COPWRR Project-Level Ecosystem Monitoring Report Form

Project: Greater La Pine Community WUI Hazardous Fuel Reduction - Darlene
NEPA Authority Used: Environmental Assessment
Date: June 9, 2009
Interdisciplinary Team Members Participating: Steve Castillo, Cassandra Hummel, Dennis Fiore, Rick Demmer, Bill Dean, Steve Robertson
Other Participants in Field Evaluation: Ken Lane, Jim Gustafson, Tim Lillebo, Marilyn Miller, Jennifer O'Reilly, Amy Waltz, Todd Hansen, John Williams, Phil Chang, Katrina Van Dis, Robin Vora
Unit #1 (Appendix A - Lodgepole Pine Management; EA - Band 1; and Project Implementation Strategy - FTU 28)
Acres in Unit: 494.6
Other Units from Project Being Monitored:

Background

Purpose and Need for Treatment of Unit (as stated in EA Section 1.4):

The primary purpose of this project is to improve public safety by reducing hazardous fuels, to reduce flame lengths of surface fire, and to reduce the potential for crown fire (wildfire moving through tree canopies rather than staying on the ground). The secondary purpose is to restore ecosystem health and to improve long-term resiliency to insects, disease and fire. This treatment will be accomplished through the following objectives:

Primary purpose:
1) Reduce the crown fire potential by reducing fuel loading, ladder fuels and crown bulk density by treating approximately 19,212 acres.
2) Provide for an increase of defensible space areas created within the wildland-urban interface boundary

Secondary purpose
3) Manage stand structure, density, species composition, patch size, pattern and distribution.
4) Maintain and improve ecosystem health by recycling nutrients, decreasing competitions for water and sunlight, and increasing resistance to insects, disease and fire.

Management Objectives for Unit (As stated in Appendix A):

Lodgepole Pine management for ecosystem benefits would focus on reducing LP in PP stands and meadow ecosystems. In PP and meadow sites, treatments will restore a more natural (historic) condition on the landscape, and one that, when fire is present, supports low-intensity fires with flame lengths that fire suppression crews can safely fight on the ground. Since LP often burns in a manner that produces a stand-replacing crown fire, project goals within LP sites are not to maintain natural processes, but to decrease stand density, manage for other plant community types, and reduce the likelihood of crown fire. Since LP is highly susceptible to fire, the emphasis for LP management in this WUI would be to replace it with the more fire resistant PP where possible on appropriate sites, or to manage it in a structure more like a PP ecosystem.

Treatment Summary for Unit:

<u>As stated in FTU 28</u>
Objective: Hazardous Fuel Reduction of lodgepole pine; focus on fuel reduction management and wildlife habitat emphasis, not for historic range of variability.
Notes: Partial treatment 1990, hand pile
Treatment Type: Pre-commercial thinning, 20-30 ft spacing

<u>As stated in Appendix A – Lodgepole Pine Management</u>
Prescription:
1) Implement prescriptions targeting LP when it occurs in the vegetation types or management areas described below. PP restoration and wildlife habitat emphasis describe specific treatment for LP in these areas.
2) In heavy LP areas, fuel reduction and wildlife habitat will be emphasized (not for historic range of variability)
3) Where LP occurs in Band 1 (100-500ft from structures), treatment will attempt to reduce and maintain LP in a relatively low density structure. Trees thinned to 20-30 foot spacing tend to remain healthy, grow large and be less susceptible to insects, disease and fire. Periodic maintenance will occur with mowing and pre-commercial thinning. This will help produce a stand that will be similar in structure to a mature PP stand type.
4) Patch Cuts:
In Band 2 (500-1,320ft) and Band 3 (1/4 mile – 1.5 miles) use patch cuts of ¼ to 5 acres in size. The openings would be in various shapes with an irregular boundary to facilitate natural regeneration. The total area will not exceed 5% of the total during the 7-10 year implementation. Patch cuts are used as a means for managing insects and disease and to develop healthier LP clumps while retaining current cover, diversity and fuels reduction treatments. In some cases, prescribed burning may be applied. Implementation of this prescription would be conservative in the first few years in terms of number of patch openings and size. This prescription will usually be applied in 3 situations:

1) Where LP stands are suppressed and/or severely infected with disease, making them unmanageable with thinning.
2) Where expansive stands of interior even-aged LP occur, providing conditions conducive to bark beetle attack or wildfire.
3) Where horizontal and/or vertical wildlife habitat diversity is lacking.

