

Steepness of slope/aspect of slope (direction it faces): 25° North facing, lot
of trees

☒ Landslide risk, describe: 25° slope w/ some rocks / some large trees along
Density of roads (per sq. mi): none active, 2 miles decommissioned "creek"
Effects of livestock grazing: cow pies, cow trail

Evidence of Animal Damage Control

activities: n/a

Evidence of bait stations for hunting, hunters' camps: n/a

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: bull thistle

Recreational use: n/a

Describe sale unit overall: unit shows only very limited signs of human impact
riparian areas, wild life signs (especially elk), many sheep & dogs
and many old trees make this unit very valuable

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☒ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency ☐ private land, ownership

☒ riparian (specify): coffee pot creek

☐ area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

- header
- 1. gram on CG PP leg
- 2. typical view of CG PP grove
- 3. rocky outcropping w/ old PP
- 4. same
- 5. pillared fence on fir snag
- 6. beautiful rocky outcropping
- memory card full :-)

1 111 1 7
111 5
1 111 111 1 1
11 11 11 11 11 11

Recommendations
for allotment location:

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE 6/19/19
NTL FOREST Malheur
DISTRICT Emigrant
Grazing Allotment Rattlesnake
Pasture Aspen Quadrant 16 (67)
Location Coordinates _____

Subjective evaluation of area:

Seems healthier than other aspen stands in area, though the erosion of the creek bed due to cattle is sad to see.

Type of Allotment Site:

Stream _____ Spring _____ Aspen Stand ☒ Other: _____

Stream Conditions:

Overall Description: Sometimes graded down deep embankment, small to medium cobble, mild flow, good shade & downed wood.

-Channel:

Fine sediment level: low
Width vs. depth ratio: 2' across, 1-4" deep
Bank stability: low, grading & unstable, no rock
Meander or straight: Slightly meandering
Size of cobble: fine to medium
Large wood: high

Signs of Livestock damage: Clear presence of cattle: cow pits, erosion on banks, hedging, heavy soil compaction, lack of vegetation

Riparian hardwoods: Aspen ☒ Alder ☒ Red Osier dogwood _____ Willow ☒ Rocky Mt. Maple _____
Cottonwood _____ Other: _____

Riparian Plants:

Exotic invasive plants: Gull thistle, orchard grass

Impoundments/livestock ponds/weirs: n/a

Spring Conditions:

Overall Description: _____

Trough _____ Springbox ☒ Source Fenced off to cattle? _____
Riparian hardwoods: Aspen ☒ Alder ☒ Red Osier dogwood ☒ Willow _____ Rocky Mt. Maple _____
Cottonwood _____ Other: _____

Riparian Plants:

Exotic invasive plants: Orchard grass

Signs of Livestock damage: _____

Spring flow/Amount of flow:

Trough: Animal escapement device: _____ Pipe into ground for overflow? _____
Distance from Spring headwaters: _____
Extent of fencing around spring: _____

Aspen Stand Conditions:

of live Aspen: 114 # of Aspen snags 29 # of Aspen Logs 104

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Describe: intermittent shading from all directions, most of stand receives variable shade

Old growth/Large trees near Aspen? (> 21" dbh) How many? Distance from Aspen? From what direction (N/S/E/W)?

Describe: 24.5" PP, 26" DF, some others. 80 feet away & less. all directions.

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Describe: no fencing, but would greatly benefit.

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe: few sprouts, some hedging, at 1.5'-3'. Hedging on about 50% of sprouts.

typical plants: gooseberry, Oregon grape, lupine, ceonosis, rabbit brush, many blue lops, water leaf, dogsbane, bull thistle, yarrow, arnica, wild rose, sweet sycily, cinquefoil, pine drop, hawkweed, wood groundsel, arrow leaf balsam root, false Solomon's seal, shooting star, service berry

cutting trees which stabilize the bank or shade creek would have negative impact. non-com. thinning by hand OK. cattle enclosure necessary block auto traffic.

red tail hawk spotted in woodspecker nest in aspen stand

big sage brush, bitterbrush

tree 1.5' in diameter

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle scat, Cattle present? Describe: evidence of four wheeler use in area

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: *areas of bare ground on NW bank & heavy soil compaction*

