

# BASIC FOREST MANAGEMENT PLAN

## Mount Emily Recreation Area Management Plan



**Landowner Name**

**Period Covered by the Plan**

**Union County**

9/30/2025 – 9/30/2035 **Period Plan Covers**

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## NOTE TO LANDOWNER

You have taken a key step to managing your forest by deciding to do a **Basic Forest Management Plan** for your property. Now that you have a Plan completed – you may be eligible for several other programs and opportunities available to you as a forest landowner in Northeast Oregon. **Please contact your local stewardship forester to learn more** (see “Where to Get Help”).

This plan is an educational resource/tool designed to help provide general guidance as you decide how to manage your land and forest. However, you are under no obligation to complete the items suggested in this plan.

## LANDOWNER, PROPERTY & PLAN INFO

<b>Landowner:</b>	Union County		
<b>Name of Landowner Contact:</b>	Josh Ford Mount Emily Recreation Area Coordinator		
<b>Landowner Contact Address</b>	<b>Phone:</b>	541-963-1319	
10513 N McAllister Road Island City, OR 97850	<b>Cell:</b>		
	<b>E-Mail:</b>	jford@union-county.org	
	<b>Web Address:</b>	<a href="https://www.meetmera.org/">https://www.meetmera.org/</a>	

## LAND INFORMATION

<b>Property Name:</b>		Mount Emily Recreation Area		<b>Elevation:</b>		3,000' – 5,600'	
<b>Total Acres:</b>		3,700		<b>Forestland Acres:</b>		3,530	
<b>Address:</b>				<b>County:</b>		Union	
10513 N McAllister Road Island City, OR 97850				<b>Legal Description</b>		Township 2S Range 37E Sections 12, 13, 24, 25 Township 2S Range 38E Sections 7, 8,17, 18, 20	
<b>Structural Fire Protection District:</b>				None			
<b>Forest Fire Protection District:</b>				La Grande ODF			
<b>Watershed Name:</b>				Lower Grande Ronde HUC# 17060106			
<b>Tax Lot Information (Add for All Tax Lots Making Up the Parcel)</b>							
<b>#</b>	Tax Lots 500 and 800 in Township 2S Range 37E and Tax lots 1200 and 1203 in Township 2 South Range 38E	<b>Zoning:</b>	A4 – Timber Grazing	<b>Property Tax Classification:</b>		7D – Dry	

## IDENTIFY PROBLEMS

### Background & History

The Mount Emily Recreation Area (MERA), was purchased by Union County in November of 2008 for its recreational values and resource management opportunities. The purchase was made possible by grants from the Oregon State Parks and Recreation Department ATV grant program and the Blue Mountain Habitat Restoration Grant Program. Since its purchase the MERA, has become extremely popular with Northeast Oregon residents and visitors from around the Northwest. The MERA has become one of the most stated reasons for people visiting Union County, according to the Chamber of Commerce.

Since the MERA purchase in 2008, a 45-mile non-motorized trail system with three trailheads has been developed. These non-motorized trails provide opportunities for mountain biking, hiking, trail running, dog walking and horseback riding. A 45-mile motorized trail system also has been developed with trailhead, staging area, campground and a youth learning loop. The motorized trails provide riding opportunities for ATV's, full-sized off-road vehicles, motorcycles and side by sides. Also, within the MERA's boundaries, 100 acres is leased to the Grande Ronde Bowman archery club, whose mission is to promote the sport of bow hunting and host archery tournaments.

In 2012 the Oregon Society of American Foresters, Blue Mountain Chapter developed the original the MERA Management Plan to give the MERA guidance in managing its natural resources and a part time professional forester was contracted. Since that time several timber sales and/or projects with the various goals of improving forest health, reducing hazardous fuels and creating fuels breaks have been completed. The Oregon Department of Forestry has worked cooperatively with the MERA helping with project design. A grazing program was also implemented for several years on the MERA but currently is not active.

Prior to its purchase by Union County, the MERA had a long history of use by the residents of the local area. This use started originally with several tribes of indigenous people including the Umatilla, Cayuse, Nez Perez and Paiutes. These tribes primary use was for hunting and gathering purposes.

The area was then used by American emigrants settling the area in the mid 1800's, mainly for the valuable timber and grazing resources. A few homestead sites were established but later abandoned.

The area was eventually was, owned, and managed primarily for timber production and grazing by several private entities, starting with the Mount Emily Lumber Company followed by Boise Cascade Corporation and finally Forest Capital Inc/Emanuel Life.

Since its purchase in 2008, two important factors affecting MERA's management direction have become more evident. They are the MERA's ever-increasing popularity as a recreation destination and an ever-increasing need to manage the MERA for wildland fire risk by improving the area's fire resistance and resiliency. These changes make this a good time to review and update the MERA Forest Management Plan.

### General Description (including terrain & topography)

The MERA property is located approximately three miles north of the city of La Grande, Oregon. The property sits on the slopes of Mount Emily, which are part of the Blue Mountains. The MERA is part of the Lower Grande Ronde River watershed.

Elevation ranges from about 3,000 feet to 5,600 feet above sea level. The topography ranges from gentle to very steep, and includes a band of rock outcrops and cliffs approximately one and a half miles in length, which give Mount Emily its distinctive profile. About half the area comprising the MERA has east and southeasterly aspects and the remaining areas have west to southwesterly aspects. The MERA is dissected by numerous small drainages that are seasonal non-fish bearing streams with the exception of a portion of Conley Creek which is a year-round stream with no fish present.

The MERA is predominantly forested, of the 3,700 acres approximately 3,500 acres are forested. The forested acres are comprised of two forest types (Ecology and Management of Eastern Oregon Forests, Oregon State University). The two forest types are the Warm Dry Mixed Conifer (WDMC) and the Cool Moist Mixed Conifer (CMMC). The WDMC type is predominantly found at lower elevations on the southern and eastern parts of the MERA. The CMMC type is found predominantly at upper elevations on the western and northern parts of the MERA.

The WDMC stands are stocked primarily with ponderosa pine and Douglas-fir with lesser amounts of grand fir, western larch and lodge pole pine. The understory component is dominated by a wide array of shrubs including; common snowberry, ninebark, oceanspray, spirea, service berry, three stemmed ceanothus, snowbrush, and Scouler's willow. The most common grasses and sedges include; pine grass, Columbia brome and elk sedge. The most common forbs present are various lupines, and heart leaf arnica.

The CMMC stands are stocked primarily with Ponderosa pine, Douglas-fir, grand fir, and western larch with lesser amounts of lodge pole pine and Engelmann spruce. The understory component is dominated by an array of shrubs including; big huckleberry, Oregon boxwood, princess pine, three stemmed ceanothus, snowbrush, mountain ash, pacific yew and Scouler's willow. The most common grasses and sedges include; pine grass, mountain and Columbia brome, elk sedge and northwest sedge. The most common forbs present are various lupines, and heart leaf arnica and twinflower.

### Forest Health Conditions

The overall forest health conditions, including wildfire risk for the MERA property are generally good. Previous timber management activities, including; selective cutting, commercial thinning, even-aged type harvests, tree planting (ponderosa pine and western larch) and pre-commercial thinning has resulted in most timbered stands being stocked with a good mix of fire-resistant species (ponderosa pine, western larch and Douglas-fir).

Most stands were previously harvested using whole tree yarding and landing piles, which were burned, leaving generally light fuels loading.

Pre-commercial thinning was mainly accomplished by mastication with lesser amounts of hand thinning followed by pile burning and also resulting in light fuel loading.

The most common insect and disease problems identified on the MERA property are as follows; dwarf mistle-toe (ponderosa pine, Douglas-fir, western larch), western gall rust (ponderosa pine, lodge pole pine), root disease (grand fir and Douglas-fir), bark beetles (ponderosa pine, Douglas-fir and grand fir) and larch case-bearer (western larch). Past harvests and pre-commercial thinning have attempted to address these insect and disease issues and kept them at endemic levels.

The main forest health issues needing to be address are as follows;

- Stand density management, to maintain acceptable growth/mortality rates, good early seral species composition, maintain insect and disease problems at endemic levels and manage fuels build-up.
- Increase in the number of snags and down logs/acre to improve wildlife habitat.
- The re-introduction of fire into the landscape using prescribed fire to improve the landscapes fire resiliency and resistance.

Approximately 40% of the MERA stands, requiring density management are good candidates for pre-commercial thinning using mechanical and non-mechanical methods. Pre-commercial thinning project goals would be to;

- Achieve acceptable stand densities based on forest type, species and average stand diameter (see Ecology and Management of Eastern Oregon Forests, Oregon State University)
- Promote acceptable growth/mortality rates
- Good fire-resistant species composition
- Target for removal insect or disease infested trees, late seral species or physically damaged trees
- Maintaining fuel loading at acceptable levels through mastication or hand piling and burning.

Approximately 35% of the MERA stands, have reached average stand diameters that will require commercial harvest within the next 5 to 15 years. Commercial harvest project goals would be to;

- Achieve acceptable stand densities based on forest type, species and average stand diameter (see Ecology and Management of Eastern Oregon Forests, Oregon State University)
- Promote acceptable growth/mortality rates
- Good fire-resistant species composition
- Target for removal insect or disease infested trees, late seral species, physically damaged trees or trees with crown ratios less than 45%
- Maintaining fuel loading at acceptable levels with various slash treatments.

Approximately 20% of the MERA stands have no treatments assigned to achieve other MERA objectives such as wildlife habitat or are considered to be non-forest types.

All projects whether commercial or non-commercial entries need to be designed so as to reflect the other stated objectives for the MERA property.

## DETERMINE OBJECTIVES

### Current Uses

#### Recreation

##### Non-motorized

- Hiking
- Mountain biking
- Equestrian
- Running
- Education
- Archery
- Events

##### Motorized

- Motorcycles
- Side by side
- ATV
- Full sized 4WD
- Education/Safety
- Camping

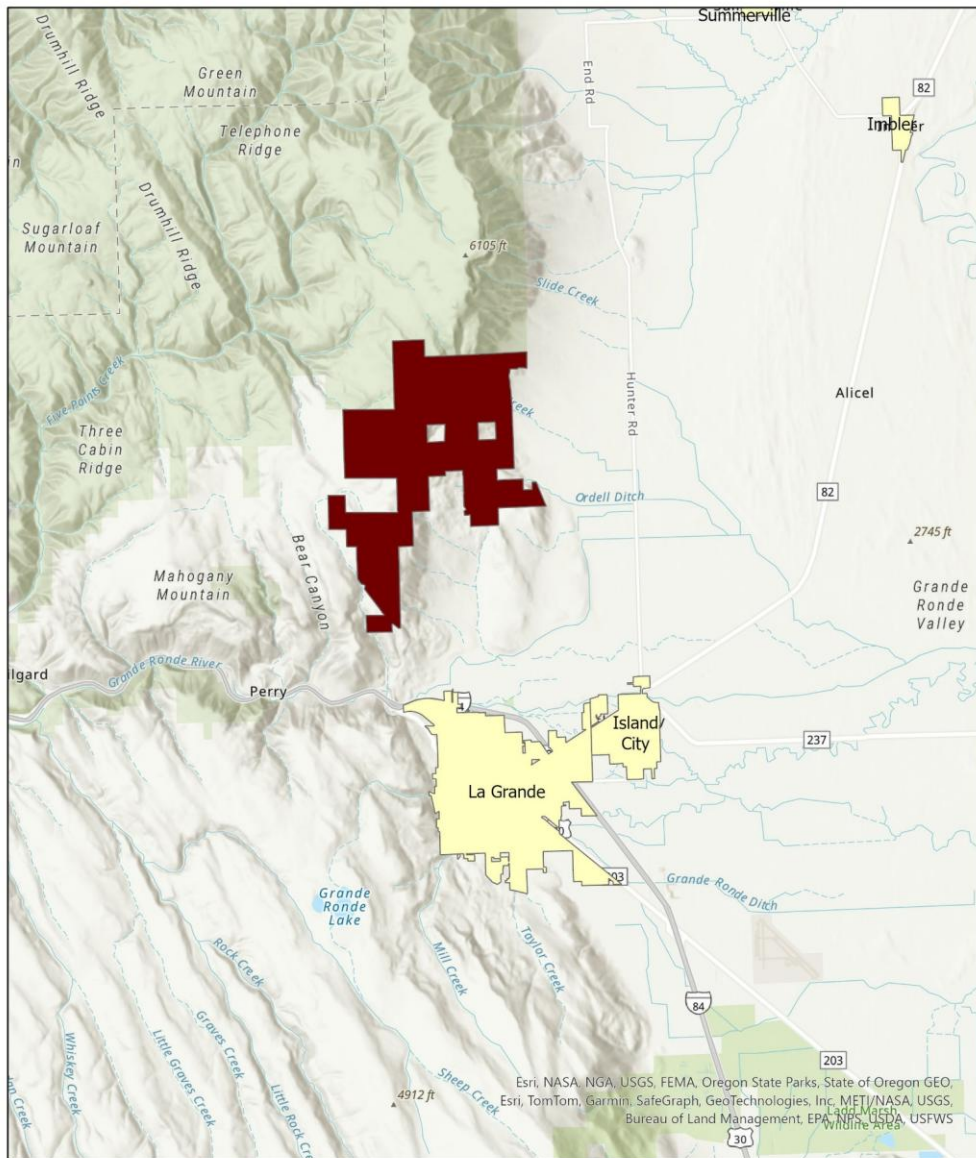
**Grazing** (currently inactive)

#### Timber Management

#### Education

### Management Objectives

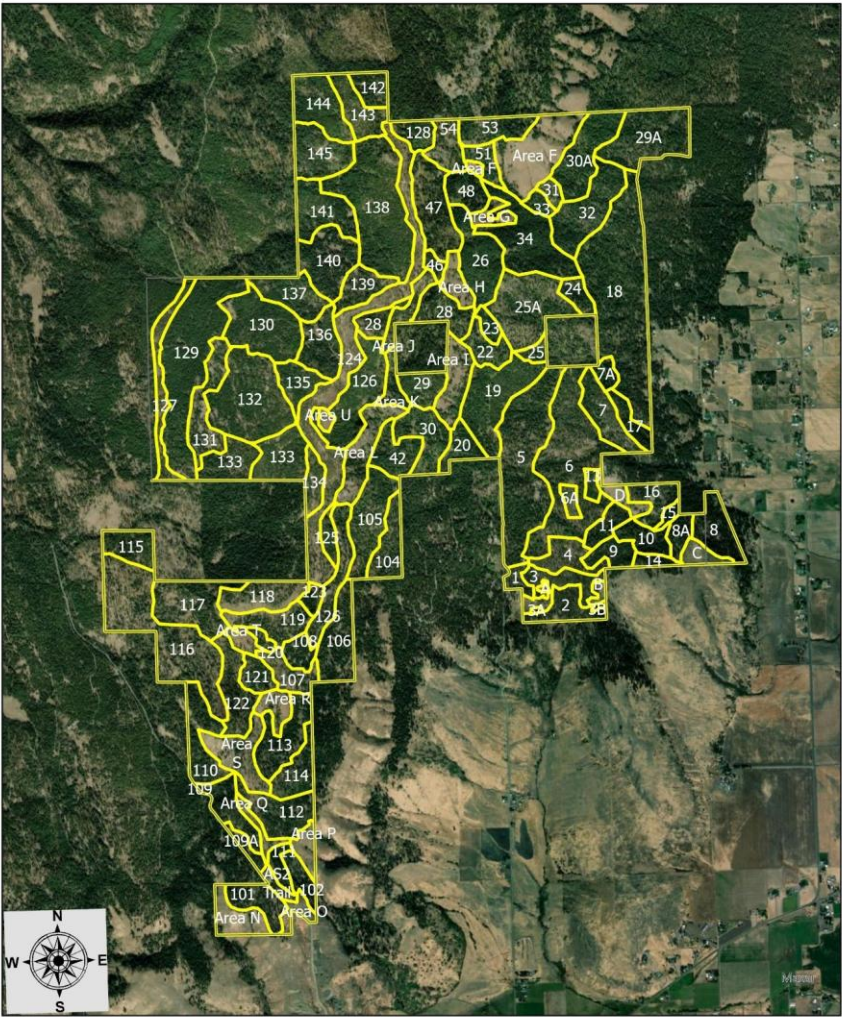
- Recreation
- Aesthetics
- Forest Health
- Fire Resistance and Resiliency
- Wildlife and habitat Diversity



## Mt Emily Recreation Area Vicinity Map



INVENTORY RESOURCES



Mt Emily Recreation Area Timber Types





## Forest Stand Characteristics

Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
1 B	9	WDMC	PP 99	M	L1: 10 – 22" dbh, 17" avg.	95 - 120	50	36 - 54	M (slash, litter)	SEV, F, P, TR, BB, RD, DM, GR, NW	Harvest ~ 2022 with SPC with masticator, acceptable growth, evaluate harvest in ~ 15 years. Possible Rx burn.
			PP 50 DF 50		L2: 5 – 10" dbh, 7" avg.	35 - 50	30	25			
			PP 60 DF 40		L3: 2 – 4" dbh, 3" avg.	25	25	25			
2 B	24	WDMC	PP 99	M	L1: 16 – 26" dbh, 22" avg.	95	37	23 - 34	L (grass and litter)	F, P, TR, BB, DM, GR, NW	Harvest ~ 2022, needs, acceptable growth, evaluate harvest in ~ 15 years. Possible Rx burn.
			PP 40 DF 60		L2: 7 – 10" dbh, 8" avg.	55	7	5			
			PP 70 DF 30		L3: \$ - 4" dbh	5 - 25	<25	150			
3 3A 3B B	26	WDMC	PP 99 DF 1	M	L1: 10 - 20" dbh, 15" avg.	50	63	57 - 84	L (grass and litter)	F, P (3B), TR, GR, DM, SEV, RI, NW	Harvest ~ 2022, good growth, evaluate harvest in ~ 15 years. Possible Rx burn.
					L2:						
					L3:						
4 B	25	WDMC	PP 99 DF 1		L1: 14 – 28" dbh, 19" avg	95	30	36 - 54	L (grass and litter)	DM, GR, TR	Harvest ~ 2022, SPC and pile 2024 completed, good growth, burn piles 2025, evaluate harvest in ~ 15 years. Possible Rx burn.
			PP 90 DF 10		L2: 5 - 14" dbh, 7" avg	35 - 55	15	15			
					L3: \$	5 - 10	5	5			

**Forest Type/Tree Species:** WDMC – warm, dry, mixed conifer; CMMC – cool, moist, mixed, conifer; PP – Ponderosa Pine; DF – Douglas Fir; LP – Lodgepole Pine; GF – Grand Fir; ES – Engelmann Spruce; WL – Western Larch; WJ – Western Juniper; OTH – Other, **Layer (L1, L2, L3)** – Each layer represents a distinct age or size class in the stand (i.e. 25 – 35 years old or 18 – 24' dbh)

**Snags:** Having a variety of size and species of snags and large woody debris is important to provide for wildlife habitat and forest health.

