

CHAPTER V
MANAGEMENT OPPORTUNITIES

This chapter is comprised of a series of Tables which list potential projects, based on the analysis completed in Chapters 3 and 4, that would promote the desired trends in the watershed. The results of discussions in previous chapters are brought to conclusion by:

1. Recommending management activities that are responsive to the issues in Chapter 2 and to the interpretation(s) in Chapters 3 and 4 between existing and desired conditions and are designed to move the system towards reference conditions;
2. Summarizing Data Gaps, information needs and limitations of this analysis;
3. Identifying monitoring and research activities that are responsive to the issues and data gaps;
4. Prioritization based on Forest and District stressors and indicators.

The potential projects listed are minimally detailed. Actual project level planning and design will be done through a NEPA process which will frequently be dependent upon further ground/field survey and analysis.

Forest WRAPPS Process:

In 1999, the Wallowa-Whitman Forest Leadership Team established a watershed restoration strategy with the overall goal to maintain or improve the baseline condition, or health of all watersheds across the forest. The watershed restoration strategy was developed to assist in prioritization of restoration needs, aide in cumulative effects analyses, and display how projects are to improve or maintain baseline conditions over time.

The Watershed Restoration and Prioritization Process (WRAPP) is based upon the concept of “stressors and indicators.”

Stressors are effectors that push the ecosystem to the outer limits of the Historical Range of Variability (HRV). Ecosystems with high stressor values are more likely to experience large-scale re-adjustments from catastrophic events or disturbances.

Indicators are values that provide an indication of relative ecosystem function or health. Low indicator values are often associated with a system that is under stress.

Four stressors were selected to represent the primary effectors on watersheds. The stressors selected are fire risk, forest insect and disease, noxious weed invasion, and roads. Three indicators were selected to evaluate ecosystem health. These are aquatic (fish habitat), vegetation (HRV and structural stage departure), and Lynx (denning and forage habitat mix). The Upper Grande Ronde Watershed Rankings for NFS lands are as follows:

<i>Stressors</i>	<i>Indicators</i>
Fire – Low	Aquatics – High
Insects and disease – High	Vegetation – Moderate
Roads – Medium	
Noxious weeds - Medium	

The Upper Grande Ronde Watershed Rankings for Private lands are as follows*:

<i>Stressors</i>	<i>Indicators</i>
Fire –	Aquatics -
Insects and disease –	Vegetation –
Roads –	
Noxious weeds -	

*Based on FY2001 Blue Mountain Demonstration Project WRAPPS

Analysis of the combined Forest Service and Private land ratings resulted in an overall priority rating of Moderate for restoration work within the Upper Grande Ronde Watershed.

RECOMMENDATIONS

POTENTIAL PROJECTS FOR ECOSYSTEM MANAGMENT AND RESTORATION

This section is presented in the three main dimensions (physical, human, and biological). Under each dimension, **potential projects** are organized and displayed by narrative or in a series of tables **under their related key question resource area**. These recommended projects have the objective of creating a movement or trend towards desired conditions in the watershed. This will also provide a stronger link with Watershed Assessments and District NEPA documents answering the questions:

- 1) How does this project fit within the identified priorities of the entire Watershed? Answers the question of "Why here, why now?"
- 2) How does it move the area toward the desired conditions?
- 3) How does this project fit within the thresholds that this watershed can withstand?

The potential projects listed vary in detail. The information from this analysis will be used to guide development of Restoration projects. Site specific information summaries from these analyses will be included in the attached tables and referenced appendices. Other information outside either the scope or area of those proposed projects will not be as specific in detail. Additional project level planning and design will be done through NEPA and selection will require further field survey and analysis.