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

- 376 - Header
- 377 - un'id'd flower
- 378 - conifers shading aspens from east
- 379 - pp to east & south
- 380 - un'id'd plant
- 381 - bank erosion south of road 507
- 382. hedging on aspen sprout at 31"
- 383. un'id'd riparian shrub w/ adam
- 384. close up
- 385. view of aspen stand facing west
- 387. aspen hedging 2-3'
- 389. typical view facing west
- 390. woodpecker nest on aspen snag
- 391. same
- 396. dry compacted ash/soil just above creek demonstrating overgrazing
- 397. fire tracks nearby creek in soggy meadow (southeast of creek)
- 398. aspen stand facing west in northern tip
- 399. hedging on sprout at 15"

[illegible]

Recommendations
for allotment location:

Add cattle enclosure fence to
reduce hedging. Don't cut
bank of creek. Core Aspen in
are recovering from so thinning is unnecessary.
Subjective evaluation of area:

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE 6-18-19
NTL FOREST Malheur
DISTRICT Emigrant
Grazing Allotment Rattlesnake
Pasture

Location Coordinates Sec 9, 10, 15 Aspen Unit
SE of 2820830 Wd 2820216
Surveyors Names Cooper, Ben

Unit 95

Type of Allotment Site:

Stream ☒ Spring ☐ Aspen Stand ☐ Other: Meadow

Stream Conditions:

Overall Description: well shaded pooling to mild flow some Gambusia
from cattle

Channel:

Fine sediment level:
Width vs. depth ratio:
Bank stability: spray stable
Meander or straight: meander
Size of cobble: Rocky boulder
Large wood: interspersed

Signs of Livestock damage: bank erosion
hedging @ 12", many cow pies

Riparian hardwoods: Aspen ☒ Alder ☐ Red Osier dogwood ☐ Willow ☒ Rocky Mt. Maple ☐
Cottonwood ☐ Other: ☐

Riparian Plants:

Exotic invasive plants:

Impoundments/livestock ponds/weirs:

Spring Conditions:

Overall Description:

Trough ☐ Springbox ☐ Source Fenced off to cattle? ☒
Riparian hardwoods: Aspen ☒ Alder ☐ Red Osier dogwood ☐ Willow ☒ Rocky Mt. Maple ☐
Cottonwood ☐ Other: ☐

Riparian Plants:

Exotic invasive plants:

Signs of Livestock damage: cow pies

Spring flow/Amount of flow: moderate meandering slow flow w/ pooling rocky channel

Trough: Animal escape device: ☐ Pipe into ground for overflow? ☐

Distance from Spring headwaters:

Extent of fencing around spring:

Aspen Stand Conditions:

of live Aspen: ☐ # of Aspen snags ☐ # of Aspen Logs ☐

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Describe:

Old growth/Large trees near Aspen? (>= 21" dbh) How many? Distance from Aspen? From what direction (N/S/E/W)

Describe:

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Describe:

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe:

73" DF
8" DF

community, vegetation, low density

Typical: Coms, Bulbs, w groundsel, pacific cinquefoil, 5 time mold, heart shaped
many blue lily, pine drops, water camp (sp)

44 in Malheur meadow
In good
dry bedding
In V. meadow
111
27
63

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe: bank cutting
down cutting in stream

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: _____

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description: Red Sony camera 9518 Headway 9519 Meadow
Steady shot

9520 Marsh like ground 9521 Aspen logs

New Corner

Live

||||

Sunny

||

Coop

||||

Seedling

Recommendations
for allotment location:

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE 6-16-19

NTL FOREST Melhem

DISTRICT Enigman

Grazing Allotment on tributary

Pasture

Location Coordinates 42° 41' N 121° 45' W

Surveyors Names Karen Dye

Subjective evaluation of area:

Type of Allotment Site:

Stream ☐ Spring ☐ Aspen Stand ☐ Other: ☐

Stream Conditions:

Overall Description: Long stretch w/ no Aspen along creek EG / spot / mature Aspen & a few sprouts

-Channel:

Fine sediment level: ☐
Width vs. depth ratio: ☐
Bank stability: ☐
Meander or straight: ☐
Size of cobble: ☐
Large wood: ☐

Signs of Livestock damage: ☐

Riparian hardwoods: Aspen ☐ Alder ☐ Red Osier dogwood ☐ Willow ☐ Rocky Mt. Maple ☐