**Fuel Loads:** Low Fuels – indicates the size, type, location and quantity of burnable fuels may have a lower risk of a catastrophic, stand replacing fire. Moderate Fuel Loads – indicates the size, type, location and quantity of burnable fuels may have a moderate risk of a catastrophic, stand replacing fire. High Fuel Loads – indicates the size, type, location and quantity of burnable fuels may have a higher likelihood of catastrophic, stand replacing fire.

**Stand Density:** Low – tree density (trees/acre) below recommended minimums for the site; Medium – tree density (trees/acre) at or within the recommended range for the site; High – tree density (trees/acre) above recommended range for the site. These recommendations are based on maintaining a healthy forest.

**Special Resource & Concerns:** HC – Hiding Cover; DM – Dwarf Mistletoe; RD – Root Diseases; NW – Noxious Weeds; WH – Wildlife Habitat; WR – Water Resource; CR – Cultural Resource; CI – Culvert Issue; Road Problem – RP; SEV – Special Ecological Value; TR – Trail; BB – Bark Beetle; GR – Gall Rust; SD – Stem Decay; F – Fence; P – Borders Private, FS – Borders Forest Service, S – Slope > 40%

**dbh:** diameter at breast height, **TPA:** trees per acre, **SPC** - Precommercial Thinning, **RI** – Range Improvement, **SP** – Spring, **AC** – Archery Club, **ST** – Perennial Stream, **IS** – Intermittent Stream

**Stand Class:** **A** Commercial entry within 5 years, **B** Commercial entry within 15 years, **C** Pre-commercial thinning treatment within 5 years, **D** Wildlife emphasis or non-forest type, **E** Administrative site

Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
5 A/C	116	WDMC	PP 60 DF 35 GF 5 WL T	M	L1: 16 – 24" dbh, 21" avg.	90 -120	40	36 - 54	L (litter)	P, F, AC, SP, TR, ST, RD, BB, GR	Harvest ~ 2010, good growth, harvest in ~ 5 years followed by a SPC and pile or mastication. Alternative is SPC w/ hand pile or mastication. Root disease prevalent in DF and GF.
			PP 35 DF 30 GF 35 WL T		L2: 5 – 16" dbh, 10" avg.	35 - 55	38	45 - 67			
			PP 30 DF 35 GF 35		L3: \$ - 4' dbh	5 - 15	60	25			
6 C	121	WDMC	PP 45 DF 45 GF 9 WL 1	L	L1: 18 – 38" dbh, 23 avg.	90 -120	12	22 - 33	L – M (slash, litter)	ST, DM, RD, TR, BB, GR, NW	Harvest ~ 2022, partial SPC with mastication ~ 2023, Partial SPC with hand piles completed 2024 and 2025, piles burned 2024, good growth, root disease prevalent in DF and GF, continue SPC with hand piles.
			PP 50 DF 40 GF 10 WL T		L2: 5 – 12" dbh, 7' avg.	35 - 55	50	57 - 84			
			PP 20 DF 40 GF 40 WL T		L3: \$ - 4" dbh	5 -15	25	0 -50			
6A B	7	WDMC	PP 99	L	L1: 10 – 14" dbh, 12" avg.	55	40	74 - 111	L (slash, litter)	BB, GR, NW	Harvest ~ 2022, evaluate harvest ~ 15 years.
					L2:						
					L3:						
7 A/C	32	WDMC	PP 95 DF 5		L1: 14 - 26" dbh, 19" avg.	95	30	30 - 45	L (grass, litter)	TR, BB, GR	Harvest ~ 2010, evaluate harvest ~ 5 years, alternative option is SPC with hand piles or mastication.
					L2:						
					L3:						

**Forest Type/Tree Species:** WDMC – warm, dry, mixed conifer; CMMC – cool, moist, mixed, conifer; PP – Ponderosa Pine; DF – Douglas Fir; LP – Lodgepole Pine; GF – Grand Fir; ES – Engelmann Spruce; WL – Western Larch; WJ – Western Juniper; OTH – Other, , **Layer (L1, L2, L3)** – Each layer represents a distinct age or size class in the stand (i.e. 25 – 35 years old or 18 – 24' dbh)

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**Fuel Loads:** Low Fuels – indicates the size, type, location and quantity of burnable fuels may have a lower risk of a catastrophic, stand replacing fire. Moderate Fuel Loads – indicates the size, type, location and quantity of burnable fuels may have a moderate risk of a catastrophic, stand replacing fire. High Fuel Loads – indicates the size, type, location and quantity of burnable fuels may have a higher likelihood of catastrophic, stand replacing fire.

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**dbh:** diameter at breast height, TPA: trees per acre, SPC - Precommercial Thinning, RI – Range Improvement, SP – Spring, AC – Archery Club, ST – Perennial Stream, IS – Intermittent Stream

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Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
7A C	9	CMMC	PP 30 DF 60		L1: 20 – 26" dbh, 21" avg.	95	20	23 - 34	L (litter)	TR, RP, RD, BB, NW	Evaluate for SPC and pile ~ 5 years.
			GF 10								
			DF 40 GF 60		L2: 6 – 16" dbh, 10" avg.	35 - 55	30	103 - 153			
			DF 35 GF 30		L3: \$ -4' dbh, 2" avg.	5 - 20	750	150 - 175			
			WL 30 PP 5								
8 C	32	WDMC	PP 90 DF 10	H	L1: 12 – 30" dbh, avg. 18	95	15	36 - 54	L (grass and litter)	P, F, S, GR, NW	Harvest ~ 2010, evaluate SPC and pile or mastication.
			PP 50 DF 50		L2: 5 – 14" dbh, 9" avg	35	250	152 - 227			
			PP 60 DF 40		L3: \$ - 4	25	125	25			
8A C	15	WDMC	PP 95 DF 5	L	L1: 10 – 24" dbh, 19" avg.	110	35	36 - 54	L (litter and grass)	TR, DM, RD, GR, NW	Harvest ~ 2004, evaluate SPC and pile or mastication ~ 5 years.
			PP 40 DF 60		L2: 6 – 18" dbh, 11" avg.	35	35	74 - 131			
			PP 60 DF 40		L3: \$ - 3" dbh	15	25	50			
9 A	17	WDMC	PP 95 DF 5	H	L1: 8 – 16" dbh, 14" avg.	55	110	57 - 84	L (litter)	TR, P, F, CR, GR, BB, DM, NW	Evaluate harvest ~ 5 years, poor growth. Cultural resource concerns.
			PP 95 DF 5		L2: \$ -4" dbh						
					L3:						

**Forest Type/Tree Species:** WDMC – warm, dry, mixed conifer; CMMC – cool, moist, mixed, conifer; PP – Ponderosa Pine; DF – Douglas Fir; LP – Lodgepole Pine; GF – Grand Fir; ES – Engelmann Spruce; WL – Western Larch; WJ – Western Juniper; OTH – Other, , **Layer (L1, L2, L3)** – Each layer represents a distinct age or size class in the stand (i.e. 25 – 35 years old or 18 – 24' dbh)

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Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
10 C	21	WDMC	PP 40 DF 40	L	L1: 20 – 26" dbh, 22" avg.	120	20	30 -45	L (litter, grass)	TR, IS, RD, DM, BB	Harvest ~ 2004, partial ITM mark, low volume, good growth, evaluate SPC and pile or mastication ~ 5 years.
			GF 15 WL 5								
			DF 50 PP 40		L2: 6 – 10" dbh 8" avg.	30	25	75 - 150			
			GF 5 WL 5								
			DF 40 GF 40		L3: \$ - 4	5 - 15	200	25 - 50			
			PP 20								
11 C	16	WDMC	PP 55 DF 45	M	L1: 10 – 26" dbh, 17' avg.	80 -120	65	45 - 67	L (grass, litter)	TR, GR, RD, BB	Harvest ~ 2004, Partial ITM mark, low volume, good growth, evaluate SPC and pile or mastication ~ 5 years.
			PP 40 DF 60		L2: 5 – 10" dbh, 7" avg.	45 - 75	35	75 -150			
			PP 60 DF 40		L3: \$ - 4	25	35	25			
13 B/C	6	WDMC	PP 99	L/H	L1: 10-16" dbh, 13" avg.	55	50(130)	57 - 84	L (litter, slash)	GR, BB	Harvest ~ 2022 (2 ac. Not harvested), poor to fair growth, evaluate 4 ac. for harvest ~15 years and 2 acres for SPC and pile ~ 5 years.
					L2:						
					L3:						
14 C	7	WDMC	PP 90 DF 5	M	L1: 12 -20" dbh, 15" avg.	75	35	57 -84	L grass, litter)	TR, P, F, BB, RD, GR	Harvest ~ 2004, good growth, evaluate SPC and pile or mastication ~ 5 years. Root disease prevalent in DF and GF.
			WL 3 GF 2								
			PP 45 DF 50		L2: 6 – 10" dbh, 8" avg.	35	15	5 - 10			
			WL 5								
			PP 40		L3: \$ - 4" dbh, 3" avg.	25	50	15 - 25			
			DF 60								

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
15 A/C	5	WDMC	PP 15 DF 70 WL 5 GF 10 PP 5 DF 80 WL T GF 10	H	L1: 10 – 22” dbh, 13” avg.	60 - 95	110	60 - 90	L – M (litter)	TR, P, F, ST, RD, BB	Evaluate for Harvest ~ 5 years. Small acres limiting. Favor WL and PP. Alternative option is SPC and pile or mastication.
					L2: 5 – 8” dbh, 7” avg.	50	60	10 - 15			
					L3:						
16 A/C	22	WDMC	PP 90 DF 10  PP 60 DF 40  PP 80 DF 20	H - M	L1: 8 – 22” dbh,11” avg	9 - 120	70	74 - 111	L (litter and grass)	TR, P, F, S, BB, GR, DM,	Evaluate for harvest ~ 5 years, small diameter pine limiting. Poor growth. Alternative option is SPC and pile or mastication.
					L2: 5 – 10” dbh, 6” avg.	45	70	50			
					L3: \$ - 4” dbh	25	283	25			
17 D/C	15	WDMC	PP 50 DF 50  PP 50 DF 50	H	L1: 12 – 34” dbh, 21” avg.	120	55	30 - 45	L – M (litter)	TR, S, BB, RD, GR	Evaluate for SPC and hand pile ~ 5 years. Slope and rocky ground and rock outcrops limiting logging. Haul route requires culvert or easement.
					L2: 6 – 14” dbh, 10” avg.	55 - 75	40	10 - 15			
					L3:						
18 C	176	WDMC	PP 70 DF 25 WL 5 DF 55 PP 40 DF 55 WL 3 GF 2 PP 25 DF 40 WL 5 GF 30	L	L1: 18 – 30” dbh, 22” avg.	95-120	20	25 - 38	L (litter and grass)	TR, P, F, IS, RD, BB, GR	Harvest ~ 2010, good growth, evaluate for SPC with hand pile or mastication ~ 5 years. Conley Creek requires culvert for access to south end of stand or easement.
					L2: 6 -20” dbh, 12” avg.	35 - 55	40	50 75			
					L3: \$ - 4” dbh	5 - 25	400	25 - 50			

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
19 B	66	WDMC	PP 75 DF 15 GF T WL 5 PP 10 DF 30 GF 65 WL 5	M	L1: 6 – 18" dbh, 14 avg.	55	65	57 - 84	L – M (litter)	IS, GR, BB, RD, NW	Harvest ~ 2010, evaluate harvest ~ 15 years. Thin from below, favor PP and WL as root disease present in GF and DF.
					L2: \$ - 2" dbh	5 - 15	450	25			
					L3:						
20 A/C	18	WDMC	PP 40 DF 30 WL 5 GF 20 DF 40 PP 25 GF 30 WL 5 GF 60 DF 30 WL 5 PP 5	H - M	L1: 14 -26" dbh, 22' avg.	120	20	5 - 10	L – M (litter)	P, F, GR, RD, BB, DM	Harvest ~ 2010, evaluate harvest ~ 5 years. Poor growth, mistletoe and root disease in GF and DF.
					L2: 5 – 22" dbh, 10" avg.	55	145	103 - 153			
					L3: \$ - 4" dbh	15 - 35	175	25			
22 C	20	WDMC	PP 40 DF 50 GF 10 PP 35 DF 40 GF 20 GF 20 WL 5 DF 40 GF 30 PP 25 WL 5	L	L1: 16 – 24". 20" avg.	120	5	5	L (Litter)	S, RD, DM, GR	Harvest ~ 2004, evaluate SPC and hand pile ~ 5 years. Favor PP and WL.
					L2: 5 – 14" dbh, 9" avg.	35 - 55	25	20			
					L3: \$ - 4" dbh	15	125	75			
23 A/C	8	CMMC	PP 80 DF 15 WL 5 GF T PP T DF 80 WL T GF 20	H	L1: 5 – 16" dbh 10" avg.	55	140	103 153	L (litter)	S, GR	Evaluate harvest ~ 5 years. Thin from below. Favor PP and WL. Alternative is SPC and hand pile.
					L2: \$ - 4" dbh	25	100	0 -25			
					L3:						

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
24 C	68	WDMC	PP 50 DF 30	L	L1: 16 – 24" dbh, 20" avg.	95-120	10	10	L (litter)	TR, GR, RD	Harvest ~ 2004. Evaluate SPC with hand pile or mastication. Favor PP and WL.
			WL 5 GF 15								
			PP 40 DF 40		L2: 6 – 14" dbh, 10" avg.	35 - 55	25	100			
			WL 5 GF 15								
			PP 25 DF 40		L3: \$ - 4" dbh	5 - 25	500	75 - 100			
			GF 30 WL 5								
25 C/A	7	WDMC	PP 90 DF 10	M	L1: 22 -26" dbh, avg 25"	95-120	30	20	L (litter)	P, F, S, TR, GR,	Evaluate SPC and pile ~ 5 years. Alternative is harvest ~ 5 years. Steep slopes and adverse skid limit logging. Private land below.
					L2:						
					L3:						
25A C	12	WDMC	PP 90 DF 10	M	L1: 14 – 22" dbh, 17" avg.	85	36	36 - 54	L (litter)	P, F, S, GR, BB, DM	Harvest ~ 2004, poor growth in overstory. Slopes average 50% limiting logging. Evaluate SPC and hand pile ~ 5 years.
			PP 30 DF 60								
			GF 10		L2: 5 – 10" dbh, 7" avg.	35	35	25			
					L3:						
26 A/C	47	WDMC	PP 80 DF 15	H	L1: 6 – 16" dbh, 9" avg.	55	220	103 - 153	L (litter)	TR, BB, GR	Evaluate harvest ~ 5 years, poor growth. Alternative SPC and hand pile or mastication.
			WL 5 GF T								
					L2: \$ - 4" dbh	15	50	0			
					L3:						

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
28 C	28	CMMC	GF 80 DF 15 WL 5 PP 5 WL 5 DF 30 GF 50 GF 60 DF 35 WL 5 PP T	L	L1: 16 -24" dbh, 20" avg.	95-120	20	10	L (litter)	TR, S, SD, RD	Harvest ~ 19990, layer 2 in overstocked clumps. Evaluate for SPC with hand pile or mastication. Broken topography.
					L2: 5 – 22" dbh, 9" avg.	35 - 55	75	191 - 286			
					L3: 5 - 4"	5 - 20	200	50			
29 A	21	CMMC	PP 95 DF 1 GF 3 WL 1 PP 5 DF 25 GF 65 WL 5	H	L1: 12 – 20" dbh, 16" avg.	55	70	40 - 60	L (litter)	IS, DM, BB	Harvest ~ 2010. Evaluate for harvest ~ 5 years. Some pockets of SPC favor WL.
					L2: 5 – 3" dbh	5 - 20	875	50			
					L3:						
29A C	62	WDMC	PP 90 DF 10 GF T WL T PP 35 DF 35 WL 5 GF 25 PP 10 DF 40 WL 5 GF 45	M	L1: 16 – 20" dbh, 18" avg.	95	35	36 - 54	L (litter and grass)	P, F, FS, GR, BB, RD	Harvest ~ 2010, Evaluate SPC and hand pile or mastication ~ 5 years.
					L2: 5 – 16" dbh, 9" avg.	35 - 55	100	50			
					L3: 5 - 4" dbh	5 - 15	350	25			
30 C	37	CMMC	PP 20 DF 40 GF 35 WL 5 PP 35 DF 40 GF 15 WL 5 LP 3 ES 2 GF 40 DF 40 PP 10 WL 9	L	L1: 14 – 26" dbh, 19" avg.	95	12	10	Litter (L)	P, RD, BB, DM, GR	Harvest ~ 2010, good growth, evaluate SPC and hand pile or mastication. Favor PP and WL.
					L2: 5 – 16" dbh, 9 "avg.	35 -55	100	50 - 75			
					L3: 5 - 4" dbh	5 - 15	350	25 - 75			
					-						

