of restoration and maintenance.
- Change fuels funding to balance WUI with other resources
- Get a better handle on owl locations for project planning
- Need better science on eastside owl habitat use

*Emerging themes from Question 5 suggest:*

- Need to shift resources to be less WUI centric
- Provincial to Forest analysis by an interagency team: describe fuels and owl current conditions; desired future condition, and priorities for treatments: keep what we have in short-term; develop habitat for long-term, monitor to measure success, adapt to monitoring results
- Need recovery plan or an umbrella strategy to tier from the province downward: Interagency development of strategy for fuels/owls – general prioritization rangewide of maintenance and restoration of habitat; then prioritize within administrative unit
- Identify at risk habitat and prioritize across the provincial landscape; develop treatments at watershed scale
- Agree on site-specific definition of owl habitat and just how low the habitat quality can be taken and remain stable as a balance to type of density and fuels management treatments allowed; Understand and identify areas at risk to habitat loss due to fire and insect and disease and overstocking; Identify best habitat where retention is critical to maintaining owl populations; Convene interdisciplinary team and identify acceptable options for treatment that reaches reasonable compromise between owl habitat, fuels hazard and stand conditions-locations on the ground feasible to treat; get funding, implement treatments, and monitor effects to the spotted owls as well as meets fuels and silviculture (forest health) objectives

*Question 6. Do you have specific recommendations at the Forest, BLM District, and/or Provincial level to reduce fuel loads and protect owl habitat?*

- Convene Team for large scale and mid-scale analysis to assess risk to owl habitat and prioritize.

- Relate how project-scale fits into larger scale, movement toward desired future condition
- These plans need a temporal and spatial scale
- Focus on high risk areas of fuel loads
- Develop guidelines for stand and landscape level treatments using known owl site information
- Develop guidelines for stand and landscape level treatments in absence of owl site information

*Biological:*

- Current status/distribution of owls and at-risk habitats
- Accept risk in some areas to protect others
- Know how you will develop habitat through time so X amount is always on-line
- Spotted owl habitat should be described in silvicultural terms
- Spotted owl recovery plan should set priorities in recovery units...priority actions stem from this
- Thinning is possibly the most effective tool we have to manage forest. We need to utilize it more and think about doing away with diameter prescriptions
- Protect active nests first; Identify active nests most at risk to fire; Identify critical connectivity areas to protect; identify treatments that promote NRF

*Land Management Actions:*

- Support biological recommendations
- Restructure the budget and organization to support efforts beyond own unit mindset
- Agree that “no action” is not necessarily the answer
- Use adaptive management feedback loop
- Identify reasonable short and long-term risks
- Utilize flexibility of NWFP LUA in developing treatments
- Need to have multiple pathways for doing things....all shouldn't go down same path
- Utilize existing watershed analyses and tier these upward for coarse scale analysis....need bigger context picture...convene group to provide the latter

*Policies:*

- Super streamlined consultations
- Adopt spotted owl recovery plan or provincial strategies
- Support public involvement in strategy
- Support/credit actions for protection of habitat, not just fuels reductions
- Look to reallocate funds beyond just WUI work
- Need to better inform decision makers regarding urgency of situation
- Make sure THIS SESSION'S notes/results are distributed to MANAGERS and that follow up actions/tasks occur
- Alter policies that preclude actions in owl circles, NRF, critical habitat etc. Use the policies we have to treat the same.

*Research:*

- Focus on issues with uncertainty; barred owls, prey
- Develop tools to allow units to assess risk to illustrate spatial and temporal treatment priorities and/or protection priorities
- In adaptive management, test various treatments and owl/vegetation response
- Test effects of treatments on prey
- Synthesize existing treatment knowledge on prey....owls?
- Work with new Prineville PNW station to address forest fuels and owl issues
- How do we develop prey habitat?

**Exercise 3. Landscape Scale Discussion**

**Geographic Area** \_\_\_\_\_

**Agency** \_\_\_\_\_ **Specialist** \_\_\_\_\_

**Objective: Address fuels reduction and owl habitat protection at a landscape level**

- 1) Do we need to reduce fuel loads within owl habitat to conserve the owl?
  