Table 5-1: General – Survey and Monitoring Needs

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
G-1	Stocking Surveys	Regeneration units in all subwatersheds in Wshed 85	To determine seedlings per acre and ensure adequate stocking.	(2000+) Changes almost annually.	Within next 5 years	Low. Part of ongoing program.
G-2	Water Quality Monitoring	All SWS	Continue existing monitoring program at all gaging stations, stream temperatures sites, and precipitation sites.			Moderate
G-3	Road Surveys	All SWS	Build on existing information and culvert inventories to update ATM Plan and Roads Analysis.			Moderate-High
G-4	Stream Surveys	All SWS	Continue existing stream survey program across entire SWS			Moderate-High
G-5	PETS Surveys	All SWS	Continue existing survey program for fish, plants and wildlife Proposed, Endangered, and Threatened species.			Moderate-High

THE PHYSICAL DIMENSION

AQUATIC

Table 5-2: Aquatic Projects

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority (Hi to Low)</i>
P-1	Stand Initiation (SI) Creation	All SWS	Create SI structural stage (0 to 20 year old trees) to mimic the natural opening processes.	.	Within 5-10 years	
P-2	SI Maintenance	SWS 85	Maintain 5-15% of forested acres in SI. Thin remaining SI acres to accelerate stand development and hydrologic recovery.	Approximately 15,000 acres	Within 5-10 years	Medium
P-3	RHCA Planting	SWS 85	Interplant understocked RHCAs in all subwatersheds to accelerate development of canopy cover, root mass, and recruitment material.		Within 10-20years	

Table 5-3: Aquatic Projects

Number	Project	Location	Purpose	Acres/Miles	Time Frame	Priority (Hi to Low)
P-4	RHCA Thinning	SWS 85A-J	Thin overstocked and suppressed RHCAs in all SWS to accelerate development of recruitment of LWD materials.	85A: 364 ac. 85B: 817 ac. 85C: 484 ac. 85D: 807 ac. 85E: 333 ac. 85F: 755 ac. 85G: 501 ac. 85H: 1,174 ac. 85I: 570 ac. 85J: 775 ac.	Within 5-10 years	SWS: A,I,F,E,H,J,G,C,B,D
P-5	Stream Channel LWD Additions	SWS 85	Increase LWD in and to enhance instream structure.		Within 5-10 years	
P-6	Road Obliteration	SWS 85A-L *for specific roads refer to the Roads Analysis Section	Reduce overall road densities and roads within RHCAs. Restore SWS to total road density PFC by road obliteration.	85A: mi. 85B: mi. 85C: mi. 85D: mi. 85E: mi. 85F: mi. 85G: mi. 85H: mi. 85I: mi. 85J: mi. 85K: mi. 85L: mi.	Within 5-10 years	
P-7	Upper Grande Ronde Large Pool Development	SWS 85	Create large pools to improve habitat conditions for threatened summer steelhead.		By 200x	
P-8	McCoy Creek Large Pool Development	SWS 85	Create large pools to improve habitat conditions for threatened summer steelhead.		By 200x	

Table 5-4: Aquatic Projects

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres/Miles</i>	<i>Time Frame</i>	<i>Priority (Hi to Low)</i>
P-10			Increase fish habitat, reduce sediment, restore floodplain and stream channel, restore native vegetation.		By 200x	High
P-11	Culvert Replacement		Restore fish passage throughout watershed for all fish species and life stages.		w/in 5 yr 2002-4 2002-4 w/in 5 yr w/in 5 yr w/in 5 yr w/in 5 yr w/in 5 yr w/in 5 yr	Low High High High Low Low High Low Low
P-12	Drainage Culvert Installation	All Subwatersheds	Reduce sediment input to 303(d) listed streams containing federally listed fish.		Within next 5-10 years	Moderate - High

THE HUMAN DIMENSION

RECREATION and ROADS ANALYSIS

Table 5-5: Human Dimension – Recreation						
<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
H-1	OHV Management Plan	All Subwatersheds	Provide for appropriate OHV management within the watershed that meets recreation needs while protecting resources.		Within 5 years	High
H-2	Access and Travel Management Plan	All Subwatersheds *Refer to specific Roads Analysis recommendations below	Establish a long term management system for access and travel across the watershed ensuring all access needs are met while resources.		Within 5 years	High

**Upper Grande Ronde Watershed (85)
Roads Analysis
Management Recommendations**

Subwatershed 85A

Road Management Recommendations

Subwatershed 85B

Road Management Recommendations

Sub watershed 85C

Road Management Recommendations

**Construction/Reconstruction Needs
Subwatershed 85D**

Road Management Recommendations

Construction/Reconstruction Needs

1. Areas of concerns are roads located adjacent to McCoy Creek or its tributaries. Road 2100 from 1) from the east section line of section 36 to the county line.