Cottonwood ☐ Other: ☐

Riparian Plants: ☐

Exotic invasive plants: ☐

Impoundments/livestock ponds/weirs: ☐

Spring Conditions:

Overall Description: ☐

Trough ☐ Springbox ☐ Source Fenced off to cattle? ☐

Riparian hardwoods: Aspen ☐ Alder ☐ Red Osier dogwood ☐ Willow ☐ Rocky Mt. Maple ☐

Cottonwood ☐ Other: ☐

Riparian Plants: ☐

Exotic invasive plants: ☐

Signs of Livestock damage: ☐

Spring flow/Amount of flow: ☐

Trough: Animal escapement device: ☐

Pipe into ground for overflow? ☐

Distance from Spring headwaters: ☐

Extent of fencing around spring: ☐

Aspen Stand Conditions: Conifers are PP DF

of live Aspen: 100 # of Aspen snags 2 # of Aspen Logs 6

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Describe: ☐

Old growth/Large trees near Aspen? (>= 21" dbh) How many? Distance from Aspen? From what direction (N/S/E/W)

Describe: ☐

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Describe: ☐

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe: ☐

typical meadow Rue, W. Columbine, Snow Berry, Anemone, OCMR, W. Rose
near Rabbit Creek, graceful Siskin fairy, Fireweed, OCMR, Star flowered Islander
W. Columbine

map 1 Snags 4

* Very quiet up the drainage, w/ the feeling that if you wait quietly, many wild animals will come out.
* There's reference condition old growth PP, GF, & PP within the unlogged RHCA buffer.

The rock outcrops
could also be used for sale unit: West

Recommendations Stringer:
for sale unit: DRIP IT!

except for NOTING up to 8-9"
dbh by hand - The majority of

the sale unit is the "No Logging" RHCA
apparently never logged RHCA buffer.
Subjective evaluation of area.

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE June 15th, 2019
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT CT40 section 1 & 2 at W of 2810
SURVEYOR'S NAME Karen C. Eads 546

Noncommercial size thinning would be enough to take care of water competition stress w/ w/ Rattlesnake Creek
to the old growth Ponderosa pines - most density = $< 8''$ dbh. w/ more OG upstream. This feels wild + scenic, SW of Juniper Flat Spring

Roadless area ☒ (Never logged in) Plantation ☒ Many old growth logs and snags
☒ Old growth/mature forest: RHCA buffer High quality OG habitat in canyon RHCA.

Average tree size in "dbh": Density = average 2-6" dbh / 35.5" PP, 32.5" DF
Examples of large tree diameter: 32.6" PP, 25.4" DF, 23.5" DF, 26.6" PP, 35.5" GF, 30.9" PP, 36" PP

of old growth trees per acre: 13 OG live PPs, 3 OG live DFs, w/ 06 snags - 5 PP, 2 GF, 1 DF, &
OG logs: 1 DF & 1 PP (within RHCA buffer) 2nd OG count in W end canyon: 10 OG PPs, 4 OG GFs,

☒ Previously logged approx. age of trees / 4 OG DFs, w/ 06 snags: 5 GF & 2 DF, & 06 logs: 2
Describe marking to cut: None / 06 logs: 9 GF & 2 DF

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:
No stumps within rock formation narrow canyon RHCA in west end.

☒ Mixed conifer, specify species and number in descending order of prevalence: 2 Ponderosa Pine

Juniper 2 Doug Fir Western Larch 3 Grand Fir Lodgepole Pine Engleman

Spruce Subalpine Fir Yew Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): Mostly GF & DF

Quality and type of canopy closure, %: Mostly high, shady. Less canopy closure in E. and w/
more OG PP; more canopy closure in W. end narrow canyon w/ more OG GF & DF.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe: a large OG GF logs & large OG GF snags, an OG DF log, a big live OG GF

3 OG DFs, etc. in a drainage that still has water in pools in the stream, N slope on one
% of defoliation - species and age of trees affected: top kill in some younger-mature GF side of the drainage

patchy isolated mistletoe in m DF

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): Douglas squirrel, N. Flicker foraging & bark scaling,

a likely yellow-rumped warbler heard, a hawk seen, "Globe web" spiders,

a native bee pollinating the Penstemon flowers, Gray jays, bear foraging, bobcat scat,