Selected Implementation Guidelines, Management Measures, and BMPs to Evaluate:
As stated in EA: 2.2 Best Management Practices, See attachment for more information

Vegetation: Botanical surveys will be performed prior to any fuels treatment; special status plant habitat would be avoided if necessary

Weeds: Prior to arriving at a unit, all vehicles/equipment will be washed to remove noxious weed seeds from undercarriage

Soils:
- When frozen with 6" or more, no pass limitation
- Dry or moist soil – operate track or wheeled machinery, but not on wet as defined in guidelines for soil moisture conditions
- Not frozen- designate main arterial trails (over 3 passes or use a recording GPS, keep spacing 100' or more
- Rehabilitation methods include: subsoil skid trails used > 3 times, plant with native species, and pull wood slash and organic debris back onto skid trail
- For wet ground/loamy sand – if soil forms a weak ball under certain conditions, don't operate

Thinning: non-commercial size trees(generally < 6" dbh), promote hand felling; scatter non-commercial trees and slash on ground, less slash left in home protection zones, emergency egress routes, administrative sites and visual resource monument sensitive areas

Wildlife:
Deer Migration Corridor: 40% of BLM managed lands will be retained for suitable hiding cover, minimum cover patch size should be approximately 6.5 acres, and have a minimum width of at least 600 feet, and be located within1,200 feet of another suitable cover patch. In areas lacking 40% cover, treatments would be limited to fuels within the first 500' band and possibly in Band 2.

Snags and Down logs:
- PP stands – retain at least two hard snags ≥ to 9"dbh/acre
- LP stands retain at least six hard snags ≥ to 9"dbh/acre
- Retain at least 120 lineal feet of down logs (Class 1 and 2) per acre ≥ 8" diameter at the small end. Logs less than 12' in length will not be credited toward this total
- Retain all snags (stages 5-7) and down logs (Classes 4-6) from harvest and avoid destroying

Unit Evaluation

Were the treatments implemented as described in the decision document or Record of Decision? Were the treatments implemented in accordance with the Selected Implementation Guidelines, Management Measures and BMPs identified above? If not, please explain why.

The Greater La Pine EA specified a WUI treatment band approach for this area (in which the strip of land closest to human settlements would have the most aggressive fuel reduction) and

also specified certain treatments for Field Treatment Unit 28 in the EA Proposed Treatment Prescriptions by Unit. But between the time when the Prineville BLM District completed this programmatic NEPA document and when it began implementation, District wildlife staff determined that the need to leave wildlife cover was much higher than had been anticipated during the development of the EA. 40% of the total acres within the project area must be hiding cover. So the original prescription had to be modified. The Prineville BLM District also used Appendix A – Treatment Prescription Categories to describe the types of treatments that would be implemented in different stand types. The ultimate treatment of Darlene Unit 1 was a combination of the prescriptions detailed in the band treatment strategy, EA Proposed Treatment Prescriptions by Unit, and Appendix A.

In the first 500 foot band (nearest to human settlements) forest fuels were aggressively reduced through both commercial and non-commercial thinning techniques. In the second band an understory thin was not done. In the second and third band the BLM began to integrate larger cover patches to meet the wildlife cover objectives of the project. In part because of federal stimulus funds, the BLM had greater opportunities to dispose of fuels through biomass utilization than anticipated and this reduced the need for piling and burning. There was still a certain amount of downed material left on the project site and the BLM was trying to decide whether this needed to be piled and burned or whether dispersing this material and spreading it on skid trails adequately addressed fuel load concerns. In the longer term, the BLM would like to maintain the area with mowing in a few years.

For the commercial thin, a 16" diameter limit was used and the contractor was directed to leave all snags and wolf trees. A significant number of snags were created in the area, using a diagonal cut and trying to make the tree break off and leave a jagged to. The BLM directed the stewardship contractor to select trees for removal based on tree health, disease, and vigor first and then based on spacing second to achieve a more heterogeneous look. Typically, this kind of treatment would be completed over frozen soil. But the windows of opportunity to work over frozen soil were limited this winter so much of the work was completed on un-frozen ground with no snow. Skid trails were spaced every 100 feet as specified in the BMPs and slash wwas being placed on the trails to close the area. Existing landings were re-used.