Subwatershed 85E

**Road Management Recommendations
Subwatershed 85F**

Road Management Recommendations

**Construction/Reconstruction Needs
Subwatershed 85G**

**Construction/Reconstruction Needs
Subwatershed 85H**

Road Management Recommendations

Construction/Reconstruction Needs

Subwatershed 85I

Road Management Recommendations

Construction/Reconstruction Needs

Sub Watershed 85J

Road Management Recommendations

Construction/Reconstruction Needs

Sub Watershed 85K

Road Management Recommendations

Construction/Reconstruction Needs

Sub Watershed 85L

Road Management Recommendations

Construction/Reconstruction Needs

THE BIOLOGICAL DIMENSION

Table 5-6: Biological Dimension – Diversity, Old Growth, I&D

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
B-1	Identify and Manage Old Growth Patches	Patches enclose allocated and existing old growth; approximately one patch per subwatershed (usually no more than 2 miles apart)	Maintain existing and manage for future old growth habitat; identify potential old growth habitat patches, generally larger than 400 acres. (smaller stands of old growth will exist outside the larger patches to meet HRV)	1000-6000 acres/SWS	100 years	High
B-2	Identify and Manage Connective Corridors	See B-1	Provide connective corridors to facilitate wildlife movement between old growth patches.		Ongoing	Moderate
B-3	Identify and Manage Big Game Cover Areas	Intermediate stand treatments will accelerate the development of cover of biophysical groups 1-4 (see B10-B12)	Provide cover to influence the distribution of elk across available habitat.	See B10-12	Ongoing	Moderate
B-4	OHV Management	Refer to Tri-Forest OHV Plan	Enhance wildlife security habitat	Watershed 85	5 years	High
B-5	Road obliteration	All Subwatersheds *Refer to specific roads in the Road Analysis section above.	Return un-needed road beds to productivity, and reduce motorized disturbance to wildlife	See specific roads in Roads Analysis Section	5 years	High

Table 5-7: Biological Dimension – Diversity, Old Growth, I&D

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
B-6	Sign Old Growth Areas		Post signs to protect snags and old growth values from wood cutting.	xx MA 15 areas	10 years	Low
B-7	Reduce fuel loadings in Allocated Old Growth Areas		Reduce the risk of wildfire in allocated SSLT old growth areas with high fuel loadings.		10 years	Moderate
B-8	Forage Enhancement Burning	All subwatersheds	Burn grassland and dry plant communities to enhance forage and grass cover for big game and nesting birds.	ac (biophysical group G6-9) nonforested = ac TOTAL=	10% per year by sws	Moderate

Table 5-8: Biological Dimension – Diversity, Old Growth, I&D

Number	Project	Location	Purpose	Acres	Time Frame	Priority
B-9	Reduce stocking levels in overstocked stands	85A: ac. 85B: ac. 85C: ac. 85D: ac. 85E: ac. 85F: ac. 85G: ac. 85H: ac. 85I: ac. 85J: ac. 85K 85L	Thinning to reduce densities in overstocked stands to promote stand growth and vigor.	ac	xx% per decade	High Silv-1
B-10	Promote development of LOS	All Subwatersheds	Thin from below to increase growth to facilitate development of late and old structure (LOS) across the landscape to meet HRVs.	ac (included in total above)	50% of U.R. per decade	High Silv-2
B-11	Remove Insect and Disease Damaged Trees	All Subwatersheds	Remove insect or diseased trees in severely damaged stands at or below recommended stocking levels.	Estimated to be 20% of the total acres listed above		Moderate Silv-3
B-12	Precommercial Thinning	All Subwatersheds	Thinning of stem exclusion closed canopy stands to promote vigor and growth.	ac	Within next 20 yrs.	Moderate Silv-4
B-13	Stocking and Plantation Protection	All Subwatersheds	Ensure disturbed areas are adequately stocked and plantations are protected.	acres currently	Within next 5 years	Moderate Silv-5