Hermit Thrush singing, W. Tanager, a male Hairy woodpecker seen & heard 14:53

a white-breasted nuthatch seen, bear foraging, likely Cassin's Finch song heard, elk scat,

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, Robins
creeks, rivers, lakes, ponds) describe: a tributary drainage to West Fork Rattlesnake in the

upper (N) spring of the sale unit heading w/ - flowing upstream, w/ wide pools,

small cobble, well defined channel w/ boulders, lacking riparian hardwoods

& most riparian forks - moss, clear water, some algae - see 12:59 & 13:00 photos.

Riparian buffers? Adjacent steep slopes?

The tributary stream needs at least a 50' no logging buffer on each side

Unusual plants?

Plant community types: Elk sedge, Pinegrass

Soil type, quality, compaction
level(s):

Typical plants: Arnica, OR grape, Thinleaf lupine, Pines, yarrow, Dogbane
tall yellow groundsel (?) sp., OR checker mallow root, False Solomon's Seal

Wang Bluebirds, Hawkwood

more photos (15:01) me hugging a big OG GF snag (15:16) - an OG GF in W. end of OG count
(15:18) a big OG PP in W. end of OG count (15:19) many - False Solomon's Seal
(15:21) 2 big OG GF snags & an OG GF line (tops) (15:23) a big OG fir snag w/ extensive
Steepness of slope/aspect of slope (direction it faces): Pileated foraging & spiral grain
40° NE/N slope in W. end of canyon (15:29) (15:31) very fresh Pileated foraging in
Landslide risk, describe: Yes - little plant cover OG DF snag at 15:23
Density of roads (per sq. mi.): (15:50) me w/ a 32.5" OG DF in W. end
Effects of livestock grazing: Not a lot of ground cover (15:59) Tops & base of 2 tall OG GFs
Evidence of Animal Damage Control (16:06) Tops of tall NET size GF on canyon rim, so side
activities: None seen / OG + m PPs & 2 OG PPs snags (16:09) a male W. Tanager high in an OG PP
Evidence of bait stations for hunting, hunters' camps: None seen hunting in the canyon is likely
Mining Herbicide spraying Gopher trappings/poison Other:
Exotic weeds seen: Orchard grass
Recreational use: This narrow canyon is great exploring & bird watching w/ scenic OG + rock
Describe sale unit overall: The E. end is more open w/ more OG PP & pools in the
stream in one place. Then it narrows into a canyon bounded by big rock outcrops
w/ more & more OG GF & DF the further you go west - very scenic & never logged.
Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area canyon
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland
☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:
☒ public land, agency FS ☐ private land, ownership None
riparian (specify): West Fork of Rattlesnake Creek to NE
area of human habitation None
Species seen adjacent to sale unit:
Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest
holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn
if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy
mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different
areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic
weed locations. Identify camera used. Karen's Canon 12:29 Surv. heading + map
Photo #s & descriptions: 12:30 close up of map (14:17) me hugging a 35" dbh OG live GF
12:42 Northern Flicker foraging & bark scaling in an OG PPs snag Same one as in 14:09
12:43 - overstory PP + DF w/ DF midstory (young & younger - mature DF) (14:23) 3 large OG PPs
12:49 - a shrub-like willow w/ brown woody stems & much sideways branching & rock outcrop
12:53 - me at the base of a 32.6" dbh OG PP (14:25) me in a big catface fire scar in a 36" dbh OG A
12:54 - tops of 3 OG PP snags w/ midstory NET-size DF (14:30) Rock outcrop w/ DF seedlings
12:57 - me hugging a 25.4" DF w/ OG characteristic bark & dead lower limbs (14:32) " "
12:59 & 13:00 - water in pools in the tributary stream (14:33) 2 big OG fir logs - both GF
13:07 - 13:08 - Globe web spider in web (13:10) Top of an OG DF w/ an OG PP - 23.5" dbh but
13:12 - False Solomon's Seal (13:28) wildlife tree sign on a 28" dbh OG PP This tree is only
13:32 - 13:33 - unrinded Penoteman sp. w/ large blossoms, narrow bright green simple leaves has OG characteristic
13:36: 1) top of an OG DF, 2) a large OG GF snag in the rock outcrop = 29.8" dbh Huge base OG
13:37 & 13:38 - a burrow under a big rock big enough for a skunk (13:44) The 29.8" OG GF
13:39 - top of the small canyon's rock formation (13:49) a Gray jay Snag w/ a Wildlife
14:02 - me standing next to an OG DF snag marked to save (14:04) Penoteman sp. & yellow lichen
14:06 - a large OG GF snag (14:09) 1) a large OG PP broken top snag w/ a big burn scar
14:09 2) a large leaning live OG GF w/ OG PPs (14:10) a big OG GF log seen from above
14:13 - large OG fir logs & a live OG DF (14:14) fresh N. Flicker foraging in hollow heartwood of an OG