- 2) Do we need to reduce fuel loads within owl habitat to achieve overall fuels management objectives?
  
- 3) Should landscape strategies be developed to reduce fuel loads in & adjacent to owl habitat?
  
- 4) If you answered yes to #3, at what scale should landscape strategies be developed (watershed, FS Ranger District/BLM Resource Area, FS Forest/BLM District, Province)?
  
- 5) Outline the next steps that the Forest Service, Fish & Wildlife Service, and BLM need to take to minimize the loss of owl habitat across its range due to fuel build up.
  
- 6) Do you have specific recommendations at the Forest, BLM District, and/or Provincial level to reduce fuel loads and protect owl habitat?

Please provide your recommendations in the following categories:

Biological:

Land Management Actions:

Policies:

Research:

## **Appendix B5. Evaluation Summaries**

### Day 1 Attendee Evaluation Summary (30 evaluations compiled)

#### *1. What is the most important idea or concept that you are taking away from this Workshop?*

- Focus on resources from the ground on up
- Talking about adaptive management in owl circles
- FWS support and flexibility to manage for NRF
- Realization that actions have been too conservative in owl habitat
- Be open and adaptive and flexible
- Do nothing in NRF, likely lose the habitat in a wildfire or other disturbance
- Dry forest habitats will burn eventually
- Treat mosaic in and around owl sites
- Do more management in LSRs
- Relationship of HRV departure to sustainable spotted owl habitat under current conditions
- Currently doing good work on the issue; more than executives realize
- Treat in moderation
- NWFP reserves were not designed for landscapes as dynamic as those in the dry forests
- It will take multiple treatments in multiple years to manage for spotted owl habitat
- Questions asked, strategies passed reality checks, source information to review and use to develop sites specific strategies
- Prioritize management for future NRF stands on good sites
- Glad to see the “Gang of 4” members recognize the significant difference in trying to sustain a resilient spotted owl habitat in dry forests
- Different techniques the forests are using to approach the problem
- No touch areas is a bad idea and that areas should be treated if even very lightly
- Like the forward thinking of providing habitat for the future
- Use treatments to improve/maintain spotted owl habitat while reducing the risk of stand replacement fire
- Paradigm shift; there is becoming a watershed change in attitude among natural resource professionals about the need for intervention in forest habitats. It has taken a long time to reach this critical mass among the technical working professionals
- Don’t do the same thing everywhere
- Calibrate
- Need momentum out of this meeting to plan and implement appropriate treatments before the next big fire takes out too much more habitat
- Humans remain very arrogant about our knowledge and understanding of the natural system
- We continue to emphasize landscape scale, yet we talk about stand and individual trees when we get to the details
- We are definitely improving our general understanding of systems, at least as modeled on computers, and we are trying to improve our understanding
- Diversity of treatment samples to learn from

- Manage for prey base (rats, squirrels)
- Even though issues get very complicated ( i.e. barred owls), we still have need and function for late and old structured stands that are resilient to disturbance events
- Conflict exists with fire and owl habitat
- Unstable forest conditions present a difficult challenge to management
- Importance of landscape considerations in addressing this issue

2. *Will you actually practice on-the-ground implementation of the concepts you heard at this Workshop?* (Yes – 23; No – 5; Hopefully – 2)

If Yes, describe what the actions might be.