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
30A C/B	49	WDMC	PP 40 DF 40 WL 5 GF 15 PP 10 DF 30 WL 5 GF 65	H	L1: 5 – 20" dbh, 10" avg.	55	170	103 - 153	L (litter)	IS, FS, F, RD, BB, DM, GR	Marginal size for commercial thin. Evaluate SPC with hand pile or mastication. Root disease prevalent in GF and DF, favor WL and PP.
					L2: 5 - 4" dbh	15	125	25			
					L3:						
31 C	7	WDMC	PP 90 DF 10 PP 30 DF 70 PP 30 DF 70	M	L1: 14 – 22" dbh, 19" avg.	120	50	36 - 54	L (litter)	GR	Harvest ~ 2010. Evaluate SPC with hand pile or mastication ~ 5 years. If no SPC, harvest ~ 15 years.
					L2: 5 – 10" dbh, 8" avg.	35	20	15			
					L3: 5 - 4" dbh, 2" avg.	15	100	50			
32 C	54	WDMC	PP 40 DF 30 GF 25 WL 5	M	L1: 14 – 28" dbh, 20" avg.	85-120	22	10	L (litter,)	GR, DM, RD, BB	Harvest ~ 2010. Evaluate SPC with hand pile or mastication ~ 5 years. Root disease prevalent in DF and GF. PP DM widespread favor WL
					L2: 5 – 16" dbh, 7" avg.	35 - 55	115	50			
					L3: 5 - 4" dbh	5 - 15	500	125			
33 C	8	WDMC	PP 75 DF 10 GF 15 PP 10 DF 10 GF 80	H	L1: 6 – 16" dbh, 10" avg.	55	280	103 - 153	L – M (litter, down wood)	RD, BB, GR	Evaluate SPC with hand pile or mastication ~ 5 years. Alternative is a commercial harvest ~ 5 years. Low value pulpwood.
					L2: 5 - 4" dbh, 1" avg.	20	100	25			
					L3:						

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
34 D/A	69	CMMC	GF 90    DF 10 WL T    PP T GF 55    DF 30 PP 5    WL 9 GF 80    DF 20	H	L1: 18 – 24" dbh	90	20	30 - 50	L – M (litter, down wood)	S, ST, TR, RD, BB, GR, DM	Good candidate for wildlife or future old growth stand. Alternative is to commercial thin ~ 5 years. Favor DF and WL. Possible SPC with mastication.
L2: 5 – 16" dbh, 9" avg.			55		340	150 - 175					
L3: \$ - 4" dbh			5 - 25		250	25					
42 C/B	28	WDMC	PP 20    DF 5 WL T    GF 75 PP 35    DF 50 GF 10    WL 5 PP 5    DF 15 WL30    GF 45 LP 5	M	L1: 16 – 22" dbh, 19" avg.	90-120	20	10	L M (litter and slash)	RD, SD, BB, GR	Harvest ~ 2010. Evaluate for SPC with hand pile or mastication. Alternative is harvest ~ 15 years.
L2: 5 – 16" dbh, 9" avg.			50		107	103 - 150					
L3: \$ - 4" dbh			15 - 25		833	75					
46 D/A	7	CMMC	GF 80    DF 20  PP 5    DF 10 WL40    GF 45	H	L1: 16 – 28" dbh, 22" avg.	120	60	30 - 40	L – M (litter and down wood)	WH, DM, BB, SD, S	Evaluate for harvest ~ 5 years. Favor DF and WL. Alternative is to leave for wildlife with surrounding stands.
L2: 5 – 14" dbh, 10" avg.			35 - 55		40	25					
L3:											
47 D	52	CMMC	GF 89    DF PP 1 GF 75    DF 25  DF 50    GF 50	L	L1: 16 24" dbh	85-110	35 - 55	35	L (litter)	WH, RD, BB	Harvest ~ 1990. Steep slopes and tall shrubs limit management. Manage for wildlife habitat.
L2: 5 – 14" dbh			35 - 55		25	25					
L3: \$ -4" dbh			5 - 35		10 - 20	10 -20					

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Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
48 D	22	WDMC	GF 90 DF 10	M	L1: 16 – 30" dbh	85-110	35	35	M – H (litter)	SEV, WH	Harvest ~ 1990. Steep slopes and tall shrubs limit management. Manage for wildlife habitat.
			GF 80 DF 20		L2: 6 – 14" dbh	35 - 55	25	25			
			GF 80 DF 20		L3: \$ - 4	5 - 35	25	-			
51 D	18	WDMC	GF 80 DF 20	L	L1: 16 – 30" dbh	85-110	25	25	L (litter)	WH, ST	Harvest ~ 1990. Steep slopes and tall shrubs limit management. Manage for wildlife habitat
			GF 70 DF 30		L2: 5 – 14" dbh	35 - 55	25	25			
			DF 50 GF 50		L3: \$ - 4" dbh	5 - 30	15	15			
53 D	28	WDMC	DF 50 GF 50	M	L1: 14 – 30" dbh	85-110	20 - 40	20 - 40	L (litter)	FS, F, ST, WH, IS	Harvest ~ 1990. Steep slopes and tall shrubs limit management. Manage for wildlife habitat. Borders Forest Service.
			DF 50 GF 50		L2: 6 – 14" dbh	35 - 55	20 - 30	20 - 30			
					L3: \$ - 4" dbh	5 - 25	10	10			
54 D	24	WDMC	DF 60 GF 40	M	L1: 14 – 30" dbh	85-110	20 - 40	20 - 40	L (litter)	FS, F, WH, IS	Harvest ~ 1990. Steep slopes and tall shrubs limit management. Manage for wildlife habitat. Borders Forest Service
			DF 60 GF 40		L2: 6 – 14" dbh	35 - 55	20 - 40	20 - 40			
			DF 60 GF 40		L3: \$ - 4" dbh	5 - 30	20 - 40	20 - 40			

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101 C	22	WDMC	PP 85 DF 15	L	L1: 16 – 22" dbh, 18" avg.	120	20	10	L (grass and litter)	P, F, CR, S, GR, DM, BB	Harvest ~ 1995. Evaluate for SPC with hand pile or mastication. Alternative is a harvest for sanitation to remove severely infected mistle-toed PP.
			PP 80 DF 20		L2: 6 – 10 " dbh, 8 " avg.	45	20	10			
					L3:						
101A A	2		PP 99	M	L1: 6 – 20" dbh, 13" avg.	45	80	57 - 84	L (litter and grass)	P, F, CR, S, GR, DM, BB	Evaluate harvest ~ 5 years. Stand close to maximum density. Small acres are limiting.
					L2:						
					L3:						
109 A	28		PP 75 DF 25	H	L1: 10 – 20" dbh, 16" avg.	120	87	45 - 67	L (litter and slash)	P, F, S, DM, GR, BB	Evaluate harvest in 5 years. Sanitation salvage due PP and DF mistle-toe in stand.
			PP 50 DF 50		L2: 5 – 10" dbh, 6" avg	35	15	15			
					L3: 5 - 2" dbh	15	20	20			
109A A	9		PP 99 DFT WL T GF T PP 50 DF 10 GF 40	M	L1: 14 – 20" dbh, 17" avg.	45	45	36 - 54	L (grass and litter)	P, F, GR, BB	Harvest and SPC ~ 2010. Evaluate harvest ~ 5 years. Plan with stand 109 for harvest.
					L2: 5 - 2" dbh	10	25	15			
					L3:						

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
104 C	27	CMMC	GF 95 WL 5	M	L1: 18 – 30" dbh 24" avg.	120	10	10	L (litter)	P, F, RD, BB, DM	Harvest ~ 1990. Evaluate for SPC and hand pile or mastication ~ 5 years. Favor PP and WL. Maintain boundary fence. Borders Fire Wise Community.
			PP 25 DF 35		L2: 5 – 14" dbh, 9" avg.	35 - 50	33	129 - 138			
			WL15 GF 20								
			LP 5								
			GF 40 DF 40		L3: 5 - 4" dbh	10 - 25	683	100			
105 C/B	50	CMMC	PP 15 DF 40	M	L1: 5 – 16" dbh, 9" avg.	35 - 50	92	129 - 138	L (litter)	RD, BB, DM, GR, S	Harvest ~ 2010. Evaluate SPC and hand pile or mastication ~ 5 years. Alternative is harvest ~ 15 years, thin from below favor PP and WL, root disease prevalent in DF and GF.
			WL30 GF 15		L2: 5 - 4" dbh, 5" avg.	5 - 25	1438	100			
					L3:						
111 C/B	11	WDMC	DF 80 PP 20	M	L1: 5 - 16" dbh, 10" avg.	80	100	100 - 150	L-M (litter, slash)	DM, BB, GR, S	Harvest 2014. Evaluate SPC and hand pile or mastication ~ 5 years. Alternative is harvest ~ 15 years, thin from below and sanitation salvage. Slope limiting for logging.
			GF T		L2: 6-16" dbh, 9" avg.	45	90	20			
			PP 90 DF 10		L3: 5-4" dbh	5 - 25	25	10			
			PP 60 DF 40								
112 B/C	40	WDMC	PP 95 DF 5	M	L1: 14 – 16" dbh, 16" avg.	120	7	7	L (litter and grass)	DM, GR, BB	Sanitation harvest and SPC ~ 2010 for PP Mistle-toe. Evaluate for harvest ~ 15 years. Alternative is SPC and hand pile or mastication. PP mistle-toe prevalent favor DF or trees with lower 1/3 infection.
			WL T GF T		L2: 5 – 14" dbh 9" avg.	40	83	104 - 153			
			PP 90 DF 10								
			PP 40 DF 55		L3: 5 - 4" dbh	10	25	15			
			GF 5								

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102 C/B	15	WDMC	PP 85 DF 15	H	L1: 10 – 24" dbh, 17" avg.	90	63	48	L (litter)	P, F, BB, DM, S, SEV, SP	Partial harvest 2014, Evaluate for SPC and pile. Alternative is harvest, slope and topography limiting. Level 2 has heavy PP mistle-toe infection.
			PP 80 DF 20		L2: 5 – 12" dbh, 10" avg.	45	10	5			
			PP 50 DF 50		L3: \$ - 4" dbh	15	25 - 125	25			
107 B	22	WDMC	PP 90 DF 10	L	L1: 18 – 24" dbh	90	1	1	L (grass, litter)	P, F, BB, GR, DM	Sanitation harvest for PP mistle-toe ~ 2014. Evaluate for sanitation harvest in ~ 15 years, follow up with SPC.
			PP 90 DF 10		L2: 5 – 14" dbh, 9.6 avg.	45	20 - 80	103 - 153			
					L3: \$ - 4"	5 - 25	0 - 150	25			
108 A	14	WDMC	PP 80 DF 20	H	L1: 18 – 22" dbh	95	1	1	L (litter, slash)	BB, GR, DM	Partial harvest with SPC ~ 2014. Evaluate for commercial thin from below ~ 5 – 10 years. Watch for PP mistle-toe.
			GF T								
			PP 90 DF 10		L2: 5 – 16" dbh, 10.1" avg	45	140 - 280	103 -- 153			
			GF 60 DF 30		L3: \$ - 4' dbh	5 - 25	0 - 150	25			
			PP 10								
106 C/B	42	WDMC	GF 60 DF 40		L1: 18 – 26" dbh	95-110	1	1	L (litter)	P, F, SP, CR, RD, BB	Harvest ~ 2010, over story removal. Evaluate pre-commercial thin with hand pile or mastication ~ 5 years. Alternative is commercial thin from below ~ 15 years. Favor PP/WL. Cabin and spring on west boundary.
			PP 60 DF 30		L2: 5 – 16" dbh, 12' avg	35 - 55	50 - 260	74 - 111			
			WL 5 GF 5		L3: \$ - 4" dbh	5 - 20	150 - 900	75			

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110 A	39	WDMC	PP 30 DF 60	H	L1: 10 – 32" dbh, 18" avg.	85-110	40 - 90	36 - 54	L (litter)	P, F, TR, DM, BB, RD, GR	Harvest ~ 2010. Evaluate Commercial thin from below ~ 5 years. Remove DF mistle-toe. Favor PP.
			GF 10 WL T								
			PP 10 DF 60		L2: 6 – 14" dbh, avg. 11"	45 - 55	0 - 60	25			
			GF 30								
			GF 70 DF 30		L3: 5 - 4"	5 - 15	25	-			
			PP T								
113 C/B	41	WDMC	PP 70 DF 30	H	L1: 8 -20" dbh, 12 avg	75-110	15	5	L (litter)	P, F, BB, GR, DM	Harvest ~ 2010. Overstory removal. Evaluate pre-commercial thin with hand pile or mastication. Favor DF due to PP mistle-toe. Alternative is waiting 15 years for thin from below.
			PP 80 DF 20		L2: 5 – 14" dbh, 9.5 avg.	45 - 70	60 - 300	100 - 153			
			PP 40 DF 60		L3: 5 - 4" dbh	5 - 25	50 - 350	50			
114 C/A	27	WDMC	PP 80 DF 20		L1: 8 -18" dbh, 13.1 avg.	95-110	30 - 110	57 - 84	L (grass, litter)	P, F, S, DM, BB, GR	Sanitation harvest ~ 2010.to remove PP mistle-toe. Evaluate pre-commercial thin with hand pile or mastication. Favor DF due to PP mistle-toe. Slopes limiting for logging.
			PP 80 DF 20		L2: 5 – 10" dbh, 7.5 avg.	45 - 70	10 - 60	10			
			PP 40 DF 60		L3: 5 - 4" dbh	20	50 - 150	50			
					L1:						
					L2:						
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					L1:						
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115 C	30	CMMC	DF 10 WL 5 GF 75 ES 5 PP 10 DF 20 WL70 GF T PP 5 DF 15 WL35 GF 50	M	L1: 10 – 22" dbh, 12" avg.	95	10 - 40	20	L (litter)	P, F, ST, RD, BB	Harvest ~ 2010, partial SPC with masticator ~ 2011. Evaluate SPC with hand piles or mastication ~ 5 years. Favor WL and PP due to root disease in GF and DF.
					L2: 5 – 10" dbh, 6" avg.	35	10 - 140	51 - 76			
					L3: \$ - 4" dbh	5 - 35	100 - 650	50			
116 C	117	WDMC	PP 60 DF 35 WL T GF 5 PP 30 DF 40 GF 40 WL T		L1: 12 – 30" dbh, 20" avg.	85-110	0 - 50	10	L (litter & grass)	P, F, T, RI, RD, BB, DM	Harvest ~ 2010. Evaluate SPC with hand pile or mastication. Favor PP and WL due to root disease. Two cattle ponds in unit.
					L2: 5 – 10" dbh, 7" avg.	35 - 45	0 - 140	132 - 157			
					L3: \$ - 5" dbh	5 - 25	0 - 200	25			
117 C/B	53	WDMC	PP 60 DF 35 GF 5 WL T PP 30 DF 40 WL 9 GF 20 PP 5 DF 40 WL 9 GF 21	M	L1: 10 – 24" dbh, 17" avg.	95-110	0 - 20	5	L (litter & grass)	P, F, DM, RD, BB	Harvest ~ 2010 removing most over story. Evaluate ~ 5 years SPC with hand pile or mastication. Favor PP and WL due to root disease.
					L2: 5 – 12" dbh, 8.5" avg.	45	40 - 180	103 - 153			
					L3: \$ - 4"	5 - 25	0 - 150	25			

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Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
118 B/C	36	WDMC	PP 70 DF 20 GF 10	L	L1: 18 – 24" dbh, 21" avg.	110	10 - 20	10	L (litter & slash)	P, F, TR, BB, RD	Harvest ~ 2010. Evaluate harvest ~ 15 years follow up with SPC.
			PP 5 DF 10 GF 85		L2: 6 – 14" dbh, 12" avg.	85	10 - 90	10			
					L3: 5 - 4" dbh, 1" avg.	5 - 35	0 - 300	50			
119 B	36	WDMC	PP 90 DF 5 WL 5 GF T	M	L1: 8 – 18" dbh, 12" avg.	45	40 -160	74 - 111	L (litter)	BB, GR	Over story removal ~ 2010. Evaluate a commercial thin from below ~ 15 years. Watch for PP mistle-toe. Favor WL.
					L2: 5 - 4" dbh	5 - 20	50 - 300	23			
					L3:						
120 A/B	4	WDMC	PP 95 DF 5 PP 20 DF 20 GF 60	M	L1: 5 – 14", 9.2" avg.	45	100 - 220	74 - 111	L (litter)	SP, GR, DM	Harvested ~ 2014 to mainly remove mature over story. Evaluate a commercial thin from below ~ 5 – 15 years. Diameter limiting in places. High water table in spots.
					L2: 5 - 4" dbh	5 - 25	50 - 400	25			
					L3:						
121 C/B	16	WDMC	PP 90 DF 10 PP 40 DF 60	H	L1: 5 – 14" dbh, 9.7 "avg.	45 - 70	120 - 180	103 - 153	L (Litter)	SP, IS, BB, GR, DM	Partial harvest ~ 2010 combined with SPC. Evaluate for SPC with hand pile or mastication. Alternative is harvest, small stand diameter limits. Watch for PP mistle-toe. Bordered by two seasonal streams.
					L2: 5 -4" dbh	5 - 25	0 - 100	25			
					L3:						

