

WALLOWA WHITMAN FOREST COLLABORATION
FULL GROUP ASSEMBLY August 28, 2013
Lower Joseph Creek Watershed Assessment Field Trip
MEETING NOTES

In Attendance: Larry McCalden , Ray Osterpovich, Nick Myatt, Jennifer Ferriel, Cynthia Warnock, Bill Aney, Ayn Shilsky, Paul Boehne, Amy Gowan, Dave Hannibal, Spencer HoveKamp, Andrew Larson, Emmitt Taylor, Mike Shaw, Paul Survis, Rod Childers, Tom Birkmaier, Larry Nall, Steve Edwards, Vince Naughton, Roy Garten, Tom Montoya, Bill Gamble, Nathan Goodrich, Mack Birkmaier, Marion Birkmaier, Kelly Birkmaier, Bruce Dunn, Ron Rochna, Darlene Rochna, John Buckman, Lindsay Warness, Patrick Shannon, Brian Kelly, John Williams, Nils Christoffersen, Jenny Reinhardt, Rex Storm, Mark Davidson, Gunnar Carwash, David Salo, Adrienne Holcomb, Jamie McCormack, Kathleen Cathey, Tom Burry

4 stops on Lower Joseph Creek Watershed Assessment Tour

Agenda of Field Trip Stops and Discussion: Primary Objective was dialogue and discussion of vegetation treatment options in various plant associations, riparian restoration options, and fire history and hazardous conditions.

Guests in attendance:

Andrew Larson – Assistant Professor of Forest Ecology – University of Montana

Michael McWilliams - Forest Pathologist USFS, R6 Forest Health Protection

Blue Mountains Forest Insect and Disease Service Center

STOP 1 – Warm/dry, Ponderosa Pine, Douglas-fir stand – Lower Joseph Creek Watershed Unit 15 -54 treated acres, 59 acres gross (5 ac non-forest).

- Previously treated under the Bvine Environmental Assessment Project
- Opportunities to implement more aggressive treatments in dry forests.
- Warm/Dry represent 14,810 of the forested acres (29%) in the watershed, 7,428 acres are overstocked and exhibit poor growth rates compared to site potential. Historically the SSLT stand structure represented 40% of these forest types and currently are completely deficit.
- Most common plant associations representing warm/dry are grand fir/spirea and Douglas-fir/Snowberry

Overview of stop:

Comparison of previous prescription with more aggressive treatment approach.

- a. Bvine unit 116 - Comparison of past treatment in a warm/dry PP/DF site along a ridge to a same stand proposed for treatment by the Collaborative within Lower Joseph Creek Watershed Assessment.
- b. Assess the treatment results from the Bvine Project (Unit 116) (See Bvine Pretreatment and Target Residual.
- c. Flagging in place to simulate what trees would be left if treated to a 60 sq ft Basal Area. Marked trees are representative of 60 sq ft of basal area inclusive of the 21" rule.
- d. Prior to field trip a silviculturalist completed plots to assess the current stand information. (see table below under Current Site Information).

Unit	Seral Structural Stage	Plant Association	SDI-UMZ	SDI-LMZ	Existing Parameters					Target					
					SDI	QMD	TPA	BA	CC	Residual BA	Residual SDI	Residual QMD	Forested Acres	Volume per Acre	Total Volume
BVINE PRETREATMENT AND RESIDUAL 2007															
116	MSLTU	ABGR/SPBE	385	257	204	13	137	129	75	74	100	20	4	4.0	16
CURRENT SITE INFORMATION 2013															
	MSLTU	ABGR/SPBE	385	257	197	13.6		121		70				10.8	18.6



Discussion at stop 1:

- a. This is an opportunity for aggressive treatment approach to provide restoration according to Lower Joseph Creek recommendations.
- b. Good example of a multi-storied stand lacking old trees (MULTU) with prospect of moving the stand to a single storied large tree common (SSLTC) which is a stand structure lacking across the landscape.
- c. Prescription can be creative by having low basal area in one area and higher in another with average basal area of 60 -70.
- d. Once treated maintenance of acres is needed to retain investment on the landscape.
- e. Treatments will also increase forage and plant diversity.