THE BIOLOGICAL DIMENSION

Table 5-9: Biological Dimension – Fire & Fuels

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
B-14	Reduction of High Fire Risks		Reduce fuel loadings using mechanical and prescribed fire in areas identified as having a high fire risk.	90-100% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 20 years on a rotation basis	High Fire-1 Hi to Lo=
B-15	Reduction of Moderate Fire Risks	85A: ac. 85B: ac. 85C:ac. 85D: ac. 85E: ac. 85F: ac. 85G: ac. 85H: ac. 85I: ac. 85J: ac.	Reduce fuel loadings using mechanical and prescribed fire in areas identified as having a moderate fire risk.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	High Fire-2 Hi to Lo=

Table 5-10: Biological Dimension – Fire & Fuels

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
B-16	Reduction of Low Fire Risks	85A: ac. 85B: ac. 85C: ac. 85D: ac. 85E: ac. 85F: ac. 85G: ac. 85H: ac. 85I: ac. 85J: ac. 85K: ac 85L: ac	Reduce fuel loadings using mechanical and prescribed fire in areas identified as having a low fire risk.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	Low Fire-4 Hi to Lo= 85
B-17	Reintroduction of Fire in High Departure Areas	85A: ac. 85B: ac. 85C: ac. 85D: ac. 85E: ac. 85F: ac. 85G: ac. 85H: ac. 85I: ac. 85J: ac. 85K: ac 85L: ac	Return fire to areas in Fire Regimes 1 and 3 (hot/warm dry sites) to restore fire as a disturbance, reduce fuel loadings, and manage for historic species mixes and structures.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	High Fire-3 Hi to Lo=
B-18	Reintroduction of Fire in Moderate Departure Areas	85A: ac. 85B: ac. 85C: ac. 85D: ac. 85E: ac. 85F: ac. 85G: ac. 85H: ac. 85I: ac.	Return fire to areas in Fire Regime 4 (cool/moist sites) to restore fire as a disturbance, reduce fuel loadings, and manage for historic species mixes and structures.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	Low Fire-5 Hi to Lo=

		85J: ac. 85K: ac 85L: ac				
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THE BIOLOGICAL DIMENSION

RANGE and NOXIOUS WEEDS

Table 5-11: Biological Dimension – Range & Noxious Weeds						
<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
B-19	Treatment of Leafy Spurge, Musk Thistle, Diffuse Knapweed, White Top Noxious Weed Sites	1.	Appropriately treat populations of the identified noxious weed species to eventually eradicate these species from this area.	1.	Within a 5 year period (2006)	High
B-20	Treatment of Canada Thistle and Bull Thistle		Appropriately treat populations of the identified noxious weed species to eventually eradicate these species from this area.	1.	Within a 5 year period (2006)	Moderate

Table 5-12: Biological Dimension – Range & Noxious Weeds

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
B-21	Monitoring of Tansy Ragwort Sites		These areas were treated previously. Annual effectiveness monitoring is needed to ensure treatment success and minimize potential for regrowth.		Yearly for 5 years	Low
B-22			Placement of large woody material along stock trails and riparian areas to protect streambanks and increase riparian complexity.		Within 5 years (2007)	Moderate
B-23			Develop additional off-site water sites to provide for better livestock distribution and utilization.		Within 5 years (2007)	Moderate
B-24			Reconstruct Campbell Creek riparian enclosure and redevelop the Campbell water development to better protect the stream.		Within 5 years (2007)	Moderate
B-25			Development of stock trails, placement of LWM, construct additional off-site water developments, change salting locations to better manage livestock use.		Within 5 years (2007)	Moderate

Table 5-13: Biological Dimension – Range & Noxious Weeds

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>
B-26			Placement of additional LWM and repositioning of existing LWM to prevent livestock from trailing adjacent to the stream.		Within 5 years (2007)	Moderate
B-27		nt	Placement of LWM, construct additional off-site water developments to better manage livestock use.		Within 5 years (2007)	Moderate

Table 5-14:

<i>Number</i>	<i>Project</i>	<i>Location</i>	<i>Purpose</i>	<i>Acres</i>	<i>Time Frame</i>	<i>Priority</i>