Participants in the field review appreciated all the practical reasons for varying from the prescription and BMPs in the NEPA document. Still, there were some concerns that the ultimate treatment varied from what was specified in the NEPA document. If the NEPA document describes the project that the public accepts through a public participation process, it is important for transparency and trust building for the final treatment to mirror the NEPA prescription as closely as possible.

For each Management Objective for this Unit please evaluate whether the objective has been achieved. If the objective has not been achieved, please comment on barriers, constraints, limitations, etc and what might be needed for future projects to achieve the objective.

The BLM sought to strike a balance between reducing fuels and maintaining cover for wildlife at this site. Participants in the field review agreed that the site would support lower intensity fire with shorter flame lengths after treatment than it would have prior to treatment, and that the

likelihood of crown fire was lower. Still, the fuels staff who participated in the review thought that the crown bulk density in bands 2 and 3 were higher than would be desired from a fuels perspective if a crew had to come fight a fire in the project area.

Project Evaluation

Were the results of this project what was anticipated and intended? Have treatments addressed the Purposes and Needs for this Unit? If not, why not?

As described above, the field review participants thought that the treatment had addressed the hazardous fuels reduction goals and objectives of the project, especially in the first band of treatment. There was a lengthy discussion about providing wildlife cover in the project and how the BLM had met the 40% hiding cover criteria. Substantial thought and planning went in to working with existing mule deer travel habits, excluding areas from treatment, including leave patches in the treated area, and designing the shape of the fuel breaks along road corridors. Participants in the field review appreciated the care that had been put into preserving wildlife cover. If part of the Purpose and Need was to "manage the structure, density, species composition, patch size, pattern and distribution" to preserve and restore ecosystem health the careful attention to wildlife cover seems to have addressed that goal.

Some participants had a strong initial reaction to how intensively the forest was thinned in Band 1. Though there were not houses at the site yet, BLM is treating Band 1 to provide a fuel break for the development that is slated to occur there in the future.

Please share any observations or comments about the project planning, implementation, or results that are important to understanding management of this unit or important for improving future management in similar projects.

Participants in the field review expressed a desire to see more heterogeneous spacing of trees in the project area after treatment (clumpy, patchy, gappy). There was significant discussion of snags. There was agreement that when creating snags using larger trees and cutting higher up was preferable. There was some discussion about the angled cuts used to create snags in Unit 1 but no consensus on whether there was an advantage or disadvantage to angling the cuts. Aesthetically, many liked the effect when the tree was partially cut and then the top of the created snag ripped apart as the tree top fell. Marilyn Miller inquired about whether the BLM could not just top trees but also do some drilling down into and into the side of the newly created snag tree.

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Unit: #1 (Appendix A – Wildlife Habitat Emphasis; EA – Band 3; and Project Implementation Strategy FTU 27
Acres in Unit: 971.2
Other Units from Project Being Monitored:

Background

Purpose and Need for Treatment of Unit (As stated in EA Section 1.4):

The primary purpose of this project is to improve public safety by reducing hazardous fuels, to reduce flame lengths of surface fire, and to reduce the potential for crown fire (wildfire moving through tree canopies rather than staying on the ground). The secondary purpose is to restore ecosystem health and to improve long-term resiliency to insects, disease and fire. This treatment will be accomplished through the following objectives:

Primary purpose:

1) Reduce the crown fire potential by reducing fuel loading, ladder fuels and crown bulk density by treating approximately 19,212 acres.
2) Provide for an increase of defensible space areas created within the wildland-urban interface boundary

Secondary purpose

3) Manage stand structure, density, species composition, patch size, pattern and distribution.
4) Maintain and improve ecosystem health by recycling nutrients, decreasing competitions for water and sunlight, and increasing resistance to insects, disease and fire.

Management Objectives for Unit: (As stated in Appendix A)

The objectives for this unit are to promote healthy and vigorously growing stands of trees; develop and/or maintain structural diversity and; develop and/or maintain a mosaic of forest conditions ranging from relatively dense stands to relatively open-growing stands of trees.