- f. This type of biophysical group and stand structure is a good place to focus on managing the stands.
- g. Marking Leave Trees over trees being removed is helpful in visualizing treatment results.
- h. Other forests are also finding that treatments have not been aggressive enough with entries.
- i. Aggressive road side and ridgeline treatments will also benefit fuels and fire suppression.
- j. There may be opportunities for re-introduction of fire to be brought to the table with the collaborative.

STOP 2 - Warm/dry. Ponderosa pine, Douglas-fir stand. Lower Joseph Creek Watershed stand 31 - 110 treated acres, 127 gross acres.

- Marked in adherence to the 21" rule. Example mark established with the leave BA of 120 sq ft, from a stand stocking of 140 sq ft.
- A 23" co-dominant DF was bared that was 145 years old, growing 1.4"/decade. There is a nice selection of PP if the goal is 60 sq ft, leaving only lightly infested DF.
- Information tidbit: Seventy-one percent of the warm/moist Douglas-fir/ninebark stands are on slopes over 35%. (No warm/moist stand is on field trip agenda stops)



Discussion at stop 2:

- a. There was a great deal of good discussion on the rule of not removing trees greater than 21" in size at diameter breast height (dbh).
- b. 21" rule is there for a reason – there is agreement that it falls short of some protection but still need some guides to follow. 21" rule is to protect old large trees.
- c. There are trade offs of different types of approaches particularly between 21" rule and Van Pelt's. We have a variety of choices not just a few.
- d. Forest Plan Management is a Timber Emphasis for this area.
- e. Can restoration recommendations provide approaches for management of tree age or continue managing for size of tree. Van Pelt's guidelines for managing and promoting old growth would likely work in conjunction with a Management Area 1 – Timber Emphasis. This type of site would benefit from Van Pelt's approach of old trees.

- f. There was agreement that this stand type would be a good candidate for removing young trees over 21" to retain old trees even old trees under 21" in size.
- g. Identify ecological reason to remove large grand fir or Douglas-fir. Removing 21+ trees to protect early seral would make sense if it has a true benefit ecologically.
- h. It will need to be enforceable, measurable standard to help prevent over abuse of rules and prevent a general application of Van Pelt's guidelines.
- i. Approach may not be applicable for all acres but would work in this particular type of stand.
- j. This stand is also a candidate to think about fire restoration.
- k. Stand contains a great deal of fir infested with mistletoe. We need to retain some mistletoe for biotic purposes. It has a place on the landscape.
- l. Ridgeline above the stop supports an old lookout that stood 100 feet high. Trees began to impede view. First hand knowledge was provided that ridge was once an open area with limited conifer. (Mack Birkmaier - Local resident that frequented the area 70 years ago.)

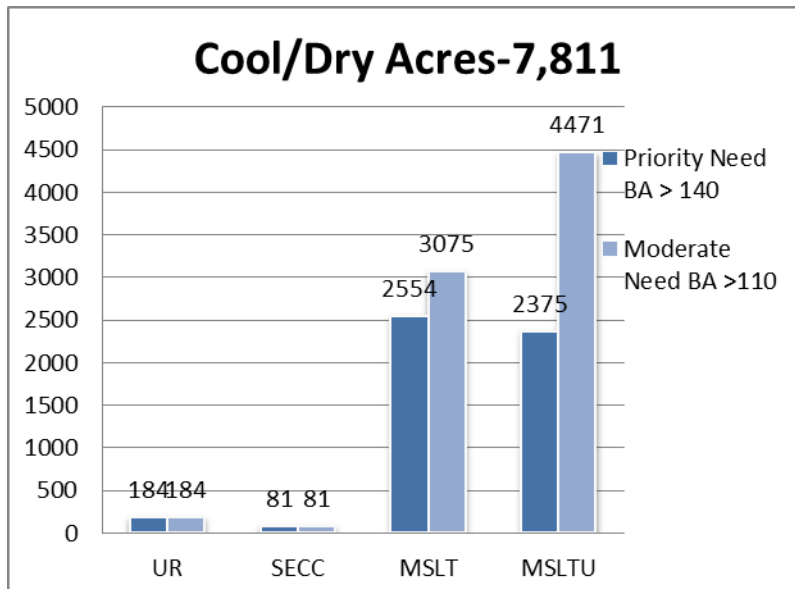
STOP 3 - Cool/dry Grand fir/twinflower. Lower Joseph Creek Watershed Unit 32 - 21 treated acres, from the same gross acreage.