- All resources are of equal value
- Different thinning rates over time
- Monitor owl response to manipulation
- Fuel reduction with mastication and prescribed fire
- Silviculture treatments, pre-commercial thins, small diameter commercial thins all within natural stands and plantations using small group (1-4 acres) for stand diversity
- Apply SPLATS to a functional LSR that is at high risk of loss from wildfire
- Try SPLAT in LSR leaving but buffering roost site. 1<sup>st</sup> go around will be canopy closure.
- Implement Franklin/Johnson concepts if funding allows
- Carry on with considerations of diversity, legacy and protecting what we have now as well as balancing where the owls may be
- Planning projects with attention to biological approach, socio/political considerations, economic challenges/opportunities
- Need more flexibility/positioning of LSRs/NRF
- Management must buy into making the planning needed for landscape strategies a priority for funding and future treatments
- Informed implementation
- Build monitoring programs that will better describe these habitats in regard to fuels treatments
- Use new prescriptions and hopefully have the support and adoption of the USFWS
- New policy
- Review BAs
- Consultation advice = if some big trees (within reason) are not contributing to good of fuel reduction, or growing of future habitat, be firm with rationale why you are pushing to more thinning versus an arbitrary diameter limit that limits your goal accomplishments
- Fireshed approaches to strategic planning
- LSR, matrix, DDR, DDRB management – thinning mostly with fuels
- Fuel treatments in un-mapped LSRs
- Begin protection of scarce LSR habitat through fuel treatments adjacent to LSRs, then work within LSRs given time and financial resources
- Will put in a mosaic of both fire and fuels between LSRs
- Treatments within and outside LSRs dependent on being able to get some interest in retention of options outside of WUI with prescribed burning

- Prey base is the main limiting factor in habitat for spotted owl, not amount and distribution of nest trees
- External factors such as barred owl range extensions and West Nile virus may cause decreased success even with increased habitat quality and quantity
- Doing something in a heads-up, look-around kind of “landscape” context may help with varying degrees of resilience
- Strive to promote greater understanding of how forest systems/spotted owl habitat are dynamic and require thoughtful management to retain essential elements & processes

1. *Value of this Workshop to your job position:*

Very-Very = 2; Very = 6; Mod – Very = 11; Moderate = 5; Not-Mod = 7; Not at All = 0

*Notes:*

- ✓ Good speakers
- ✓ Well organized
- ✓ Good facility
- ✓ Thanks FWS
- ✓ Glad that the Davis Fire Salvage actually dealt with small diameter burnt which is the real future fire hazard
- ✓ Wenatchee model was good
- ✓ Value of Workshop depends on future assignments
- ✓ Practice on the ground implementation depends on NEPA
- ✓ Concerned about Sisters Ranger District plan to designate the best ground on the district to grow spotted owl habitat. When did the mission of the FS become to forgo management of everything else to grow spotted owl habitat?

4. *Recommendations for future Workshops:*

- Provide actual owl responses to the different manipulations
- New tools, techniques, realizations
- Share experiences
- Continue to meet and dialogue
- Provide a map of the BLM/FS/Research areas so group knows who their neighbors are
- Extend to 3 days so speakers have more time
- SW Oregon risks. Is reluctance to recognize hazard in SW mixed conifer and fire/silviculture/owl objectives. Tendency to single resource management objective. Need to find and stress interdisciplinary goals.
- Incorporate detailed fire behavior information that illustrate effective treatment choices
- Bring in fuels prescriptions for maintaining forest structure
- Demonstrate SPLAT training
- Provide participant list, papers, handouts, Powerpoint presentations
- Provide scope of value of eastside spotted owl population to overall population viability
- Incorporate day 2 into a field trip
- Social issues related to spotted owl management
- Provide feedback forums where groups gather annually to share spotted owl management results

- A talk on owls and other specific needs for those people who work in possible owl habitat that are not wildlife biologists
- Status updates on what has appeared to work and what has not on forest stand treatments to improve spotted owl habitat in understory fuel landscapes over the range of dry forest ecosystems (and particularly in SW Oregon’s dry mixed conifer)
- Key bit of information missing was a discussion of the historical ranges and extent of spotted owl habitat and of owl populations prior to fire suppression
- How about some more stakeholders or something similar to these
- Break-up talks wand working sessions on each day instead of 1 day devoted to talks and 1 day to working groups
- Position the projector screen so it can be seen over the heads of participants (raise the bottom of the screen so it is 5’-6’ off ground)
- “Geriatric Forestry” – keeping the old forests alive Workshop
- Bring in the social/policy folks who will take this message to the general public. May need to get biological/ecological thoughts together first but need to engage the public in these efforts.
- We need policy makers to carry the message
- Building consensus for managing dynamic forests
- Dr. Forsman should have before fire - after fire pictures of many of the nest sites
- Address the question of should we put a lot of time and effort into maintaining spotted owl habitat on the eastside when most of us are aware that spotted owl habitat is a direct result of fire exclusion
- 