Treatment Summary for Unit:

As stated in FTU 27 and Appendix A
Objective: Wildlife Emphasis
Notes: No treatment history
Treatment Type: Pre-commercial thinning, 18-20 feet spacing in Band 3 (¼ mile and up to 1.5 miles from properties designed to reduce the occurrence, size and severity of crown forest by breaking up fuel continuities and limiting ladder fuels)

As state in Appendix A – Ponderosa Pine Management
Prescription for Remnant Mature Stands:

1) Treat up to 60% of each unit with a variety of density management prescriptions except those within Band 1 (100-550 ft from structures). Density management will be similar to the following guidelines:
    - Thin to 10-20% of the area to a wide spacing that would retain 20-30 trees/acre
    - Thin 20-30% of the area to a moderately wide spacing (30ft spacing between trees) that would retain 40-50 trees/acre
    - Thin 20-30% of the area to a moderately close spacing that would retain 70-90 trees/acre (20 ft. spacing between trees)

2) Retain at least 40% of dense cover per unit untreated for wildlife cover areas, with the exception of thinning around a few mature and old-growth pine trees. Cover areas will be within 1,200 ft. of each other, at least 1 acre in size, and will contain some of the densest and more mature stands available to provide suitable habitat.

3) Thin out to 50 ft. from around mature and old growth PP trees and focus on removing young LP and retaining large size trees (12" dbh and larger)

4) Retain adequate amounts of large snags and downed logs. Where large snags and/or large logs are absent, retain additional trees that would otherwise be thinned for recruiting snags and logs. Trees retained for snag and down log management will be selected from the largest available trees that would otherwise be harvested.

Selected Implementation Guidelines, Management Measures, and BMPs to Evaluate:
As stated in EA Section 2.2 BMP, see attachement for more information

Vegetation: Botanical surveys will be performed prior to any fuels treatment; special status plant habitat would be avoided if necessary

Weeds: Prior to arriving at a unit, all vehicles/equipment will be washed to remove noxious weed seeds from undercarriage

Soils:

- When frozen with 6" or more, no pass limitation
- Dry or moist soil – operate track or wheeled machinery, but not on wet as defined in guidelines for soil moisture conditions
- Not frozen- designate main arterial trails (over 3 passes or use a recording GPS, keep spacing 100' or more
- Rehabilitation methods include: subsoil skid trails used > 3 times, plant with native species, and pull wood slash and organic debris back onto skid trail
- For wet ground/loamy sand – if soil forms a weak ball under certain conditions, don't operate

Thinning: non-commercial size trees(generally < 6" dbh), promote hand felling; scatter non-commercial trees and slash on ground, less slash left in home protection zones, emergency egress routes, administrative sites and visual resource monument sensitive areas

Wildlife:

Deer Migration Corridor: 40% of BLM managed lands will be retained for suitable hiding cover, minimum cover patch size should be approximately 6.5 acres, and have a minimum width of at least 600 feet, and be located within1,200 feet of another suitable cover patch. In areas lacking 40% cover, treatments would be limited to fuels within the first 500' band and possibly in Band 2.

Snags and Down logs:

- PP stands – retain at least two hard snags ≥ to 9"dbh/acre
- LP stands retain at least six hard snags ≥ to 9"dbh/acre
- Retain at least 120 lineal feet of down logs (Class 1 and 2) per acre ≥ 8" diameter at the small end. Logs less than 12' in length will not be credited toward this total
- Retain all soft snags (stages 5-7) and down logs (Classes 4-6) from harvest and avoid destroying

Unit Evaluation

Were the treatments implemented as described in the decision document or Record of Decision? Were the treatments implemented in accordance with the Selected Implementation Guidelines, Management Measures and BMPs identified above? If not, please explain why.

As described for Stop 1, the treatment for this site varied from what was described in the EA because wildlife cover requirements were greater than what was anticipated during the development of the EA. Rather than implementing the wildlife habitat emphasis treatment as described in Appendix A, the BLM left a large portion of this area untreated as wildlife cover and only developed a zig-zag shaped fuel break along Darlene Way. The zig-zag shape provides mule deer with greater cover up to the edge of the road and also increases the amount of edge area / edge effect to enhance habitat for deer. The teeth of the zig-zag are offset to break up the continuity of fuels to the maximum degree possible.

For each Management Objective for this Unit please evaluate whether the objective has been achieved. If the objective has not been achieved, please comment on barriers, constraints, limitations, etc and what might be needed for future projects to achieve the objective.

The wildlife habitat emphasis treatment for this area was not implemented. So the focus of the visit to this site was to evaluate the zig-zag fuel break along the road. Field review participants anticipate that the zig-zag design will provide safer crossing and better edge habitat for deer than a straight lineal fuel break would. They found the treatment aesthetically appealing and liked the more heterogeneous spacing of trees. The fuel break has also broken up the continuity of fuels to aid in fire suppression efforts. Participants in the field review suggested that Glen Ardt from ODF&W would be a good person to help identify ways to formally evaluate the effectiveness of the zig zag pattern for maintaining mule deer habitat and hiding cover.