- 13,167 forested acres (25%) in watershed is cool/dry with 7,811 acres overstocked and exhibiting poor growth rates.
- A heavily stocked part of the stand was marked, in adherence to the 21" rule.
- Stand consists of Douglas-fir, grand fir, remnants of larch and ponderosa pine.
- Ground cover is limited with the exception of twin flower and some remnants of huckleberry
- A Lone Dog group selection unit is adjacent that was planted and left to natural regeneration. It was a shelterwood with only a few large trees left on site. It is regenerating with ponderosa pine, Douglas-fir and western larch.
- A quarter acre was pre-marked in advance - Information for the pre-marked quarter acre:
 1. Total volume 37 MBF/acre
 2. BA 318 sq ft/ac with stand density index (SDI) 332
 3. Ave stand diameter 15.8"
 4. Harvest volume 21 MBF and Harvest BA 194 sq ft/ac and average harvest tree diameter of 13.1"
 5. Leave tree BA 124 sq ft/ac
- Just to the west of this quarter acre there is less stocking because there is not the selection of DF that exists in the thicket selected as an example.
- Example option for treatment - walking 100' and finding 20 sq ft, walking another 100' and finding 120 sq ft, walking another 100' and finding 60 sq ft, all dictated by what components exist on the ground, but averaging 60 sq ft.



Discussion:

- a. In a restorative approach, develop species composition more in line with historic composition rather than an imbalance to GF with the exclusion of ground fire over the life of the stand.
- b. The last two stops have been within 1 mile of each other with little elevation change except for topographical aspect which is having an effect on species composition even though the area as a whole has a frequent fire history. This site is more productive than previous stop.
- c. Twinflower indicates a productive site if treated there is potential for grand fir regeneration.
- d. Should recommended basal area be same as drier sites? Management options can be varied based on plant association.
- e. A basal area filter of greater than 110 was used to identify the 7,811 acres of cool/dry stands in need of treatment. (see reference table with charts). If a lower basal area had been used the acres would have been significantly higher.



- f. Suggested to proceed with some caution in these types of stands that could fall into a cool/moist stand. Only a small percentage of landscape fall into the cool/moist stand type.
- g. This area has one of the 3 highest fire density areas within the watershed. Fire occurrence is high with historically frequent fire disturbance. Lightning start densities were analyzed and vicinity is very prone to fire starts – total of 8 starts within 1000 acres over 30 years – very significant – 7 caused by lightning and one human.
- h. These stands can be treated where applicable with some left for diversity of stand structures on landscape. This area supports a high number of homogenous acres in this plant association without diversity.
- i. Local contractors evaluated each timbered stand based on data collection criteria needed for analysis. 73% of timbered stands support 3+ structure layers, 69% support heavy down fuels, and 87% of stands support a crown density of 40% or greater with 51% of the stands over 60% crown density. This is significant across the watershed with 16,076 timbered acres supporting ALL three conditions. The highest concentration of acres is in this general area.
- j. If treated and with disturbance would the stand convert to huckleberry instead of twinflower? (Local Mack Birkmaier said when he was a kid it was huckleberry ground cover. It has changed a lot over the years.)
- k. There are some residual ponderosa pines within the stand. The ponderosa pine itself justifies a need for treatment.
- l. This area is a Fire regime I of 0 – 35 years. It would be marginal to fall within a fire regime III of 35 – 100 years. This area was historically shaped with frequent fires.

STOP 4 - Cool/dry Grand fir/huckleberry – grand fir plant association. Lower Joseph Creek Watershed – Fuels/Fire Vegetation Treatments in Riparian Areas

- This specific stand is identified to have an average stand density of 90%, 54 tons/acre of down woody material, and 5 structure layers – based on field survey during Lower Joseph Creek Watershed field assessment.