5. Describe your job position:

<i>Agency/Organization</i>	<i>Discipline</i>	<i>Number of Responses</i>
BLM	Fuels and Fire	4
	Wildlife	1
	Silviculture	1
USFWS	Management	2
Forest Service	Wildlife	6
	Silviculture	4
	Management	2
	NEPA/planning	1
	Ecology	1
	Research & Development	1
	Entomology	1
BIA	Management	1
Tribal		1
ODF		2
Other wildlife		2
Other		1

*Day 2 Attendee Evaluation Summary (21 evaluations compiled)*

*1. What is the most important idea or concept that you are taking away from this Workshop?*

- Need to maintain high quality LSR/habitat in dry eastside area
- Science of silviculture and fire behavior need to be considered in spotted owl habitat management in spite of the wildlife biologist religious mindset revolving around preservation
- Various federal agencies must work together in ID team settings to develop management actions to address spotted owl habitat loss
- Together we can work to solve local natural resource issues
- Need to more closely work together and good evidence that the FWS is ready to be part of the solution and better recognize the threats/risks we're having to deal with
- Recognizing that habitat protection and reduction of fire and insect risk are not going to be optimized on the same acres
- Need to emphasize treatment around other than in habitat
- Reinforcement of the importance of information such as PAG and fire regime mapping
- Emphasis on foraging habitat, managing for prey as another approach to owl conservation
- Agreement on managing sustainable habitat almost independent of LUA
- Team work and education on a large scale to include the public
- Dry forest ecosystems are very different and need to be treated as such
- Be strategic
- Better understanding of the problem, data limitations, research needs, and owl habitat on the east side
- Support from FWS, FS and BLM to manage in spotted owl habitat
- Collaboration at all levels (specialists, managers, public, Congress) will be critical to meeting our objectives.
- Need to better communicate our definitions and desires for future conditions
- Making non-owl habitat to protect owl habitat. It is about time we realize that owl habitat can't be grown on mediocre productive sites
- Determine what size landscape you will manage habitat on and prioritize management on a hierarchical approach that will sustain short term and provide long term spotted owl habitat
- Doing nothing is a disaster waiting to happen
- Widespread recognition of the problem but very surprised we don't have a plan in place to aid prioritization of increasing sustainability of owl habitat in dry forests
- Building on what we have learned from the past and how to take the next step up to the NWFP
- Variability region by region
- Biologists and scientists are actually starting to consider some of the risks (fire and insects) associated with trying to preserve owl habitat
- Prioritize
- Be open
- Communicate with adjacent agencies more-very valuable