**Forest Type/Tree Species:** WDMC – warm, dry, mixed conifer; CMMC – cool, moist, mixed, conifer; PP – Ponderosa Pine; DF – Douglas Fir; LP – Lodgepole Pine; GF – Grand Fir; ES – Engelmann Spruce; WL – Western Larch; WJ – Western Juniper; OTH – Other, , **Layer (L1, L2, L3)** – Each layer represents a distinct age or size class in the stand (i.e. 25 – 35 years old or 18 – 24' dbh)

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**Special Resource & Concerns:** HC – Hiding Cover; DM – Dwarf Mistletoe; RD – Root Diseases; NW – Noxious Weeds; WH – Wildlife Habitat; WR – Water Resource; CR – Cultural Resource; CI – Culvert Issue; Road Problem – RP; SEV – Special Ecological Value; TR – Trail; BB – Bark Beetle; GR – Gall Rust; SD – Stem Decay; F – Fence; P - Borders Private, FS – Borders Forest Service, S – Slope > 40%

**dbh:** diameter at breast height, **TPA:** trees per acre, **SPC** - Precommercial Thinning, **RI** – Range Improvement, **SP** – Spring, **AC** – Archery Club, **ST** – Perennial Stream, **IS** – Intermittent Stream

**Stand Class:** **A** Commercial entry within 5 years, **B** Commercial entry within 15 years, **C** Pre-commercial thinning treatment within 5 years, **D** Wildlife emphasis or non-forest type, **E** Administrative site

Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
121B B	16	PP	PP 90 DF 10	L	L1: 18 – 22" dbh	110	1 - 5	1 - 5	L (grass, litter)	DM, BB, GR	Sanitation harvest ~ 2014 for PP mistle-toe and bark beetles. Stand a mosaic of forest and non-forest types. Evaluate a sanitation harvest ~ 15 years.
			PP 95 DF 5								
					L2: 8 – 14" dbh	45	10 - 30	74 - 111			
					L3:						
122 C	39	WDMC	PP 40 DF 40	M	L1: 10 – 26" dbh, 18" avg.	85-110	40	20	L (litter & slash)	IS, DM, RD, BB, GR	Harvest ~ 2010. Evaluate ~ 5 years for pre-commercial thin with hand piles or mastication. Favor PP and WL due to root disease.
			GF 20 WL T								
			PP 30 DF 35		L2: 5 – 10" dbh, 6" avg.	35	30	25			
			GF 20 WL 5		L3: \$ - 4" dbh	10	0 - 950	50			
123 A	8	WDMC	PP 10 DF 10	H	L1: 10 - 24" dbh, 16" avg.	95	10 - 40	10	L (litter)	SD, RD, GR	Harvest ~ 2010. Evaluate over story removal to manage understory. Follow with pre-commercial thin favor PP, WL, DF.
			GF 80 DF 20								
			PP 80 DF 15		L2: 6 – 14" dbh, 9" avg.	45	80	74 - 111			
			GF 80 DF 15		L3: \$ - 4"	15 - 25	250	25			
			PP 5								
124 B	125	CMMC	PP 50 WL45	L	L1: 5 - 14" dbh, 10" avg.	25 - 35	40	40	L (litter & slash)	GR, CB	Harvest ~ 2022. Evaluate needs to maintain fuels break ~ 15 years.
			DF 5								
			PP 20 DF 40		L2:						
			GF 30 LP 2								
			ES 3								

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**dbh:** diameter at breast height, TPA: trees per acre, SPC - Precommercial Thinning, RI – Range Improvement, SP – Spring, AC – Archery Club, ST – Perennial Stream, IS – Intermittent Stream, CB – Case Bearer

**Stand Class:** A Commercial entry within 5 years, B Commercial entry within 15 years, C Pre-commercial thinning treatment within 5 years, D Wildlife emphasis or non-forest type, E Administrative site

Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
125 A	10	CMMC	PP 99	H	L1: 8 – 12" dbh, 10" avg.	35	160	58 - 111	L (litter)	GR, BB	Evaluate for commercial thin from below ~ 5 years.
			DF 50 GF 50								
					L2: 5 - 1" dbh	10	200	0			
					L3:						
126 D/C	58	CMMC	PP 40 LP 35 WL10 GF 5 GF 40 ES 40 DF 20	M	L1: 5 – 12" dbh, 8" avg.	35	120 - 180	137 - 205	L (litter)	SEV, WH, GR, DM	Stand adjacent to potential Peregrine nest site. Manage for buffer. Over story removed ~ 1995 and planted with PP/WL. Alternative is to evaluate pre-commercial thinning ~ 5 years. Favor PP/WL.
					L2: 5 - 4" dbh	5 - 20	0 - 600	25			
					L3:						
127 B	29	CMMC	PP 85 WL10 DF 5	L	L1: 10 – 16", 12 "avg.	35	50	67 - 100	L (litter, slash)	P, F, FS, TR, GR, RD	Harvested for fuels break ~ 2020, followed with mastication. Evaluate commercial thin ~ 15 years. Maintain fuels break.
					L2:						
					L3:						
128 B	16	CMMC	GF 30 DF 15 WL15 PP 10 GF 40 DF 15 ES 15 PP 10	M	L1: 18 – 34' dbh	85-110	45	45 - 68	L (litter)	FS, F, SEV, TR, RD, BB	Evaluate harvest ~ 15 years. Favor PP/WL/DF/ES of all age classes. Borders Forest Service.
					L2: 6 -16" dbh	35 - 55	30	25			
					L3:						

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**Stand Class:** **A** Commercial entry within 5 years, **B** Commercial entry within 15 years, **C** Pre-commercial thinning treatment within 5 years, **D** Wildlife emphasis or non-forest type, **E** Administrative site

Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
129 C/B	123	CMMC	PP 80 WL15 DF 5 GF T	H	L1: 5 – 16" dbh, 10" avg.	35	110 - 280	129 - 138	L (litter)	P, F, FS, TR, BB, RD, GR	Over story removed ~ 1990. Planted with PP. Evaluate pre-commercial thinning with hand pile or mastication ~ 5 years. Average stand diameter limiting for commercial thin from below.
					L2:						
					L3:						
130 B	65	CMMC	PP 60 GF 4 DF 15 GF 35 DF 1 WL35 WL 5 ES 45	M	L1: 5 -16" dbh, 11" avg.	30 - 35	120 - 180	130 - 224	L (litter)	SEV, RD, BB, GR	Harvest ~ 1995, followed by planting PP/WL. Evaluate commercial thin ~ 15 years. Favor WL. Pacific yew growing on site
					L2: 5 - 4" dbh	5 - 25	0-150	25			
					L3:						
131 D/C	40	WDMC	PP 10 GF 60 PP 20 GF 60 PP 20 GF 60 DF 30 DF 20 DF 20	L	L1: 18 – 30" dbh	85-110	20 - 30	10 - 20	L (litter & grass)	DM, BB, RD, GR	Harvest ~ 1990. Evaluate improvement cut ~ 15 years when surrounding stands are treated. Remove mistle-toe and trees with poor crown ratios.
					L2: 5 – 14" dbh	35 - 55	30 – 50	25			
					L3: 5 - 4" dbh	5 -35	10 - 20	10			
132 C/B	90	CMMC	PP 95 DF T LP 5 WL T	M	L1: 6 – 16" dbh, 9" avg.	35	180 - 260	129 - 138	L (litter)	TR, GR, BB	Over story removed ~ 1995 and planted with PP/WL. Evaluate pre-commercial thinning ~ 5 years. Favor PP/WL. Alternative is thin from below ~ 15 years.
					L2: 5 - 4"	5 - 15	25	-			
					L3:						

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Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
133 B/C	67	CMMC	PP 90 DF 5 WL 5 LP T DF 40 GF 40 PP 10 LP 10	M	L1: 8 – 14" dbh, 10" avg.	35	120 - 180	103 - 153	L (litter)	P, F, TR, GR, BB, RD	Overstory removed ~ 2010. Evaluate commercial thin from below ~ 15 years.
					L2: 5 - 4" dbh	5 - 15	50	25			
					L3:						
134 C/B	16	CMMC	PP 10 DF 50 GF 40 PP 90 DF 10	L	L1: 20 – 26" dbh, 22" avg./	110	1 - 5	1 - 5	L (litter)	P, F, TR, GR, BB	Over story removed ~ 2000. Evaluate thin from below ~ 15 years. Variable unit adjacent to fuels break and private. Maintain as a fuels break.
					L2: 8 – 14" dbh, 11" avg.	35	30 - 70	74 - 111			
					L3:						
135 C/B	20	CMMC	PP 50 WL15 LP 20 DF 5 PP 2 DF 10 GF 40 ES 40	H	L1: 5 – 14" dbh, 9" avg.	35	250	137 - 205	L (litter)	SEV, RD, BB, GR	Harvest ~ 1995, followed by planting PP/WL. Evaluate pre-commercial thin with hand pile or mastication ~ 5 years. Alternative is commercial thin ~ 15 years. Favor WL. Pacific yew growing on site
					L2: 5 - 4" dbh	5 - 20	0 - 450	-			
					L3:						
136 C/B	34	CMMC	GF 40 LP 15 ES 25 DF 10 GF 40 ES 40 DF 20	M	L1: 5 – 14" dbh, 9" avg.	35 - 65	140 - 220	170 - 225	L (litter)	SEV, IS, RD, BB, GR	Over story removed ~ 1995. Evaluate pre-commercial thinning with hand pile or mastication ~ 5 years. Favor ES/WL. Wet areas and seasonal stream limit operations.
					L2: 5 - 4" dbh	5 - 25	50 - 250	25			
					L3:						

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Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
137 C/B	33	CMMC	PP 60 DF 5 WL25 GF 10 DF 5 GF 20 ES 70	H	L1: 5 – 16" dbh, 9" avg.	30 - 35	140 - 340	137 - 205	L (litter)	FS, F, IS, TR, SEV, RD	Harvest ~ 1995, followed by planting PP/WL. Evaluate pre-commercial thin with hand pile or mastication ~ 5 years. Alternative is commercial thin ~ 15 years. Favor WL. Pacific yew growing on site.
					L2: 5 - 4" dbh	5 - 25	150 - 300	25			
					L3:						
126A D	34	WDMC	PP 5 DF 15 GF 80 DF 20 PP 70 DF 35 GF 30	L	L1: 12 – 22" dbh	85-110	20 - 40	20 - 40	L (litter & grass)	SEV, WH, S	Harvest ~ 1995. Area has numerous rock outcrops and cliffs. Steep terrain limits management options. Adjacent to peregrine nesting site. Manage for wildlife.
					L2: 5 – 12" dbh	35 - 55	20 - 40	20 - 40			
					L3: 5 - 4" dbh	5 - 25	50 - 100	50 - 100			
138 B	116	CMMC	PP 50 DF 1 WL30 GF 28 GF 40 ES 30 WL25 DF 5	M	L1: 5 – 14" dbh, 10 "avg.	35 - 55	160 - 180	129 - 178	L (litter)	TR, SEV, BB, RD	Harvest ~ 1990, followed by planting PP/WL. Evaluate commercial thin from below ~ 15 years. Favor WL. Pacific yew growing on site.
					L2: 5 - 4" dbh	5 - 35	0 - 300	-			
					L3:						
139 C	24	CMMC	GF 50 ES 50 DF 30 GF 30 ES 20 LP 20 DF 30 GF 30 ES 20 LP 10 WLS PP 5	M	L1: 16 - 24" dbh	110	1	1	L (litter)	SEV, BB, RD	Harvest ~ 1990. Evaluate pre-commercial thin ~ 5 years. Favor WL/DF. Pacific yew growing on site
					L2: 5 – 12" dbh, 6" avg.	35 - 55	20 - 80	50			
					L3: 5 - 4" dbh	5 - 25	650 - 900	200			

**Forest Type/Tree Species:** WDMC – warm, dry, mixed conifer; CMMC – cool, moist, mixed, conifer; PP – Ponderosa Pine; DF – Douglas Fir; LP – Lodgepole Pine; GF – Grand Fir; ES – Engelmann Spruce; WL – Western Larch; WJ – Western Juniper; OTH – Other, , **Layer (L1, L2, L3)** – Each layer represents a distinct age or size class in the stand (i.e. 25 – 35 years old or 18 – 24' dbh)

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Commented [SG1]:

Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
140 C	48	CMMC	GF 50 ES 30 DF 10 WL 5 DF 20 WL 5 GF 50 ES 20 LP 5	M	L1: 5 – 16" dbh, 8" avg.	35 - 55	80 - 250	272 - 400	L (litter)	FS, F, SEV, BB, RD	Harvest ~ 2005. Patchy stand with two age classes generally < 9" dbh. Evaluate pre-commercial thin with hand pile or mastication. Favor WL/DF. Alternative is commercial thin ~ 15 years. Pacific yew growing on site.
					L2: 5 - 4" dbh	5 - 25	150 - 350	50			
					L3:						
144 C/B	42	CMMC	GF 70 LP 20 ES 10 WL 5 GF 35 LP 50 ES 10	M	L1: 5 – 14" dbh, 11" avg.	85-110	30 - 70	30	L (litter)	FS, F, TR, BB, GR	Harvest ~ 1975. Evaluate pre-commercial thin with hand pile or mastication. Favor WL/ES. Alternative is commercial thin from below ~ 15 years.
					L2: 6 – 10" dbh,, 6" avg.	35	20 - 60	40			
					L3:						
142 C/B	17	CMMC	GF 60 ES 25 WL10 LP 5 WL 5 GF 40 ES 50 ES 10		L1: 5 – 16" dbh, 11" avg.	50	100 - 220	150 - 224	L (litter)	FS, F, GR, SD.	Harvest ~ 1975. Evaluate pre-commercial thin with hand pile or mastication. Favor WL/ES. Alternative is commercial thin from below ~ 15 years.
					L2: 5 - 4" dbh	10 - 25	450 - 650	25			
					L3:						
143 C/B	29	CMMC	GF 60 ES 40 PP 60 DF 10 GF 10 ES 10 LP 10	M	L1: 16 – 24 " dbh	110	1 - 5	1 - 5	L (litter)	FS, F, GR, SW	Harvest ~ 2000, overstory removal. PP/WL planted. Evaluate pre-commercial thin with hand pile or mastication. Favor WL/ES. Alternative is commercial thin ~ 15 years.
					L2: 5 - 12" dbh, 9" avg.	25	80 - 160	129 - 138			
					L3:						

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Stand #/ Class	# of Acres	Forest Type / Species		Stand Density (L, M, H)	Trees per Acre (TPA) by Age Class				Fuel Loads (L, M, H)	Special Resources & Concerns (see list below)	Notes  Stand Photos (see Appendix A)
		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
A/D	7	Non-forest	PP 99		L1: 5 – 10" dbh,	35	25	15	L (grasses)	P, F, NW	Heavily disturbed site, may have potential to grow ponderosa pine. Noxious weeds (annual and domestic grasses and cinquefoil) need treatment, maintain boundary fence.
			PP 99		L2: 5 - 4" dbh	15	25	10			
					L3:						
B/D	4	Non-forest	PP 99		L1: 16" dbh	75	5	5	L (grasses)	P, F, NW	Dry meadow, saturated soils November thru June. Old orchard? Noxious weeds (annual and domestic grasses and cinquefoil) need treatment, maintain boundary fence.
					L2:						
					L3:						
C/D	11	Non-Forest	PP 1		L1:				L (grass and Herbs)	P, F, NW, WH	Blue bunch wheatgrass/mules ear plant community, past grazing. Noxious weeds (annual grasses and cinquefoil) need treatment, maintain boundary fence.
					L2:						
					L3:						
D/D	14	Non-Forest	PP 5		L1:				L (grass and herbs)	P, F, NW, WH	Blue bunch wheatgrass/mules ear plant community, past grazing. Noxious weeds (annual grasses and cinquefoil) need treatment, maintain boundary fence.
					L2:						
					L3:						

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
E/D	69	Non-Forest	PP 10 DF 5	NA	L1:				L (grass and brush)	NF, F, WH	Blue bunch wheatgrass/balsam root plant community. Choke cherry, bitterbrush and rabbitbrush present. Designate area for wildlife. Maintain boundary fence.
					L2:						
					L3:						
F/D					L1:						
					L2:						
					L3:						
G/D	11	Non-Forest	PP 90 GF T DF 10	NA	L1:				L (grass and brush)	NW, WH	Blue bunch wheat grass/ balsam root plant community. Idaho fescue and buckwheat present. Designate area for wildlife. Treat noxious weeds.
					L2:						
					L3:						
H /D	17	Non-Forest	PP 90 GF T DF 10	NA	L1:				L (grass and brush)	NW, WH	Blue bunch wheatgrass/Balsam root plant community. Choke cherry, ninebark, willow and ocean spray in draws. Treat noxious weeds. Designate for wildlife.
					L2:						
					L3:						