- Based on a ratio of the number of fires to a 1000 acre land block, this location is 1 of 3 highest fire start locations within the watershed with 7 lightning and 1 human caused fire over a 30 year period.
- There is a developed, highly used camp site here called Coyote Campground. In addition, there is riparian areas heavily stocked and with heavy down fuels, in the stand closest to the high start areas in need of hazardous fuels treatment. Definition of heavy down: Any forest type may be considered if heavy down material is present; examples are insect or disease-ridden stands, wind thrown stands, over mature situations with deadfall, and aged light thinning or partial-cut slash (Anderson, 1982).



Discussion:

- a. Tools available for vegetation restoration in riparian area. Key discussion points: Riparian restoration, riparian vegetation management, exclusion of riparian entry. Stream categories verses the need for treatment – where does restoration and historic ranges fit?
- b. Riparian areas in the northwest are fire prone and by avoiding treatment creates conduits for fire spread if uplands are treated outside of Riparian Habitat Conservation Areas (RHCA).
- c. NOAA allows and supports riparian treatment if rational is provided. The rational for treatment of commercial volume is not supported but if volume is taken as part of the tools for restoration it can be supported. Key is to state the objectives for riparian treatment (restoration) and what tools can meet those objectives.
- d. These may be opportunities for research, studies and monitoring for gaining knowledge on successful approaches to restoration.
- e. The Forest Supervisor is a proponent of taking advantage of research opportunities.
- f. Once treated bring in low intensity ground fires on regular intervals for maintaining riparian health.
- g. There are a variety of options for opening up the stands and reducing fuels and densities in riparian areas without a lot of equipment use. A suspended line can pull out material, directional falling, etc. Think about the trade offs long and short term.

- h. If equipment is proposed for use the type of equipment would need to be evaluated and approved.
- i. 25% of the watershed acres fall within the RHCA's in the Lower Joseph Creek Watershed, that is significant.
- j. The stream class will also play a role in type of treatments. The category 4 streams are ephemeral that support water periodically during the year. Those would be easier to provide rationale for treatment.
- k. There is an aversion to going into riparian areas to restore them and it is a recommendation coming out of the Lower Joseph Creek Watershed.
- l. Several resources would also benefit from riparian treatments such as: fire/fuels, hardwood/brush for wildlife habitat,
- m. There are multiple tradeoffs in treatment versus no treatment including short term management sediment versus wildfire sediment, as well as smoke emissions trade off of vegetation consumption in wildfires versus management treatments.
- n. There was mention that William (Bill) Elliot has a model out that provides some prediction methods for sediment inputs based on type of treatments. The Water Erosion Prediction Project (WEPP) model (Flanagan et al., 2001), is a physically-based erosion prediction software program developed by the US Department of Agriculture (USDA) and has proved useful in areas where Hortonian flow dominates. An example is forest applications of modeling erosion from insloped or outsloped roads, or harvested or burned areas by wildfire or prescribed fire (Elliot et al., 1999; Elliot and Tysdal, 1999; Elliot, 2004; Robichaud et al., 2007). The link to the document describing the models is:
http://www.fs.fed.us/rm/pubs_other/rmrs_2009_dun_s001.pdf

An opportunity for feedback was given by participants on site:

1. The majority of the participants felt it was a productive day.
2. A lot of good information was presented and shared at the various stops.
3. There is concern that follow through of discussion points will not occur on the ground (e.g. removing 21"+ trees/riparian treatments) and if they do occur will they be a light hand approach. Treatments need to be aggressive.
4. Some concern that discussions are simply that – "discussion". Action is needed and there is skepticism that good restoration will really occur.
5. Other resources will now need to be incorporated into the mix to get the most benefit on the ground where possible.
6. Treatments must be monitored for success/failure of approaches and be flexible enough to modify during implementation. Identifying outcomes after work is completed may create a need for re-entry or a missed opportunity for modifications.
7. Landscape approach is important when looking at the big picture.
8. Many participants are hopeful that this will be followed through with and meet not only restoration needs but local economic and community needs.

The next Forest Collaborative meeting will be at the La Grande Ranger District from 1 – 5 pm on September 25th, Wednesday.