2. Will you actually practice on-the-ground implementation of the concepts you heard at this Workshop?

Yes – 19; No – 2; Hopefully - 0

*If Yes, describe what the actions might be.*

- Prioritize vegetation treatments
- Planning entries into NRF, dispersal habitat.
- Thinning from below
- Developing priorities for both preserving and growing new habitats
- Drafting a landscape plan for spotted owl management reflecting the ideas discussed
- Renewed emphasis on effects to prey
- Communicate the very points to management
- Application to forest plan revision
- Assign/define risk to loss of fire and development of future habitat
- Influence thinking outside of the box
- Treating NRF can improve long term persistence of spotted owls and should not be considered as no treatment areas
- Use the best minds and analysis tools we can to evaluate our treatment effectiveness through both modeling and monitoring
- Treatment within LSR and habitat
- Secure adequate funding for owl surveys and monitoring
- Develop a district-wide strategy for the long term recruitment of NRF as well as protection strategies for existing habitat
- Promote a collaborative effort to develop a photo series of the various habitat types/conditions
- Prioritize opportunities in relation to risks
- Chunk-cookie theory, but I worry that actions will occur in NRF just to work in NRF. We need to make sure if we do work in NRF that wildlife and fire fuels folk are getting something out of it.
- Why alter NRF if it won't effectively help with fuels and fire fighting?
- Secure funding to do owl surveys on the Bend/Ft. Rock RD
- Develop and prioritize treatment in areas to sustain current owl habitat
- I'll be a cheerleader to the cause and will keep laying this in front of the policy folks
- Continue projects that increase likelihood of sustainability of dry forest owl habitat
- Strategically placed treatments of "thinning from below", no treatment, integrated with landscape features (rock outcrops, roads, low density forests)
- Landscape planning and the need for flexibility in reserves and land allocations
- Utilize fire and fuel management to achieve conservation objectives
- Treat/care for the management of existing old growth component
- I would listen more to fuels concerns and the possibility of treating in owl home ranges
- Be more open to treatment in core owl areas as I am treating in NRF and the owl circle

### 3. Value of this Workshop to your job position:

Very-Very = 1; Very = 7; Mod = Very – 6; Moderate = 4; Not-Mod = 4; Not at All = 0

#### Notes:

- ✓ Value of workshop depends on acceptance of wildlife biologists to entry into NRF
- ✓ Hats off to FWS for putting on this Workshop! It is timely and encouraging to this natural resource manager
- ✓ Good dialogue
- ✓ You've done an excellent job with this one.
- ✓ Time well spent
- ✓ Organization, facilitation were good
- ✓ Why didn't this session attract more ODFW staff (Day 1 = 1; Day 2 = 0)
- ✓ In research, we are interested in how we can better serve the management community. Workshops like this give me a great chance to interact with managers.
- ✓ Great to see the implementation of yesterday's ideas. The exercises were well thought out with good questions
- ✓ Implement concepts if we can get them through NEPA and the public

### 4. Recommendations for future Workshops:

- Workshop questions need effective facilitation
- Need more time for questions
- Franklin phone conversation a waste of time
- Publish presentations along with images
- Geriatric Forests – Are we loving our forests to death?
- Include more upper management types including high level REO, RIEC
- More representations by managers (those who probably need to hear these discussions the most). There seemed to be a lot of general agreement among the specialists
- Include Forest Supervisor, district rangers and public leaders
- Have NOAA fisheries attend as they have a stance too.
- Program managers could emphasize the importance of a Workshop like this for all disciplines. It was made a priority only to the biologists on our forest.
- Reach out to fire specialists more (local feeling was that this was geared toward biologists so there was little to no support from fire managers to send anyone)
- More on risk management and prioritization
- Have the Workshop late fall or early spring
- Break up presentations with work group activities
- Stronger engagement of FS Regional Office is important
- Provide handouts addressing basic spotted owl and Barred owl biology and habitat use including basic definitions
- More focus on what's working on the ground (stand to project level)
- Have at least a draft range/province wide analysis of problems and how far are we from sustainability
- Sectionalize the eastside spotted owl range to display fundamental habitat differences and then relate those to treatment/protection options

- Host more localized owl and eastside workshops
- Invite USFWS, FS, Warm Springs and ODFW and work through a current owl condition and collaboratively work for some solutions to get a forest wide strategy lined up
- Identify success stories on the eastside managing spotted owl habitat
- Meet again to see if any new treatments are going on
- Meet to share new information
- Smaller groups to get the big scale hierarchy flushed out
- How to apply lessons learned to future management
- Outdoor live examples
- Last exercise very helpful. People who don't feel comfortable speaking in front of others can write down all their thoughts

5. Describe your job position:

<i>Agency/Organization</i>	<i>Discipline</i>	<i>Number of Responses</i>
BLM	Wildlife	1
USFWS	Management	1
	Wildlife	2
Tribal		1
	Wildlife	1
	Natural Resource Officer	1
BIA	Management	1
Forest Service	Wildlife	6
	Silviculture	3
	Management	3
	Ecosystem Process Research	1