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
I/D	33	Non-Forest		NA	L1:				L (grass and brush)	P, F, NW, WH	Blue bunch wheatgrass/Balsam root plant community. Choke cherry, ninebark, willow and ocean spray in draws. Treat noxious weeds. Designate for wildlife. Maintain boundary fence.
					L2:						
					L3:						
I/D	17	CMMC	PP 10 DF 45 GF 45 PP 5 DF 50 GF 45 PP 1 DF 50 GF 49	M	L1: 12 – 30" dbh	85-110	20 - 40	20 - 40	L (litter)	WH, RD, BB	Area has numerous rock outcrops and cliffs. Steep terrain limits management options. Adjacent to peregrine nesting site. Manage for wildlife.
					L2: 5 – 12" dbh	35 - 55	20 - 40	20 - 40			
					L3: \$ - 4" dbh	5 - 25	40 - 60	40 - 60			
K/D	14	CMMC	PP 5 DF 40 WL15 GF 40 PP 40 DF 40 WL 5 GF 15 PP 20 DF 55 WL 5 GF 20	M	L1: 12 – 22" dbh	85-110	30 - 50	30 - 50	L – M (litter)	WH, RD, BB	Area has numerous rock outcrops and cliffs. Steep terrain limits management options. Adjacent to peregrine nesting site. Manage for wildlife.
					L2: 5 – 12" dbh	35 - 55	30 - 50	30 - 50			
					L3: \$ - 4" dbh	5 - 25	50 - 70	50 - 70			
L/D	39	CMMC	PP 5 DF 30 WL15 GF 50 PP 5 DF 45 WL10 GF 40 PP 5 DF 50 WL10 GF 35	M	L1: 12 -22" dbh	85-110	20 - 30	20 - 30	M (litter)	WH, RD, BB	Area has numerous rock outcrops and cliffs. Steep terrain limits management options. Adjacent to peregrine nesting site. Manage for wildlife.
					L2: 5 – 12" dbh	35 - 55	20	20			
					L3: \$ - 4" dbh	5 - 25	20 - 30	20 - 30			

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		Forest Type	Percentages of Species		Layers (L1, L2, L3)	Age	Current Density (TPA)	Desired Density (TPA)			
M					L1:						
					L2:						
					L3:						
N/D	25	Non-forest	PP 99		L1:				L (grass)	P, F, NW, WH	Blue bunch wheatgrass plant community. Treat for noxious weeds. Designate for wildlife. Maintain boundary fence. Hawthorne and snowberry in draw.
					L2:						
					L3:						
O/D	11	Non-forest			L1:					P, F, SP, IS, NW, WH	Blue bunch wheatgrass plant community. Treat for noxious weeds. Designate for wildlife. Maintain boundary fence. Old rock pit site.
					L2:						
					L3:						
P/D	13	Non-forest			L1:					P, F, SP, IS, NW, WH	Blue bunch wheatgrass plant community. Treat for noxious weeds. Designate for wildlife. Maintain boundary fence. Cocke cherry in draw.
					L2:						
					L3:						

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Q/D	8	Non- Forest	PP 99	L	L1: 18 – 24" dbh	110	5	5	L (grass)	BB DM	Area is a mix of forest and non-forest. Forested areas were logged ~ 2010. Maintain area as a fuels break.
			PP 99		L2: 8 – 12" dbh	45	5	5			
			PP 50 DF 50		L3:						
					L1:						
					L2:						
					L3:						
S/D	38	Non- Forest	PP 95 DF 5		L1: 16 – 22" dbh	110	5	5	L (grass)	BB, DM, GR	Area is a mix of forest and non-forest. Forested areas were logged ~ 2010. Maintain area as a fuels break.
			PP 90 DF 10		L2: 5 – 14" dbh	45	5	5			
			PP 60 DF 40		L3: 5 - 4" dbh	5 - 25	10	10			
T/D	8	Moist – dry Meadow	PP 90 DF 10		L1: 18 -32" dbh	110	1 - 2	1 - 2	L (grass)	SP, IS	Area has high water table with seeps or springs creating enough flow for intermittent stream. If grazing resumes this area would need fencing.
			GF T		L2: 6 – 12" dbh	45	5 - 10	5 - 10			
			PP 99 DF 1		L3:						

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AS-1	2	WDMC	PP 90 DF 10		L1: 18 -24" dbh, 20" avg.	95	15	10	L (litter)	F, TR, GR, DM	Owsley Trailhead. Evaluate SPC and pile needs. PP mistle-toe in overstory.
			DF 60 PP 40			35	75	50			
			PP 75 DF 25		L3: 5 - 12" dbh 8" avg.	10	50	25			
AS-2	7	WDMC	PP 99 DF 1		L1: 16 - 23 "dbh, 20" avg.	90	25	30 - 45	L	F, CG, TH, GR, DM, BB	Fox Hill Campground and Trailhead. Harvest 2014 to treat PP mistle-toe. Evaluate SPC and pile needs. Evaluate pruning needs to remove PP mistle-toe from lower crowns.
					L2: 5 - 14" dbh, 10" avg.	10	25	10			
					L3:						
					L1:						
					L2:						
					L3:						
					L1:						
					L2:						
					L3:						

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144 C/B	42	CMMC	GF 70 WL T WL 5 LP 50 LP 20 ES 10 GF 35 ES 10	M	L1: 5 – 14" dbh, 11" avg.	85- 110	30 - 70	30	L (litter)	FS, F, GR	Harvest ~ 1995. Evaluate pre-commercial thin with hand pile or mastication. Favor WL/ES. Alternative is commercial thin from below ~ 15 years.
					L2: 6 – 10" dbh, 6" avg.	35	20 - 60	40			
					L3:						
145 D	40	CMMC	GF 75 WL 5 PP 40 LP 10 DF 20 LP T DF 40 GF 10	L	L1: 8 – 24" dbh	85-110	50 - 100	145 - 227	L (litter)	FS, F, WH, TR, S	Stepp slopes and rock outcrops limit areas available for management. Good stand for wildlife.
					L2: 5 – 14" dbh	35 - 55	25 - 150	75			
					L3:						
					L1:						
					L2:						
					L3:						
150 B	15	CMMC	DF 15 WL 5 GF 40 ES 40 ES 40 GF 40 DF 15 LP 5	M	L1: 6 – 18" dbh, 13" avg.	85	100	95 - 142	L (litter)	DM, RD, BB	Harvest ~ 1990. Evaluate commercial improvement cut ~ 15 years. Follow up with pre-commercial thin.
					L2: 5 - 4" dbh	5 - 15	200 - 600	200			
					L3:						

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## ANALYZE RESOURCE DATA

### Soils

The soils type map for the MERA property can be found below. These soil types are the result of the *Soil Survey of Union County* conducted by the US Soil Conservation Service (now the USDA Natural Resources Conservation Service). Below is a listing of the soil types found on the MERA.

- 6F - Anatone-Klicker complex, 40 – 65% slope
- 11C - Cowsley silt loam, 2 – 12% slopes
- 13C - Emily silt loam, 2 – 12% slopes
- 14C - Emily cobbly silt loam, 2 – 12% slopes
- 17E - Gwinley very cobbly silt loam, 2 – 40% slopes
- 18F - Gwinley-Rockly complex, 40 – 70% slopes
- 19E - Hall Ranch stony loam, 2 – 35% slopes
- 19F - Hall Ranch stony loam, 35 – 65% slopes
- 33E - Klicker stony silt loam, 2 – 40% slopes
- 35E - Klicker-Anatone complex, 5 – 40% slopes
- 40C - Lookingglass very stony silt loam, 2 – 20% slopes
- 44C - Olot Stony silt loam, 12 – 35% slopes
- 55D - Rockly extremely stony loam, 2 – 20% slopes
- 58E - Starkey very stony silt loam, 2 – 35% slopes
- 59E - Tolo silt loam, 12 – 35% slopes
- 61E - Ukiah-Starkey complex, 5 – 40% slopes
- 70B - Wilkens silt loam, 1 – 5% slopes
- 72C - Olot silt loam, 2 – 12% slopes

Soil productivity should be protected whenever resource activities such as grazing, logging, log hauling or trail building occur. Activities should be timed to minimize soil displacement, sedimentation, compaction or erosion. Particularly avoid these activities when soils are saturated (November through May). Avoid using native surface roads during periods of high moisture and maintain and use drainage features such as culverts, water bars and out sloping.

Minimizing soil disturbance serves to maintain soil productivity but also reduces the opportunities for invasive non-native species to become established and minimizes the amount sediment reaching nearby streams.





## Water Resources

The topography that lies within the MERA boundaries collects water that is part of the Lower Grande Ronde watershed. Within the MERA only one stream (Conley Creek) is considered to have fish habitat. The remaining streams are classified as non-fish. All streams are seasonal and are dry by July. Other water resources found within the MERA are several springs, stock ponds, bogs and seeps.

Water resources and their associated riparian zones contain unique plants, provide habitat to important species, cycle nutrients and regulate the delivery of solar energy. The Oregon Forest Practices Act focuses protections around riparian areas due to the potential for forestry activities to impact them. The goals of riparian protections are to continue to grow and harvest trees while ensuring:

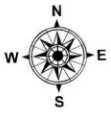
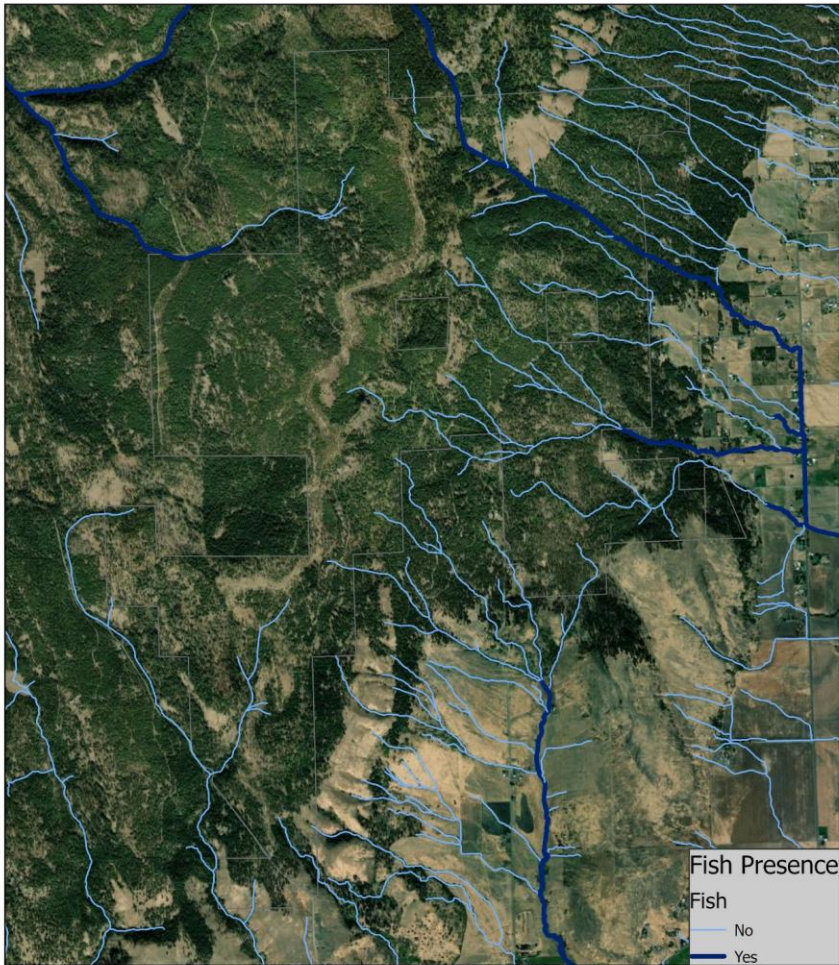
- Non-point pollution (sedimentation) resulting from forest operations does not impair water quality
- Vegetation that maintains, enhances or restores water quality, and that provides aquatic habitat components such as shade, large wood and nutrients are established and retained.
- Live trees of various species and sizes, snags and downed wood are present within riparian management areas to shade the water and provide habitat for fish and other aquatic species.

The Oregon Forest Practices Act has established Riparian Management Areas (RMAs) to include the ground along waterways where vegetation and microclimate are influenced by year-round or seasonal water, associated high-water tables and soils that exhibit some wetness. To help protect water bodies during and after forest practice activities, RMAs are regionally specified and have requirements for retaining trees, snags and understory vegetation, and for limited or modified practices that reduce disturbances from forestry activities that could impact aquatic habitat and water quality.

If forest practice activity occurs adjacent to riparian areas, a publication produced by the **Oregon Forest Resource Institute titled; Oregon's Forest Protection Laws** will help identify and classify water bodies and follow the required protections.

The RMAs besides protecting valuable water resources and aquatic species will also create unique habitat for various wildlife species.

If commercial grazing activity is restarted on the MERA the RMAs should be evaluated for possible impacts from grazing activity. Some possible mitigations are; timing, limiting the number of cow calf pairs, fencing and spring/pond development or improvements. A good reference document concerning grazing within in the MERA can be found in the Appendix B.



## Mt Emily Recreation Area Streams Fish Presence

## Threatened & Endangered Species/Desired Wildlife Species/ Undesired Wildlife Species

The 3,700-acre MERA property offers a variety of habitats for wildlife including; dry bunch grass types, moist meadows/riparian areas, small diameter to large diameter mixed conifer stands, numerous created openings and basalt rock outcrops and cliffs. A diverse mix of medium to tall shrubs beneath some of the mixed conifer stands adds value and complexity to these habitat types. Wildlife observed on the property include; mule deer, rocky mountain elk, black bear, mountain lion, fox, bobcat, coyote, turkey, sparrow-hawk, red-tail hawk, goshawk, pileated woodpecker, several species of owls, pine squirrel, chipmunk, grouse, quail and many songbirds. No threatened or endangered species are known to be present on the MERA. According to the Biodiversity Report several sensitive species are known to be present see Appendix D. A species of note is the peregrine falcon which has potential nesting sites along the cliffs and outcrops found on the MERA. Some of nesting sites were previously active. Mitigations and closures are in place if these sites become active again.

Most of the habitat needs for the wildlife species found within the MERA can be met if the following habitat components and structure are considered in the MERA management plan. Although the specifics vary by species these habitat components appear to be universally important for meeting the needs of diverse wildlife communities they are as follows;

- Spatial pattern; horizontal heterogeneity
- Structural diversity: vertical heterogeneity
- Snags
- Down logs
- Riparian areas
- Special and unique habitats

Prior to fire suppression, **Spatial pattern: horizontal heterogeneity** was a result of fire creating a variable density landscape, with patches of recently burned areas (forage), clumps of trees in unburned areas creating hiding cover dominated by fire-resistant tree sizes and species, large and small diameter snags for nesting and foraging, as well as down logs available as denning habitat and forage.

Silviculture can be used as a tool for wildlife-habitat enhancement. Planning projects with multiple densities benefits multiple species. Below are some guidelines:

- Using variable density thinning on about 75% of the stand to promote tree growth, vigor, drought resistance, early seral species and forage availability.
- Leaving 10 to 15% of the stand un-thinned to provide hiding cover and foraging habitat for species such as white-headed woodpeckers.
- Creating small regeneration patches throughout 10 to 15% of the stand will create hiding cover for multiple species as well as feeding habitat.

**Structural diversity: vertical heterogeneity** is also an important component of wildlife habitat in the forest. It refers to the number of layers and complexity of vegetation in a stand. Wildlife diversity increases with structural diversity which can be accomplished by;

- Managing multiple age classes of trees within and between stands.
- Managing multiple tree species.
- Retaining down logs and snags.
- Enhance understory development (grasses, shrubs, regeneration).

**Snags** are important to many species of plants, invertebrates, birds and mammals. Different species have adapted to each type of snag. Snags in the open are used by one group of cavity nesters and snags in cover support another mix of species.

Consider the following recommendations for high levels of cavity-nesting wildlife:

- For ponderosa and warm-dry mixed conifer forests, leave at least two snags per acre.
- In cool-moist mixed conifer, retain four to six snags per acre.
- Fifty percent of snags should be hard, greater 12 inches dbh.
- Preferred species are first ponderosa pine, then western larch, grand fir and Douglas-fir.
- Large diameter snags provide nest habitat for the greatest variety

**Down logs** are an important wildlife resource. In the Blue Mountains down logs host 5 amphibian species, 9 reptile species, 116 bird species, 49 mammal species and countless insect species.

- Ponderosa and warm-dry mixed conifer forests should have at least three to six logs per acre, greater than 12 inches in diameter and at least six feet long.
- Cool-moist mixed conifer forests should have at least 15 to 20 logs per acre at least eight inches in diameter.
- Logs 15 inches or greater in large end diameter are particularly important for species such as pileated woodpeckers.

**Riparian areas** are used by wildlife more than any other type of habitat because water can be a limiting resource. Of the 378 terrestrial species known to live in the Blue Mountains, 285 either exclusively depend on riparian areas or use them more than any other habitat. Riparian areas are important for wildlife because they provide water, abundant food and cover and favorable microclimates. Some riparian management considerations are:

- Avoid road construction in riparian areas.
- The narrower the riparian area the more easily it is altered by management actions.
- Proper grazing management should include particular attention to protection of riparian areas.
- The Oregon Forest Protection Act regulates harvesting, road building, stream crossings and pesticide applications in riparian areas.

Two **Special and unique habitats** can be found on the MERA. These are as follows:

- Black cottonwood groves along with limited amounts of aspen primarily found in the riparian areas or high-water table areas. The forks of Upper Conley Creek in particular is populated with black cottonwoods.
- A band of cliffs and rock bluffs and associated talus and steep slopes run for about a mile and a half paralleling Mount Emily Road. A portion of the area has restricted access to protect potential peregrine nesting habitat which in the past had active nests.