Project Evaluation

Were the results of this project what was anticipated and intended? Have treatments addressed the Purposes and Needs for this Unit? If not, why not?

The treatment has helped to address hazardous fuels goals described in the Purpose and Need. It has also helped to "manage the structure, density, species composition, patch size, pattern and distribution" of forest stands to preserve and restore ecosystem health.

Please share any observations or comments about the project planning, implementation, or results that are important to understanding management of this unit or important for improving future management in similar projects.

At this stop BLM staff described some of their efforts to engage stakeholders on the "front end" of project planning. They outreach actively during NEPA planning, making a special effort to involve key local stakeholders in collaboration. They also conduct annual site visits to both get feedback on treated units and visit proposed units before treatments. This has allowed the BLM to be responsive and address concerns and issues as they have arisen.

Some participants on the field visit expressed a desire to see the Wildlife Habitat Emphasis prescription. The BLM suggested some other sites where that prescription would be implemented within the Greater La Pine project.

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Unit: #3 (Appendix A – Ponderosa Pine Management; EA – Bands 2 &3; and Project Implementation Stratgey FTU 26,41,and 65)
Acres in Unit: 352.2 acres (FTU 26) 352.2acres (FTU 41) 439 acres (FTU 65)
Other Units from Project Being Monitored:

Background

Purpose and Need for Treatment of Unit (As stated in EA section 1.4)

The primary purpose of this project is to improve public safety by reducing hazardous fuels, to reduce flame lengths of surface fire, and to reduce the potential for crown fire (wildfire moving through tree canopies rather than staying on the ground). The secondary purpose is to restore ecosystem health and to improve long-term resiliency to insects, disease and fire. This treatment will be accomplished through the following objectives:

Primary purpose:

1) Reduce the crown fire potential by reducing fuel loading, ladder fuels and crown bulk density by treating approximately 19,212 acres.
2) Provide for an increase of defensible space areas created within the wildland-urban interface boundary

Secondary purpose

3) Manage stand structure, density, species composition, patch size, pattern and distribution.
4) Maintain and improve ecosystem health by recycling nutrients, decreasing competitions for water and sunlight, and increasing resistance to insects, disease and fire.

Management Objectives for Unit: (As stated in Appendix A)

The objectives are to 1) use silvicultural treatments to improve the health and increase the dominance of existing PP stands. The historic condition, structure and range of PP on these sites will be used as a guideline for restoration treatments, and 2) protect PP from the effects of high-intensity wildfire by reducing the number of trees/acre, crown bulk density, and ladder fuels.

Treatment Summary for Unit:

As stated in FTU 26, 41 and 65
Objective: Ponderosa Pine Restoration. Prescription Burn, and Hazardous Fuel Reduction
Notes: none
Treatment Type:
FTU 26 - Commercial Thinning, 70-80 BA
FTU 41 - same as FTU 26
FTU 65 - Commercial and Pre-Commerical Thinning, 20-30 ft. spacing

As stated in Appendix A: Ponderosa Pine Management
Prescription:

- Treat 50-60% of stands with pre-commercial thinning and commercial thinning to increase the dominance of PP
- Remove LP up to 16" dbh, especially in competition with PP
- Light understory thinning of PP in areas of high stocking
- Maintain structural diversity of PP, and retain all LP and PP > 16 DBH
- Radius thin out to 50' from around mature and old-growth PP and focus on removing LP and retaining large size trees
- Maintain hiding cover on at least 40% of the stand in areas selected by wildlife biologist
- Wildlife cover patches should be located such that patches are within 120' of each other, no smaller than 6.5 acres in size
- Unit U64 will only be treated in Band 1 for fuels; the rest of the unit will be treated with radius thin. Radius thinning will occur around the mature and older PP tree 12" dbh and larger.

