

Holland-Pierce Project Multiparty Monitoring Plan

	What	How	Where	Why	When		Cost	Status
<u>Forest Health and Fuels Reduction</u>	Monitor the reduction in fuel loads, including changes in canopy cover, structure, ladder fuels, and down woody material.	Establish permanent growth and photo plots, at least three in each of 5 units (15 total)	Within contract units #1, #12,#9 and Nepa unit #42	To determine the effectiveness of the fuel reduction treatments	Pre treatment (Year 1) , post treatment (Year 2) and then at 5 year intervals as funding allows.	Forest Service Fuels specialist, silviculturist, DNRC service forester, SEC and NwC Staff, students, and community volunteers Lead: John Ingebretson and Allen Branine.	\$100 per plot or \$1500 for baseline info. Equipment provided by SEC, FS, DNRC	All baseline plots were established and baseline data collected in the Fall, 2006
		Establish two 50-foot transect lines to measure 1 hr, 10 hr, 100 hr and 1000 hr ground fuels. Measure crown (canopy) cover along these transects.		To inform future projects intended to accomplish fuels reduction.			Year 1 Need = \$1500; Five year need = \$4500	all baseline plots were re-established in 2008 post harvest. Post harvest data was collected in 2008 on Unit #42.
		Establish 1/50 th acre permanent plots to assess the major understory vegetation using standard stewardship vegetative cover plot information. All plots will be monumented with a 3 foot rebar left 6 inches out of the ground with an orange plastic ball.		To monitor the vegetation response post harvest.				2009-- post harvest data will be collected on remaining units # 1, 9 and 12.
<u>Invasive Plants</u>	Monitor for the presence, spread, and/or introduction of noxious weeds.	USFS conducted pre-harvest surveys. Multi-party will conduct post treatment Walk through surveys.		To determine the presence and/or spread of noxious weeds.	Preharvest and then at 1, 2 and 3 years following harvest / haul activities.	FS botanist, FS weed crew, NwC staff, SEC staff, community volunteers Lead: Steve Lamar	Preharvest: 3 days x 2 persons @ \$250 per person per day = \$1500 Done by FS.	Baseline surveys completed in 2006. Post treatment surveys completed in 2008 and planned for 2009 and 2010.
		Copies of all data will be stored at SEC		To determine the effectiveness of project design features to minimize the spread and/or introduced noxious weeds.			3 days x 2 persons @ \$250/day = \$1500/yr or \$4500	
				Determine recovery rates of native plants in harvested units			Reports: 1 person x 1 day x 3 seasons @ \$250 per person per day= \$750	
				Determine if weed containment and/or eradication measures should be considered.			Year 1 need: \$2250; Five year need = \$6750	

<u>Community Benefits</u>	Employment Opportunities: Determine the number of direct/indirect jobs (person days by work type) created through the implementation of the stewardship contract.	Work with the stewardship contractor to identify number of employees and their 'home of record' (contractor and sub-contractors) working on this project.	Swan Valley or Northwest Montana for direct effects; Condon Area for indirect effects	To determine the number of direct/indirect jobs created by the implementation of the project, specifically the number of jobs created in the local community	As needed but not less than quarterly through the implementation of the project.	Swan Ecosystem Center staff with assistance from the University of Montana; Lead: Maureen Hartmann and Anne Dahl	Estimated cost is \$2,000 during the implementation of the project (2007-2009)	Surveys in progress--to be completed summer of 2009.
	Social Impacts: Attitudes towards fuels reduction, actions taken on private land in the interface,	Phone survey of a) people living within the Holland Pierce area from Pierce Lake to Rumble Creek Road on the east side of Highway 83 b) people who expressed an interest through comments to the Forest Service, meetings or field tours, and c) selected community members, such as Fire Department personnel	Holland-Pierce project area and community members	To determine the social impacts to the community. Determine the effectiveness of Forest Service outreach	Before the implementation of the project (January 2007) and one year after (2008).	Swan Ecosystem Center staff with training from Jill Belsky at the University of Montana	\$3800?	Trainings and surveys completed, January 2007.
				Determine social effects to the local community.			Year 1 = \$3800; Five year = \$5800	
				Help in design of future projects – more effort in collaboration and identify lessons learned.				
<u>Wildlife Habitat</u>	Presence and abundance and threshold habitat conditions for tree squirrels (as habitat surrogate) and forest carnivores	Determine permanent transects across treatment areas. Every 100 meters along transects, flag and GPS location and document subtotal of squirrel tracks, deer tracks and forest carnivore tracks.	Holland Units 5, 6, 8 and Pierce Unit #?	Tree squirrels are the base of the food chain, provide essential ecosystem services, and are often eliminated from thinned areas degrading the habitat for carnivores and raptors.	Pretreatment: Winter 2007; Post treatment 2009 and 2014	Tom Parker, Jane Ingebretson, NwC students and volunteers; Lead: Tom Parker	Five days x \$250/dayx2 persons = \$2500	Pre-treatment surveys completed in 2007.
			Transects will start in untreated areas and progress through treatment areas for comparison.	Forest Service will use results in planning future thinning projects.			Year 1 = \$2500; Five year need = \$7500	
	Impacts to winter range and habitat connectivity values for wintering ungulates	Winter track surveys (see above)	Same as above	winter range values (snow intercept and thermal cover) are decreasing across all ownerships in the Swan Valley	Same as above	Same as above	Integrated with above; no additional cost.	Same as above.