Some management strategies for overall diversity are:

**Diversity among stands**

- Retain integrity of riparian areas
- Restore, promote, and protect non-conifer habitat types (e.g., quaking aspen)
- Create ponds, and other water sources, and maintain/enhance wetlands
- Use lay-down fences to control grazing and allow wildlife access
- Provide for different species in different stands
- Vary levels of vegetation control
- Leave unmanaged areas

- Consider management from a landscape perspective
- Maintain a variety of successional stages
- Use even and uneven-aged silviculture

#### **Diversity within a stand**

- Leave a variety of tree species where appropriate
- Seed forages (native) on skid trails and landings
- Retain or create snags and logs, and leave green trees for recruitment to snags
- Create new forage areas
- Leave un-thinned patches
- Leave living trees with decay
- Leave some large trees

#### **Microhabitats**

- Protect rock outcroppings, cliffs, caves, bogs, seeps and travel ways
- Leave a few high stumps
- Leave a few mistletoe-broomed trees

#### **Overall species richness**

- Make sure fuels reduction focuses on reducing continuity of fuels, not eradication
- Encourage a mixture of herbs, shrubs and trees to provide for more niches for wildlife species
- Create or leave snags and down wood
- Maintain a variety of successional stages (age classes)

#### **Description of**

#### **Rare, Sensitive & Unique Resources**

The Biodiversity Report (Appendix D) listed for the area including the MERA listed several sensitive species but no rare species. Some of the likely sensitive species listed but not observed were; Northern Goshawk, Pileated woodpecker, Black-backed woodpecker, and Great gray owl a complete list can be found in the appendix section.

Within the MERA two unique resources were identified, first being several riparian areas lined with black cottonwoods. The most significant were found in the upper reaches of Conley Creek. The second unique resource was a line of rock outcrops, cliffs and talus slopes approximately 1.5 miles in length paralleling the Mont Emily Road. The cliffs in the recent past have had peregrines nesting. The sites are monitored by Oregon Department of Fish and Wildlife and motorized travel is restricted in the area.

Both of these areas were designated to be managed largely for wildlife in the Mount Emily Recreation Area plan.

## Roads/Trails

Prior to the establishment of the MERA, a forest road system had been established by the Boise Cascade Corporation for the purposes of forest management and logging. This current road system is adequate for MERA's management needs. Since the establishment of MERA, portions of this forest road system have been incorporated into the motorized and non-motorized trail systems. The motorized and non-motorized trail systems that MERA has developed will be included in this discussion.

After surveying the MERA for this report the overall consensus, is that with a few exceptions the MERA road/trail system is in good condition posing little threat to local water sources. It is recommended that more complete road condition assessment be completed to plan future road maintenance and address any serious issues identified. Some things to take into consideration during the road condition assessment are as follows:

- **Active road;** currently used and maintained for recreation or timber management
- **Inactive road;** not currently used and maintained for recreation or timber management
- **Vacated road;** impassable and no longer used
- **Native surface road;** constructed with material on site, susceptible to rutting
- **Rocked roads;** made with crushed rock of varying sizes
- **Grade surface;** out-sloped, in-slope or crowned
- **Ditch;** channel designed to collect water run-off, for in-sloped roads
- **Ditch relief culverts;** move water on the uphill side of road, taking it under the road and releasing it onto a stable area on the downhill side
- **Culvert;** structure that allows water to flow under a road, used to convey streams under roads
- **Drain dips;** gentle rolls in the road surface, sloped to carry water to the outside, onto natural ground
- **Water bar;** small earth humps built into the road surface that divert road surface water so it will not cause erosion
- **Drainage water and sediment;** should be directed onto undisturbed vegetated soil, acting as a filter before entering the stream
- **Durable material;** resists deep rutting, durable material may be quarrying aggregate or pit run rock

A few issues identified that should be addressed in the future are as follows;

- Some native surface roads that are haul routes, could use rock surfacing and drainage improvements to prevent rutting and extend season of use for hauling
- The Cinch Road/Trail needs a culvert crossing at Conley Creek to make accessible to vehicles and log trucks
- Temporary closures are recommended on some roads on the motorized portion of the MERA to protect road bases and limit erosion and rutting
- Easy Out Road near Old Mill Road intersection needs some grade or drainage work to eliminate rutting during the wet season
- Minimize trails and features such as jump lines on existing roads, these features block access for management activities and fire suppression

A good source for information on road management is published by the Oregon Forest Resources Institute entitled Oregon's Forest Protection Laws, under the roads section.



MERA\_Roads and  
Trails.pdf



### Cultural Resources

Cultural resource surveys are required for any federal cost share funding projects. The MERA has contracted with a professional archeologist for cultural surveys to be conducted. These cultural surveys have identified cultural resources on the MERA and steps have been taken to mitigate any disturbance during project implementation. All future management activities will be conducted in a manner that does not disrupt potential cultural resources. If sites are discovered, additional confidential site assessment may be requested from the State Historical Preservation Office (SHPO) at (503) 986-0674.

### Tax/Business/Regulatory Info

Prior to any timber harvest, the landowner should consult a qualified tax accountant to assess the impact of harvest on their individual tax situation. The landowner may find the need to establish a “taxable basis” if the land has been held for a long period of time.

Maintenance of good records (when you bought the property; how much you paid for the property; expenditures on the property; dates of harvest and volumes, etc.) is helpful for making future management decisions and tax purposes.

Prior to any commercial forest operation, the landowner (or operator) is required to file a notification of operation with the Oregon Department of Forestry (<https://ferns.odf.oregon.gov/e-notification>). This includes timber harvest, pre-commercial harvest, use of fire, use of chemicals, road building, power driven machinery etc. Also, prior to non-commercial operations that involve the use of power-driven machinery or fire (with exception of home debris burning) also require notification.

If you have questions – please consult your local stewardship forester.

### Integrated Pest Management

Integrated pest management is a broad-based approach that integrates practices through the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment.

The landowner should consider utilizing integrated pest management techniques for the control of pathogens in trees, noxious weeds, and other damaging agents (e.g. use of biocontrol for weeds; use of livestock to reduce weeds; weed/brush/grass competition).

In the process of surveying the MERA various pests related to forest ecosystems were identified and are listed below along with integrated measures for their control. Appendix B of this report contains various leaflets, notes or bulletins produce by the US Department of Agriculture, US Forest Service and Oregon Department of Forestry that discuss the identification and management of the various insects and diseases that are currently endemic to the MERA.

The following insect and diseases, were found to be present on the MERA. Included is the host species and various integrated management strategies. For more detailed information refer to Appendix B.

- **Western gall rust;** Host species: ponderosa pine and lodgepole pine; Management strategies: remove infected individuals during forest operations, maintain good spacing
- **Cytospora canker;** Host species: Douglas-fir; Management strategies: remove infected individuals during forest operations
- **Douglas-fir Dwarf Mistle-toe;** Host species: Douglas-fir; Management strategies: favor non-host species, remove infected individuals during forest operations
- **Douglas-fir Pole and Engraver Beetles;** Host species: Douglas-fir; Management Strategies: control stocking with thinning, remove infected individuals during forest operations
- **Douglas-fir Beetle;** Host species: Douglas-fir; Management strategies: remove wind throw and infected trees
- **Elytoderma Needle Blight;** Host species: ponderosa pine; Management strategies: maintain good spacing, remove infected individuals during forest operations
- **Armillaria Root Disease;** Host species: true firs and Douglas-fir; Management strategies: manage for resistant species such as ponderosa pine and western larch
- **Laminated Root Rot;** Host species: true firs and Douglas-fir; Management strategies: manage for resistant species such as ponderosa pine and western larch, avoid thinning young stands
- **Fir Broom Rust;** Host species: true firs; Management strategies: None
- **Fir Engraver;** Host species: true firs; Management strategies: control stocking with thinning, remove infected individuals during forest operations, avoid slash creation from April to July
- **Larch Casebearer;** Host species: western larch; Management strategies: favor Douglas-fir and ponderosa pine
- **Larch Dwarf Mistle-toe;** Host species: western larch and lodgepole pine; Management strategies: favor non-host species, remove infected individuals during forest operations
- **Mountain Pine Beetle;** Host species: ponderosa pine and lodgepole pine; Management strategies: control stocking with thinning, remove infected individuals during forest operations
- **Pine Engraver – Ips;** Host species: ponderosa pine and lodgepole pine; Management strategies: Avoid slash creation from December to August
- **Western Dwarf Mistle-toe;** Host species: ponderosa pine; Management strategies: favor non-host species, remove infected individuals during forest operations
- **Western Pine Beetle;** Host species: ponderosa pine; Management strategies: control stocking with thinning, remove infected individuals during forest operations

Invasive plants were identified while surveying the MERA property, Union County is currently addressing them through grants and contracts. Below is a list of invasive plants found on the MERA:

- Sulphur cinquefoil
- Quack grass
- Oat grass
- Sweet briar rose
- St, John's wort
- Hounds tongue
- Canada thistle
- Bull thistle
- Ventanata
- Medusa head
- Diffuse knapweed

### Prescribed Burning

Prescribed fire is the controlled application of fire to the land and is one tool used by land managers to achieve specific management goals.

Prescribed fires may be beneficial because they:

- **Reduce fuel buildup.**
- **Improve wildlife habitat and forage for grazing.**
- **Manage competing vegetation.**
- **Control disease.**
- **Increase aesthetics.**
- **Cycle nutrients.**
  
- **Promote the creation of snags and down wood.**

The following stands which were recently logged and had post sale work completed would be good candidates for prescribed burning; Stands 1, 2, 3, 4, 6 (partial), 6A, 112 and 127.

\* Before performing any kind of burning on your property contact your local Oregon Department of Forestry office for burning and smoke management requirements and NRCS for available funding opportunities.

\*\* Working with a professional forester, or others with prescribed burning experience is highly recommended and will lead to a more successful burning project.

\*\*\* Information on prescribed burning excerpted from Understanding Fire and Its Use as a Management Tool, EM9114, Oregon State University.  
<https://catalog.extension.oregonstate.edu/em9114>

### Aesthetics & Recreation

The MERA property is central to the iconic view of Mount Emily that is captured by thousands of photographs and photographers year-round. Alternatively, the MERA offers views to its users of the Grande Ronde Valley with its patchwork of farmland, the surrounding tree covered Blue Mountains, and the alpine peaks of the Wallowa and Elkhorn Mountains. The MERA users enjoy stands of primarily ponderosa pine and Douglas-fir with their associated native plant understories of medium to tall shrubs and forest grasses and sedges. Stands vary from young, vigorous and healthy trees to mature, large diameter and stately trees. The large tract of area and the vast network of trails allows users to disperse and find solitude and catch glimpses of the local wildlife.

All planned future management activities should be planned with the goal of maintaining and even enhancing the MERA's aesthetic values.

Since its purchase the MERA, has become extremely popular with Northeast Oregon residents and visitors from around the Northwest. The MERA has become one of the most stated reasons for people visiting Union County, according to the Chamber of Commerce.

After the MERA purchase in 2008, a 45-mile non-motorized trail system and three trailheads have been developed. The non-motorized trails provide opportunities for mountain biking, hiking, trail running, dog walking and horseback riding. A 45-mile motorized trail system has been developed with trailhead, staging area, campground and a youth learning loop. The motorized trails provide riding opportunities for ATV's, full-sized off-road vehicles, motorcycles and side by sides. Within MERA's boundaries, the Grande Ronde Bowman an archery club leases 100 acres and facilities to host tournaments and promote bow hunting.

Recreation and aesthetics should continue to be a top priority for the MERA. Careful planning is essential to maintaining the overall recreation experience and the beauty of the MERA.

## FORMULATE ALTERNATIVES

### Desired Future Conditions

#### **Recreation:**

- Have well designed, safe and maintained trail systems and trailheads for both motorized and non-motorized uses.
- Have trail networks be compatible with the other stated objectives of the MERA (Aesthetics, Forest Health, Fire Resistance and Resiliency and Wildlife Habitat and Diversity).
- Ensure trails don't negatively impact other resources such as soils, water and wildlife

#### **Forest Health:**

- Stands are dominated by fire resistant species (ponderosa pine, western larch and Douglas-fir)
- Stand stocking levels based on forest type, species and average stand diameter are maintained between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University)
- Insect and diseases issues are maintained at endemic levels
- When appropriate new age classes are recruited

#### **Fire Resistance and Resiliency:**

- Fuel loading is maintained at acceptable levels
- Prescribed fire is introduced when and where appropriate
- Fire resistant species are dominant
- Stands have a good mix of larger diameter trees
- The following stands which were recently logged and had post sale work completed would be good candidates for prescribed burning; Stands 1, 2, 3, 4, 6 (partial), 6A, 112 and 127.

#### **Wildlife Habitat and Diversity:**

- A diverse mixture of habitats is present, benefiting multiple wildlife species
- A diverse mixture of wildlife species utilizes the MERA, both game and non-game
- Native plant ecosystems are intact and protected
- Adequate numbers per acre of downed logs and snags are present
- Noxious weeds are kept at acceptable levels

## Goals & Actions

Below are some suggested goals or actions are listed for each of the following topics;

### **Recreation/Aesthetics**

- Recreation and aesthetics should be a top priority for the MERA. Careful planning is essential to maintaining the overall recreation experience and the aesthetics of the MERA.

### **Forest Health**

- Implement the schedule of actions by stand, listed in the 'Planned Actions' table below, to ensure that stands are dominated by fire resistant species (ponderosa pine, western larch and Douglas-fir), stand stocking levels based on forest type, species and average stand diameter are maintained between the suggested lower and upper management zones, insect and diseases issues are maintained at endemic levels and when appropriate new age classes are recruited.

### **Fire Resistance/Resiliency**

- Implement the schedule of actions by stand, listed in the 'Planned Actions' table below, to ensure fuel loading is maintained at acceptable levels, prescribed fire is introduced when and where appropriate, fire-resistant species are dominant and stands have a good mix of larger diameter trees.
- The following stands which were recently logged and had post sale work completed would be good candidates for prescribed burning; Stands 1, 2, 3, 4, 6 (partial), 6A, 112 and 127.

### **Wildlife Diversity and Habitat**

- Establish some wildlife emphasis areas see 'Planned Actions' table below, to protect unique habitats and limit wildlife disturbance. Take these areas into consideration when planning future developments.

### **Soils**

- Soil productivity should be protected whenever resource activities such as grazing, logging, log hauling or trail building occur. Activities should be timed to minimize soil displacement, sedimentation, compaction or erosion

### **Water Resources**

- When implementing forest management activities follow The Oregon Forest Practices Act which has established Riparian Management Areas (RMAs) to include the ground

along waterways where vegetation and microclimate are influenced by year-round or seasonal water, associated high-water tables and soils that exhibit some wetness. To help protect water bodies during and after forest practice activities, RMAs are regionally specified and have requirements for retaining trees, snags and understory vegetation, and for limited or modified practices that reduce disturbances from forestry activities that could impact aquatic habitat and water quality.

### **Roads/Trails**

- It is recommended that a road condition assessment be completed to plan future road maintenance and address any serious issues identified See below;
  - Some native surface roads that are haul routes, could use rock surfacing and drainage improvements to prevent rutting and extend season of use for hauling
  - The Cinch Road/Trail needs a culvert crossing at Conley Creek to make accessible to vehicles and log trucks
  - Temporary closures are recommended on some roads on the motorized portion of the MERA to protect road bases and limit erosion and rutting
  - Easy Out Road near Old Mill Road intersection needs some grade or drainage work to eliminate rutting during the wet season
- Perform yearly maintenance to maintain grade and drainage to prevent erosion and sedimentation.

### **Cultural Sources**

- When planning new projects make sure cultural surveys are planned and completed.

### **Integrated Pest Management**

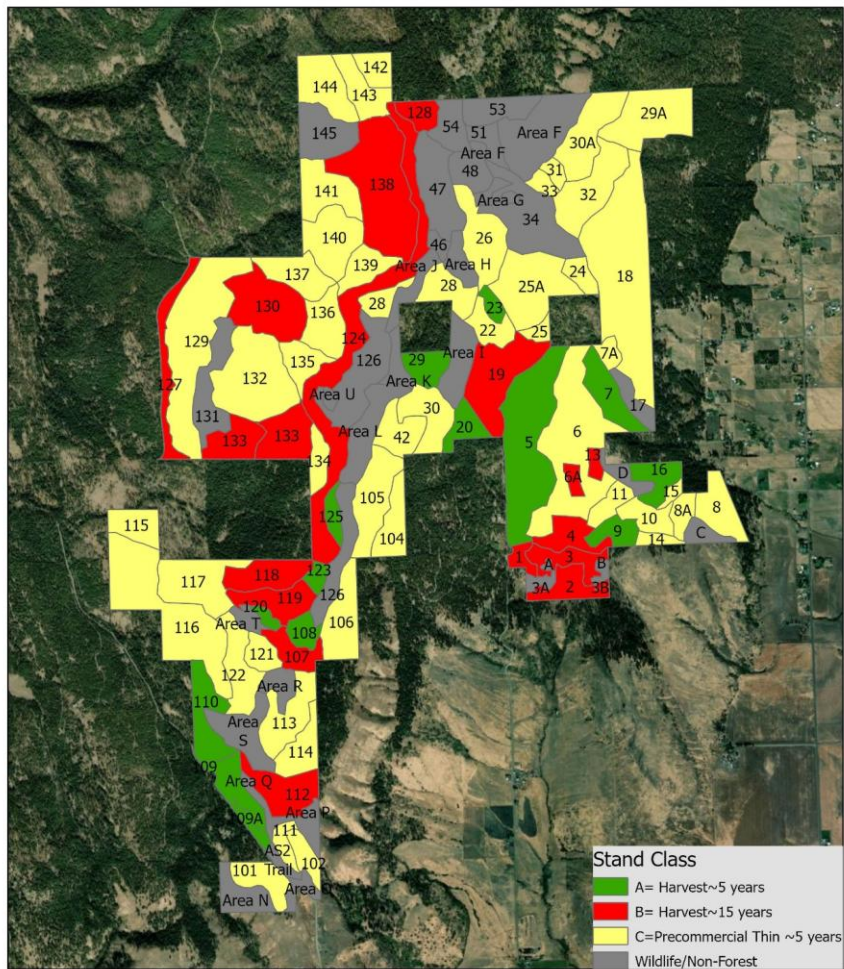
- Perform yearly surveys to monitor for insect and disease outbreaks.
- Monitor and treat noxious weeds yearly.