Selected Implementation Guidelines, Management Measures, and BMPs to Evaluate:
As stated in EA Section 2.2 BMP, see attachment for more information

Vegetation: Botanical surveys will be performed prior to any fuels treatment; special status plant habitat would be avoided if necessary

Weeds: Prior to arriving at a unit, all vehicles/equipment will be washed to remove noxious weed seeds from undercarriage

Soils:

- When frozen with 6" or more, no pass limitation
- Dry or moist soil – operate track or wheeled machinery, but not on wet as defined in guidelines for soil moisture conditions

- Not frozen- designate main arterial trails (over 3 passes or use a recording GPS, keep spacing 100' or more
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Thinning: non-commercial size trees(generally < 6" dbh), promote hand felling; scatter non-commercial trees and slash on ground, less slash left in home protection zones, emergency egress routes, administrative sites and visual resource monument sensitive areas

Wildlife:
Deer Migration Corridor: 40% of BLM managed lands will be retained for suitable hiding cover, minimum cover patch size should be approximately 6.5 acres, and have a minimum width of at least 600 feet, and be located within1,200 feet of another suitable cover patch. In areas lacking 40% cover, treatments would be limited to fuels within the first 500' band and possibly in Band 2.

Snags and Down logs:
- PP stands – retain at least two hard snags ≥ to 9"dbh/acre
- LP stands retain at least six hard snags ≥ to 9"dbh/acre
- Retain at least 120 lineal feet of down logs (Class 1 and 2) per acre ≥ 8" diameter at the small end. Logs less than 12' in length will not be credited toward this total
- Retain all soft snags (stages 5-7) and down logs (Classes 4-6) from harvest and avoid destroying

Unit Evaluation

Were the treatments implemented as described in the decision document or Record of Decision? Were the treatments implemented in accordance with the Selected Implementation Guidelines, Management Measures and BMPs identified above? If not, please explain why.

The treatments in this unit closely matched those described in the Proposed Treatment Prescriptions by unit and Appendix A of the Greater La Pine EA. Lodgepole up to 16" was reduced in the Unit, the density of Ponderosa Pine was reduced in spots where it was too high, and remaining Ponderosa Pine were released to grow into larger trees. A large volume of material was collected for chipping. There is still some post-thinning work to be completed in the Unit. The BLM needs to decide what it will do about the abundant seedling and sapling size lodgepole in the understory. They are considering eliminating some of it through clearing, mowing and/or burning. They are also considering leaving these small trees and allowing them to grow up for 15 to 20 years before dealing with them. In treatments to date the BMPs identified in the EA have been adhered to.

For each Management Objective for this Unit please evaluate whether the objective has been achieved. If the objective has not been achieved, please comment on barriers, constraints, limitations, etc and what might be needed for future projects to achieve the objective.

The treatment has definitely increased the dominance of Ponderosa Pine in the unit and has released the remaining Ponderosa Pine at least for the near term. Some participants questioned whether the Ponderosa Pine in this site would really be able to develop and establish dominance on the site if all the small lodgepole was left in the understory to compete with the Ponderosa as it gets older. There was also some concern that the small lodgepole still provides ladder fuel that threatens the mid-seral Ponderosa pine.

Project Evaluation

Were the results of this project what was anticipated and intended? Have treatments addressed the Purposes and Needs for this Unit? If not, why not?

The key question mark for the Unit was what to do about the remaining lodgepole saplings and seedlings. There were at least four considerations to weigh and balance to determine whether the small lodgepole should be further treated in the site:

1) Fully restoring Ponderosa Pine: this vegetation community is rare in the La Pine area and some participants argued that everything possible should be done to fully restore it – i.e. further treat the small lodgepole.
2) Providing cover and a mosaic of conditions: Some of the participants argued that the lodgepole saplings and seedlings currently in the site provided valuable complexity, cover, and a range of age classes so it should be maintained.
3) Reducing fuels and re-introducing fire: While this site was in Band 3 and was a little farther out from human settlement, there are still fuel load considerations and there is also a desire to re-introduce fire into the area. Reducing fuel loads or re-introducing fire would result in eliminating more of the small lodgepole.
4) Cost: The long-term and short term costs must be weighed as well. If the small lodgepole is left then a chip thinning could be implemented again in 15 years at low or no cost to the agency. Just about any method of eliminating the small lodgepole presently would have a price tag and the BLM has finite resources. Costs must be weighed against the resource concerns above.

Please share any observations or comments about the project planning, implementation, or results that are important to understanding management of this unit or important for improving future management in similar projects.

The BLM suggested that the Babb project would be a good one to visit next year. The COPWRR Monitoring Committee would have a good opportunity to review the Ponderosa Pine Management emphasis and the Wildlife Habitat emphasis treatments again on that project.