### **Prescribed Burning**

- The following stands which were recently logged and had post sale work completed would be good candidates for prescribed burning; Stands 1, 2, 3, 4, 6 (partial), 6A, 112 and 127.

## EVALUATE ALTERNATIVES





## Mt Emily Recreation Area Stand Class



## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
1	Evaluate harvest options in ~ 15 years, using individual tree and group selection to promote a mix of healthy large diameter mature trees and younger age classes. Prescribed fire ~ 5 years to reduce fuel build up.	Low	9	Maintaining boundary fencing, and enclosure. Area has a high density of user trails. Monitor and treat noxious weeds.
2	Evaluate harvest options in ~ 15 years, using individual tree and group selection to promote a mix of healthy large diameter mature trees and younger age classes. Prescribed fire ~ 5 years to reduce fuel build up.	Low	24	Maintaining boundary fencing. Area has a high density of user trails. Monitor and treat noxious weeds.
3, 3A, 3B	Evaluate harvest options in ~ 15 years, thin from below and small group selection to promote a mix of healthy large diameter trees and promote recruitment of new age class. Prescribed fire ~ 5 years to reduce fuel build up.	Low	26	Maintaining boundary fencing, enclosure and watering trough. Area has a high density of user trails. Monitor and treat noxious weeds.
4	Pre-commercial thin and pile. Completed 12/23. Burn piles 2024. Evaluate harvest options in ~ 15 years, using individual tree and group selection to promote a mix of healthy large diameter mature trees and younger age classes. Prescribed fire ~ 5 years to reduce fuel build up. Monitor PP dwarf-mistle-toe infection.	Low	25	Maintaining boundary fencing, enclosure and watering trough. Area has a high density of user trails. Monitor and treat noxious weeds.
5	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Alternative is to Evaluate harvest options in ~ 5 years, using individual tree and group selection to promote a mix of healthy large diameter mature trees and younger age classes. Follow with precommercial thinning.	High	116	Archery Club leases property. Buildings and infrastructure. Maintaining boundary fencing. Spring development. Perennial stream. High density of user trails. Root disease prevalent in DF and GF. Monitor and treat noxious weeds.
6	Pre-commercial thinning with mastication and hand thinning and hand piling completed on ~ 50 acres 12/22 – 12/24, after 2022 harvest. Hand piles burned 12/24. Complete precommercial thinning and hand piling on the remaining acres in next five years. Burn piles.	High	121	Perennial stream. Root disease prevalent in DF/GF. Ips bark beetle active in PP. Monitor and treat noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone

### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
6A	Evaluate harvest options in ~ 15 years, thin from below and small group selection to promote a mix of healthy large diameter trees and promote recruitment of new age class. Prescribed fire ~ 5 years to reduce fuel build up.	Low	7	Burn landing pile. Monitor and treat noxious weeds.
7	Evaluate harvest options in ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. Alternative treatment is a pre-commercial thin with hand piles or mastication ~ 5 years.	High	32	Area has high density of user trails. Monitor and treat noxious weeds.
7A	Evaluate precommercial thin with hand piles ~ 5 years. Favor WL/PP.	High	9	Area has high density of user trails. Monitor and treat noxious weeds. Old rock pit is part of stand.
8	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years.	High	32	Maintaining boundary fencing. Monitor and treat noxious weeds.
8A	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Root disease prevalent favor PP/WL.	High	15	Monitor and treat noxious weeds.
9	Evaluate harvest options in ~ 5 years, thin from below to promote healthy large diameter trees. Individual tree selection to target PP mistle-toe.	High	17	Cultural resource concerns require winter logging. Prescribed fire ~ 10 years to reduce fuel build up. Monitor and treat noxious weeds. Maintain boundary fencing.

## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
10	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent DF and GF.	High	21	Intermittent stream. Monitor and treat noxious weeds.
11	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent DF and GF.	High	16	Monitor and treat noxious weeds.
13	Evaluate harvest options in ~ 15 years, thin from below and small group selection to promote a mix of healthy large diameter trees and promote recruitment of new age class.	Low	6	Harvest in 2023 was only completed on 4 acres. Remaining two acres would benefit from a precommercial thin of trees < 9" dbh to reduce density. Hand pile slash. Monitor and treat noxious weeds. Maintain boundary fencing.
14	Evaluate precommercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent DF and GF.	High	7	Maintain boundary fencing. Monitor and treat noxious weeds. Cultural resources.
15	Evaluate for Harvest ~ 5 years. Small acres limiting. Favor WL/PP. Alternative option is pre-commercial thin and hand pile or mastication.	High	5	Perennial stream. Monitor and treat for noxious weeds. Cultural resources.
16	Evaluate harvest options in ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. Alternative treatment is a pre-commercial thin with hand piles or mastication ~ 5 years.	High	22	Maintain boundary fencing. Monitor and treat noxious weeds. Cultural resources.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
17	Manage for wildlife and old growth. Evaluate pre-commercial thin with hand piles ~ 5 years. Favor PP/ WL as root disease is prevalent DF and GF. DF bark beetles active.	Medium	15	Steep and rocky slopes limiting. Haul road requires culvert. Potential old growth stand. Monitor and treat noxious weeds.
18	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent DF and GF.	High	176	Culvert required for access road. High density of user trails. Maintain boundary fencing. Monitor and treat noxious weeds.
19	Evaluate harvest options in ~ 15 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes.	Medium	66	Monitor and treat noxious weeds. High density of user trails.
20	Evaluate harvest options in ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. Alternative is pre-commercial thin with hand piles or mastication. Favor PP/WL.	Medium	18	Maintain boundary fencing. Monitor and treat noxious weeds. High density of user trails.
22	Evaluate pre-commercial thin with hand piles ~ 5 years. Favor PP/WL as root disease is prevalent DF and GF.	Medium	20	Monitor and treat noxious weeds.
23	Evaluate harvest ~ 5 years. Thin from below. Favor PP/ WL.	High	8	Slope limiting. Monitor and treat noxious weeds.

## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
24	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent DF and GF.	High	68	Monitor and treat noxious weeds. High density of user trails.
25	Evaluate pre-commercial thin and pile ~ 5 years. Favor PP/DF. Alternative is harvest ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. Steep slopes and adverse skid limit logging	High	7	Maintain boundary fencing. Borders private. Monitor and treat noxious weeds. High density of user trails.
25A	Evaluate pre-commercial thin and hand pile ~ 5 years. Alternative is harvest ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. PP mistle-toe present. Steep slopes limit logging.	High	12	Monitor and treat noxious weeds. High density of user trails.
26	Harvest ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter trees. Alternative is pre-commercial thin and hand pile or mastication.	High	47	High density of user trails. Monitor and treat noxious weeds.
28	Evaluate SPC and hand pile ~ 5 years. Favor PP/WL/DF. Alternative is harvest ~ 15 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes.	Medium	28	Broken terrain, steep slopes limiting in places. High density of user trails. Monitor and treat noxious weeds.
29	Evaluate harvest options in ~ 5 years, thin from below and small group selection to promote a mix of healthy large diameter trees and promote recruitment of new age class.	High	21	Intermittent stream. High density of user trails. Approximately two acres of SPC favor WL. Monitor and treat noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

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## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
29A	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent in DF and GF.	High	62	Maintain boundary fencing. Monitor and treat noxious weeds.
30	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent in DF and GF.	High	37	Maintain boundary fencing. Monitor and treat noxious weeds. Intermittent stream. High density of user trails.
30A	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent in DF and GF. Alternative is harvest ~ 5 years, thin from below. Mainly pulpwood limiting logging.	High	49	Maintain boundary fencing. Monitor and treat noxious weeds. Intermittent stream. High density of user trails.
31	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Alternative is harvest ~ 15 years, thin from below.	Medium	7	High density of user trails. Monitor and treat noxious weeds. User trails.
32	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor WL as root disease is prevalent in DF and GF. and PP mistle-toe infection common.	High	54	High density of user trails. Monitor and treat noxious weeds. User trails.
33	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP and WL as root disease is prevalent in DF and GF. Alternative is harvest ~ 5 years, thin from below. Mainly pulpwood limiting logging.	High	8	Intermittent stream. Monitor and treat noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
34	Good candidate for wildlife habitat, future old growth stand. Alternative is to commercial thin ~ 5 years. Thin from below, favor DF/WL. Possible pre-commercial thin with hand pile or mastication. Favor WL/DF	Low	69	Slopes limiting for logging. User trail present. Intermittent stream. Monitor and treat noxious weeds.
42	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP/WL as root disease is prevalent in DF and GF. Alternative is harvest ~ 15 years, thin from below. Mainly pulpwood limiting logging.	High	28	Root disease prevalent in DF/GF. Monitor and treat noxious weeds. User trail present.
46	Evaluate for harvest ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. Favor DF/WL. Alternative is to leave for wildlife with surrounding stands.	Low	7	Slopes limiting for logging. User trail. Monitor and treat noxious weeds.
47	Manage as wildlife habitat. Steep, rock slopes with tall brush.	Low	52	Slopes limiting for logging. User trail. Monitor and treat noxious weeds.
48	Manage as wildlife habitat.	Low	22	Slopes limiting for logging. Monitor and treat noxious weeds. Old helicopter landing.
51	Manage as wildlife habitat.	Low	18	Slopes limiting for logging. Monitor and treat noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.



### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
53	Manage as wildlife habitat.	Low	28	Slopes limiting for logging. Monitor and treat noxious weeds. Maintain boundary fencing.
54	Manage as wildlife habitat.	Low	24	Slopes limiting for logging. Monitor and treat noxious weeds. Maintain boundary fencing.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
101	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor DF, PP mistle-toe prevalent.	High	22	Maintain boundary fence. Monitor and treat noxious weeds. Protect cultural resource. User trail present. Intermittent stream present.
101 A	Evaluate for harvest ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. Watch for PP mistle-toe.	High	3	Maintain boundary fence. Monitor and treat noxious weeds. Protect cultural resource. User trail present. Intermittent stream present.
102	Evaluate for pre-commercial thin and pile ~ 5 years. Understory 5" dbh to 10" dbh heavily infected with PP mistle-toe, favor DF.	High	15	Maintain boundary fence. Monitor and treat noxious weeds. Slope and topography limiting for logging.
104	Evaluate pre-commercial thin with hand pile or mastication. Favor PP/WL.	High	27	Maintain boundary fence. Monitor and treat noxious weeds.
105	Evaluate pre-commercial thin with hand pile or mastication. Favor PP/WL. Alternative is a commercial thin from below ~ 15 years	High	49	Maintain boundary fence. Monitor and treat noxious weeds
106	Evaluate pre-commercial thin with hand pile or mastication ~ 5 years. Alternative is commercial thin from below ~ 15 years. Favor WL/PP.	High	42	Maintain boundary fence. Monitor and treat noxious weeds. Protect cabin/spring.

**NOTE:** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
107	Evaluate for harvest ~ 15 years. Sanitation salvage to remove PP mistle-toe infected trees. Follow up with precommercial thin to remove mistle-toe infected understory.	Low	24	Maintain boundary fencing. Monitor and treat noxious weeds.
108				
109	Evaluate for harvest ~ 5 years, thin from below and individual tree selection to promote a mix of healthy large diameter mature trees and younger age classes. Watch for PP and DF mistle-toe.	High	28	Maintain boundary fencing. Monitor and treat noxious weeds. User trail present. Seasonal stream present.
109A	Evaluate harvest options ~ 5 years, thin from below and small group selection to promote a mix of healthy large diameter trees and promote recruitment of new age class. Watch for PP mistle-toe and gall rust.	Medium	9	Small acres limiting. Treat at same time as 101A and 109. Maintain boundary fence. Monitor and treat noxious weeds.
110	Evaluate harvest options ~5 years. Stand needs a sanitation salvage due to DF mistle-toe. Favor PP. Access limiting.	High	39	Maintain boundary fence. Monitor and treat noxious weeds.
111	Evaluate pre-commercial thin with hand piles ~ 5 years. Favor DF, PP mistle-toe prevalent. Alternative is to wait ~ 15 years to harvest slopes < 40%.	Medium	5	Monitor and treat noxious weeds. Slope and topography limiting for logging. Seep present.

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## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
112	Evaluate harvest options in ~ 15 years, sanitation harvest and small group selection to reduce spread of PP mistle-toe and promote recruitment of DF regeneration. Alternate treatment pre-commercial thin and hand pile or mastication. Favor trees with mistle-toe in lower one third of crown.	Medium	40	Monitor and treat noxious weeds. User trail present.
113	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor DF due to PP mistle-toe. Alternative treatment is to wait ~ 15 years and do a thin from below.	High	41	Maintain boundary fencing. Monitor and treat noxious weeds.
114	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor DF due to PP mistle-toe. Alternative treatment is to wait ~ 15 years and do a sanitation salvage.	Medium	27	Maintain boundary fencing. Monitor and treat noxious weeds. Slopes limit logging.
115	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP and WL due to root disease in GF and DF.	Medium	30	Maintain boundary fencing. Monitor and treat noxious weeds. Seasonal stream.
116	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP and WL due to root disease in GF and DF.	Medium	115	Maintain boundary fencing. Monitor and treat noxious weeds. Seasonal stream.
117	Evaluate pre-commercial thin with hand piles or mastication ~ 5 years. Favor PP and WL due to root disease in GF and DF.	High	53	Maintain boundary fencing. Monitor and treat noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
118	Evaluate for harvest ~ 15 years. Favor healthy dominant PP. Follow up with pre-commercial thin with hand pile or mastication. Favor PP and DF.	Low	36	Maintaining boundary fencing. Monitor and treat noxious weeds.
119	Evaluate for commercial thin from below ~ 15 years. Watch for PP mistletoe, favor WL.	Low	33	Monitor and treat noxious weeds.
120	Evaluate commercial thin from below in 5 – 15 years. Watch for PP mistletoe. Follow harvest with pre-commercial thin, favor PP/DF.	Medium		Monitor and treat noxious weeds.
121	Evaluate pre-commercial thin ~ with hand pile or mastication ~ 5 years. Target PP with mistle-toe infection especially in upper crowns. Alternative is a commercial thin from below in ~ 15 years. Small stand diameter limiting.	Medium		Monitor and treat noxious weeds.
121B	Evaluate Sanitation salvage ~ 15 years, for trees with severe PP mistle-toe. Trees are interspersed with areas of non-forest. Stand acts as a fuels break.	Low		Monitor and treat noxious weeds.

**NOTE:** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
122	Evaluate ~ 5 years for pre-commercial thin with hand pile or mastication. Favor PP and WL due to root disease in GF and DF	Medium	39	Monitor and treat noxious weeds.
123	Evaluate ~ 5 years for over story removal to manage young vigorous under story. Follow up with pre-commercial thin. Favor PP/DF	Medium	8	Monitor and treat noxious weeds.
124	Maintain fuels break. Evaluate commercial thin from below ~ 15 years.	Low	125	Monitor and treat noxious weeds. Possible Rx burn.
125	Evaluate commercial thin from below ~ 5 years.	High	10	Monitor and treat noxious weeds.
126	Leave as a buffer for peregrine nesting site. If managed pre-commercial thin ~ 5 years. Hand pile or mastication.	Medium	58	Monitor and treat noxious weeds. Management activities limiter from September 1 <sup>st</sup> to December 31 <sup>st</sup> .
127	Evaluate commercial thin and fuels break maintenance ~ 15 years	Low	29	Maintain boundary fencing. Monitor and treat noxious weeds. Possible Rx burn.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
128	Evaluate harvest ~ 15 years. Favor PP/WL/DF/ES	Medium	16	Borders USFS. Wet areas. Monitor and treat noxious weeds. Maintain boundary fencing.
129	Evaluate pre-commercial thinning with hand piles or mastication. Favor WL/PP. Alternative is to wait for commercial thin from below ~ 15 years.	High	122	Borders USFS and private. Maintain boundary fencing. Monitor and treat noxious weeds.
130	Evaluate commercial thin from below ~ 15 years. Create small openings to promote new age class. Favor WL/PP.	Medium	65	Protect Pacific yew growing on site. Monitor and treat noxious weeds. Maintain boundary fencing.
131	Evaluate improvement cut to remove DF mistle-toe and trees with poor crown ratios. Promote younger age classes. Areas of non-forest mixed in.	Low	40	Monitor and treat noxious weeds.
132	Evaluate pre-commercial thinning with hand piles or mastication. Favor WL/PP. Alternative is to wait for commercial thin from below ~ 15 years.	High	90	Monitor and treat noxious weeds.
133	Evaluate commercial thin from below ~ 15 years. Alternative is pre-commercial thin with hand piles or mastication ~ 5 years.	Medium	67	Maintain boundary fencing. Monitor and treat noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
134	Evaluate commercial thin from below in ~ 15 years. Favor PP/DF.	Low	16	Monitor and treat noxious weeds. Maintain boundary fencing.
135	Evaluate pre-commercial thinning with hand piles or mastication. Favor WL/PP. Alternative is to wait for commercial thin from below ~ 15 years.	High	22	Protect Pacific yew growing on site. Monitor and treat noxious weeds. Rock out crops.
136	Evaluate pre-commercial thinning with hand piles or mastication. Favor WL/PP. Alternative is to wait for commercial thin from below ~ 15 years.	Medium	35	Protect Pacific yew growing on site. Monitor and treat noxious weeds. Protect intermittent stream and wet meadow. Operations limited to dry season.
137	Evaluate pre-commercial thin with hand pile or mastication ~ 5 years. Favor WL/PP. Alternative is to commercial thin from below ~ 15 years.	High	33	Protect Pacific yew growing on site. Monitor and treat noxious weeds. Protect intermittent stream. Maintain boundary fencing. Borders USFS.
126A	Area has steep slopes, mixed with rock outcrops and cliffs. Adjacent to peregrine nesting sites. Manage for wildlife.	Low	34	Monitor and treat noxious weeds.
138	Evaluate commercial thin from below ~ 15 years.. Favor WL/PP.	Medium	116	Monitor and treat for noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.



## Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
139	Evaluate need for pre-commercial thin with hand piles or mastication ~ 5 years. Favor WL/PP/DF/ES.	High	24	Monitor and treat for noxious weeds.
140	Evaluate need for pre-commercial thin with hand piles or mastication ~ 5 years. Favor WL/PP/DF/ES. Alternative is wait ~ 15 years for a commercial thin.	High	48	Monitor and treat for noxious weeds. Maintain boundary fence. Borders FS.
141	Evaluate need for pre-commercial thin with hand piles or mastication ~ 5 years. Favor WL/PP/DF/ES. Alternative is wait ~ 15 years for a commercial thin	High	41	Monitor and treat for noxious weeds. Maintain boundary fence. Borders FS.
142	Evaluate need for pre-commercial thin with hand piles or mastication ~ 5 years. Favor WL/PP/DF/ES. Alternative is wait ~ 15 years for a commercial thin	Medium	17	Monitor and treat for noxious weeds. Maintain boundary fence. Borders FS. User trails.
143	Evaluate need for pre-commercial thin with hand piles or mastication ~ 5 years. Favor WL/PP/DF/ES. Alternative is wait ~ 15 years for a commercial thin.	Medium	29	Monitor and treat for noxious weeds. Maintain boundary fence. Borders FS. User trails.
144	Evaluate need for pre-commercial thin with hand piles or mastication ~ 5 years. Favor WL/PP/DF/ES. Alternative is wait ~ 15 years for a commercial thin	Medium	42	Monitor and treat for noxious weeds. Maintain boundary fence. Borders FS. User trails.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
145	Some areas of steep slopes and rock outcrops. Treat areas along shared boundary with Forest Service. Understory fuels treatment.	Medium	40	Monitor and treat for noxious weeds. Maintain boundary fence. Borders FS.
150	Evaluate improvement harvest ~ 15 years. Remove disease and damaged trees and trees with < 40 Crown ratios. Follow with per-commercial thin favor DF/WL/ES.	Low	15	Monitor and treat noxious weeds.
A	Possible habitat restoration for wildlife.	Medium	7	Monitor and treat for noxious weeds. Maintain boundary fence.
B	Possible habitat restoration for wildlife	Medium	4	Monitor and treat for noxious weeds. Maintain boundary fence.

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**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

### Schedule of Planned Actions

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
C	Maintain boundary fence. Protect spring. Treat noxious weeds (cinquefoil, medusa head, ventanata).	Medium	11	Manage for elk and deer winter range.
D	Maintain boundary fence. Protect pond and stream. Treat noxious weeds (cinquefoil, medusa head, ventanata).	Medium	14	Manage for elk and deer winter range
E	Maintain boundary fence. Monitor for noxious weeds.	Medium	69	Manage for elk and deer summer range.
G	Monitor for noxious weeds.	Medium	11	Manage for elk and deer summer range.
H	Monitor for noxious weeds.	Medium	17	Manage for elk and deer summer range.
I	Monitor for noxious weeds.	High	33	Manage for elk and deer summer range.
J	Area has steep slopes, mixed with rock outcrops and cliffs. Adjacent to peregrine nesting sites. Manage for wildlife.			Monitor for noxious weeds.

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
K	Area has steep slopes, mixed with rock outcrops and cliffs. Adjacent to peregrine nesting sites. Manage for wildlife.			Monitor for noxious weeds
L	Area has steep slopes, mixed with rock outcrops and cliffs. Adjacent to peregrine nesting sites. Manage for wildlife.			Monitor for noxious weeds
M				
N	Monitor for noxious weeds.	Medium	25	Manage for elk and deer winter range.
O	Monitor for noxious weeds.	Medium	11	Manage for elk and deer winter range.
P	Monitor for noxious weeds.	Medium	13	Manage for elk and deer winter range.

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
R				
S	Maintain as a fuels break. Monitor and treat for noxious weeds	L	38	Protect intermittent stream and riparian area.
T	If grazing resumes, fence this moist meadow with high water table, seeps and springs. Monitor and treat for noxious weeds.	L	8	None

Forest Stand Name	Suggested Management Actions	Priority	Acres	Other Management Considerations
AS-1	Evaluate pre-commercial thin and pile ` 5 years. Completed 8/2025. Burn piles 2026. Maintain as a safety zone.	High	2	General trailhead maintenance. Monitor and treat for noxious weeds.
AS-2	Contract with tree service to prune trees with PP mistle-toe in lower crowns. SPC and pile to remove trees < 9" dbh with PP mistle-toe.	High	7	Maintain fences. General campground and trailhead maintenance. Monitor and treat noxious weeds.

**NOTE;** For each Stand with planned actions of either a pre-commercial thinning or a commercial harvest refer back to the **Forest Stand Characteristics Table** and the column headed **Desired Density (TPA)**. The Desired Density (TPA) is a range based on the stands forest type, target species (i.e. ponderosa pine) and average stand diameter. This range is between the suggested lower and upper management zones, (see Ecology and Management of Eastern Oregon Forests, Oregon State University). These suggested stocking levels (TPA), delineate a management zone in which stand densities are presumed to be relatively resistant to insect and disease problems and to preclude serious tree mortality from bark beetles. Stand densities should be maintained below the upper limit of the management zone.

## MAKING DECISIONS

### Monitoring Plan

Landowner and forester should review the MERA Basic Forest Management Plan (BFMP) yearly. Review the MERA's Stated objectives and update if necessary. At this time the BFMP can be updated for completed actions and new actions can be planned. Continue to monitor timber stands before, during, and after treatment to evaluate effectiveness of treatments and adjustment as needed. Stands should be monitored for insect and disease damage. Roads should be monitored for erosion.

### Where to get help

[Choose Stewardship Forester, DC & Extension Forester for LO's county – delete others; if LO has specific objectives, include other resources as needed]

### **Resource Professional/s Who Completed this Plan for You:**

Name: David Komlosi  
Role: Advisor  
Company: DK Forestry, LLC  
Address: 906 Penn Ave.  
Phone Number: 541-963-0477  
Email Address: djkomlosi@gmail.com

Name:  
Role:  
Company:  
Address:  
Phone Number:  
Email Address:

**Oregon Department of Forestry (ODF)**

Abby McBeth, Stewardship Forester  
Oregon Dept. of Forestry – La Grande  
611 20th Street  
La Grande, OR 97850  
(541) 963-3168  
[Abby.D.MCBETH@odf.oregon.gov](mailto:Abby.D.MCBETH@odf.oregon.gov)

**Natural Resources Conservation Service (NRCS)**

Anna Gordon, District Conservationist  
La Grande Service Center  
1901 Adams Ave, Suite 6  
La Grande, OR 97850  
541-624-3098  
[anna.gordon@usda.gov](mailto:anna.gordon@usda.gov)

**Oregon State University (OSU) Extension Forester**

John Punches  
Union County Extension  
10507 N. McAlister Rd.  
La Grande, OR 97850  
541-963-1010  
[john.punches@oregonstate.edu](mailto:john.punches@oregonstate.edu)

**Two helpful resources when thinking about your forestland and your plan for its management:**

- Oregon Forest Management Planning Website <http://blogs.oregonstate.edu/forestplanning/>
- Oregon's Know Your Forest Website <https://www.knowyourforest.org/>



SIGNATURE PAGE

This plan is a basic forest management plan intended to provide the landowner with information about the state of their forest and specifically qualify them for funding from NRCS (Natural Resources Conservation Service).

Planned actions are voluntary and subject to change. This plan does not limit or reduce any existing rights of the landowner. It does not guarantee that the landowner will receive funding from NRCS or any other agency or group.

<b>PREPARED FOR:</b>  _____ Landowner's Signature                      Date  _____ Print Landowner's Name	<b>PREPARED BY:</b>  _____ Resource Professional's Signature                      Date  _____ Print Resource Professional's Name  _____ Resource Professional's Signature                      Date  _____ Print Resource Professional's Name
<b>REVIEWED BY:</b>  _____ Agency Representative Signature                      Date  _____ Print Agency Representative Name  Agency Name: _____  Acres of Forest Land: County:	

## Appendix A

### PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

Stand 1 before



Stand 1 after

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 2 before**



**Stand 2 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 3 before**



**Stand 3 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 4 before**



**Stand 4 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 5 before**



**Stand 5 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 6 before**



**Stand 6 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 6A before**



**Stand 6A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 7 before**



**Stand 7 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 7A before**



**Stand 7A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 8 before**



**Stand 8 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 9 before**



**Stand 9 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 10 before**



**Stand 10 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 11 before**



**Stand 11 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



**Stand 13 before**



**Stand 13 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 14 before**



**Stand 14 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 15 before**



**Stand 15 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 16 before**



**Stand 16 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 17 before**



**Stand 17 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 18 before**



**Stand 18 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 19 before**



**Stand 19 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 20 before**

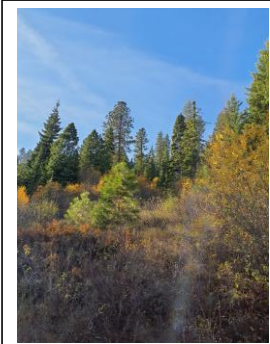


**Stand 3 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

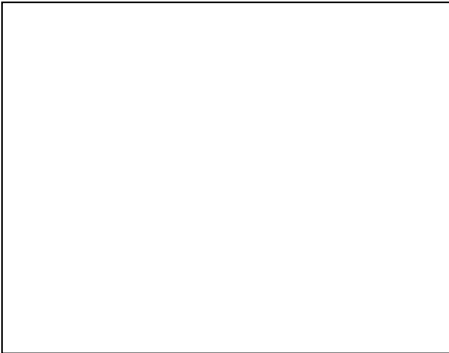
**Stand 22 before**



**Stand 22 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

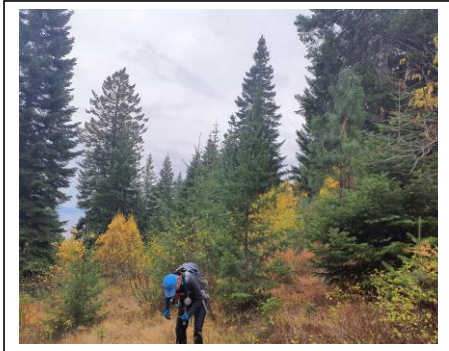
**Stand 23 before**



**Stand 23 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 24 before**



**Stand 24 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 25 before**



**Stand 25 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



**Stand 25A before**



**Stand 25A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 26 before**



**Stand 26 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 28 before**



**Stand 28 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 29 before**



**Stand 29 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



**Stand 29A before**



**Stand 29A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 30 before**



**Stand 30 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 30A before**



**Stand 30A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 31 before**



**Stand 31 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 32 before**



**Stand 32 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 33 before**



**Stand 33 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 34 before**



**Stand 34 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 42 before**



**Stand 42 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 46 before**



**Stand 46 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 47 before**



**Stand 47 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 48 before**



**Stand 48 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 51 before**



**Stand 51 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 53 before**



**Stand 53 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

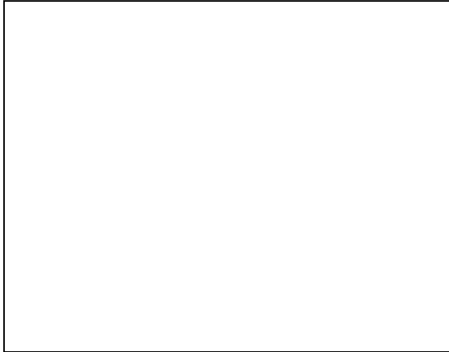
**Stand 54 before**



**Stand 54 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand before**



**Stand after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area A before**



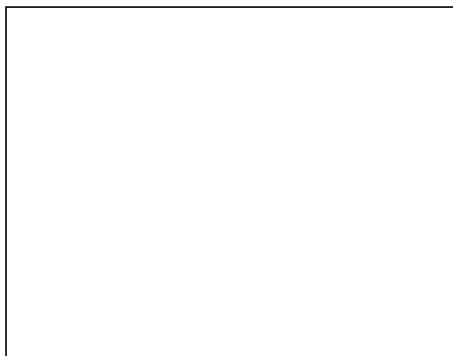
**Area A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Area B before**



**Area B after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area C before**



**Area C after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area D before**



**Area D after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Area E before**



**Area E after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area F before**



**Area F after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area G before**



**Area G after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

Area H before



Area H after

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

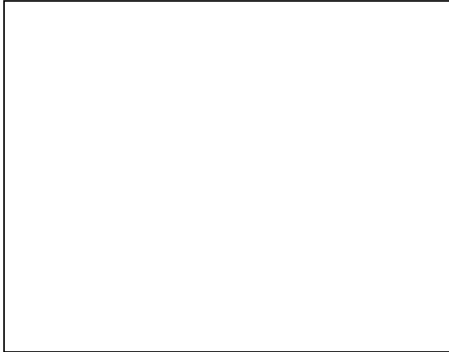
Area I before



Area I after

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area J before**



**Area J after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**AREA K before**



**Area K after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area L before**



**Area L after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area M before**



**Area M after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Area N before**



**Area N after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area O before**



**Area O after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



**Area P before**



**Area P after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Area Q before**



**Area Q after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



**Area R before**



**Area R after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Area S before**



**Area S after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

Area T before



Area T after

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Admin Site AS1 before**



**Admin Site AS1 after**



## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Admin Site AS2 before**



**Admin Site AS2 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 101 before**

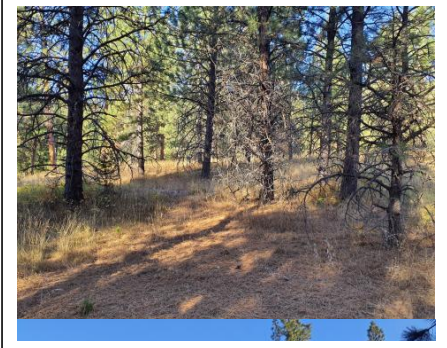


**Stand 101after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 101A before**



**Stand 101A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 102 before**



**Stand 102 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 104 before**



**Stand 104 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 105 before**



**Stand 105 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 106 before**



**Stand 106 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



**Stand 108 before**



**Stand 108 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 109 before**



**Stand 109 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 109A before**



**Stand 109A after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 110 before**



**Stand 110 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 111 before**



**Stand 111 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

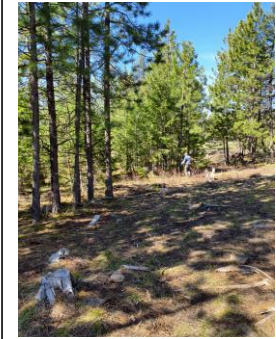
**Stand 112 before**



**Stand 112 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 113 before**



**Stand 113 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 114 before**



**Stand 114 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 115 before**



**Stand 2 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 116 before**



**Stand 116 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 117 before**



**Stand 117 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 118 before**



**Stand 118 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 119 before**



**Stand 119 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 120 before**



**Stand 120 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 121 before**



**Stand 121 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 121B before**



**Stand 121B after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 122 before**



**Stand 122 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 123 before**



**Stand 123 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 124 before**



**Stand 124 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## **PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS**

**Stand 125 before**



**Stand 125 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



**Stand 126 before**



**Stand 126 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 127 before**



**Stand 127 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 128 before**



**Stand 128 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

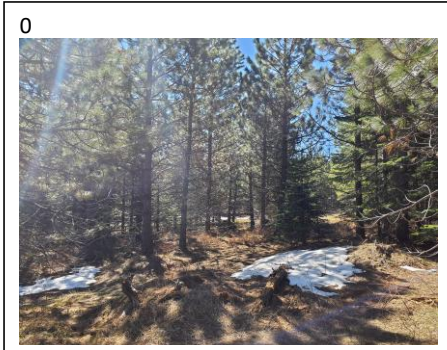
**Stand 129 before**



**Stand 129 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 130 before**



**Stand 130 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 131 before**



**Stand 131 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 133 before**



**Stand 133 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 134 before**



**Stand 134 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

## PHOTOS OF STANDS BEFORE AND AFTER MANAGEMENT ACTIONS

**Stand 135 before**



**Stand 135 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 136 before**



**Stand 1360 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]

**Stand 137 before**



















**Stand 137 after**

[Insert "After" photo of proposed management action from demonstration site similar to landowner's land or desired conditions from site on LO's property & description of conditions]



Appendix B: Forest Health Notes

 Cytospora Canker.pdf	 Douglas-Fir Dwarf Mistletoe.pdf	 Douglas-fir Pole and Engraver.pdf	 Douglas-fir-beetle.pdf	 Elytroderma needle blight.pdf	 FIDL-78-ArmillariaRoot Disease.pdf
 FIDL-159-Laminated Root Rot.pdf	 Fir Broom Rust.pdf	 Fir Engraver Beetle.pdf	 Larch casebearer.pdf	 Larch Dwarf Mistletoe.pdf	 Mountain Pine Beetle.pdf
 Pine engraver - ips.pdf	 Western Dwarf Mistletoe.pdf	 Western Gall Rust.pdf	 Western Pine Beetle.pdf		



## Appendix C: Range Discussion



MERA Advisory Topic  
Livestock Grazing FIN.Options 2-2-2020 (10)



Mera Grazing

**Appendix D: Biodiversity Report**



biodiversity\_report\_4  
5.3857°N\_-118.0904°V