*Beautiful OG PP groves adjacent to north of unit. Laming grove of 20 PP snags.

Recommendations
for sale unit:

* NCT up to 8 inches dbh!

Leave large trees to
become old growth.

Leave some snags for birds.

Subjective evaluation of area:

Already been heavily logged, and because of that small trees may need to be thinned. It's crazy to see stumps so huge, and with a boulder every 5 feet it must've been a nightmare to log. Nice to hear so many songbirds.

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest:

Average tree size in "dbh": 12-14 inch dbh; mean density ~ 6-8 inch dbh

Examples of large tree diameter: 38 in PP, 32 in PP, 22 in GF

of old growth trees per acre: 6 live PP + 1 live GF; 1 PP + 1 DF snag; 1 PP + 1 GF + 1 DF logs

☒ Previously logged approx. age of trees mature + old growth

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

very heavy - lots of OG stumps w/ skid trails + very few seedlings, too many seedlings in other place

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine ☒ Juniper ☒ Doug Fir ☒ Western Larch ☒ Grand Fir ☒ Lodgepole Pine ☒ Engelman

Spruce ___ Subalpine Fir ___ Yew ☒ Mt. Mahogany ☒ Aspen ___ Willow ___ Alder

Shasta Red Fir ___ Sugar Pine ___ White Pine ___ Incense Cedar ___ other:

Tree seedlings (species, quantity): some dense (planted?) PP along road 480; otherwise PP/DF/GF in openings

Quality and type of canopy closure, %: 35-40% under defoliating, dense, Y GF; 55-60% under maturing, dense, green crown GF.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: OG PP/GF/DF present and seedlings of all species, fire scars, generally west-facing slopes but still mud present.

% of defoliation - species and age of trees affected: 20-40% lower limb loss in dense young thickets, some frass seen and self-thinning. OG has generally green full crowns.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): redtail hawk sighting, bear forage, coyote scat, redbreasted nuthatch calls, chickadee calls, elk scat and tracks, pillated woodpecker forage, medium brown nuthatch sightings, bark scaling, hermit thrush calls, deer tracks, douglas squirrel calls, yellow rumped warbler sighting

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: No running water in unit. Drainage through road 480. Middle Fork of Rattlesnake Creek flows out of unit - headwaters about 1/2 mile south (elk tracks seen in mud). East fork Rattlesnake Creek to east about 1/2 mile; west fork Rattlesnake creek to SW ~ 1 mile.

Riparian buffers? Adjacent steep slopes?

note the headwaters of middle fork Rattlesnake

Unusual plants? rare seen

Plant community types: strawberry, pinegrass, elk sedge

Soil type, quality, compaction

level(s): dark brown loamy w/ duff layer; some light tan ashy; large rocks

Typical plants: unusual, Oregon checker mallowroot, yellow, thinleaf lupine, larkspur, heartleaf, arnica, bed straw, strawberry, Oregon grape, many blue lily, indigo paintbrush, hawkweed, bitterbrush, Phlox, Driedrogs

Steepness of slope/aspect of slope (direction it faces): 14° southeast-facing slope; 12-15° west-facing slope.

Landslide risk, describe: _____

Density of roads (per sq. mi): ~3 mi/sq mi.

Effects of livestock grazing: coupies, worm trails, some overgrazing but not too bad.

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: orchard grass

Recreational use: beer cans

Describe sale unit overall: mostly young to mature mixed conifers with taken old growth. Heavily logged for old growth, some defoliating thickets of young trees. Large boulders everywhere and sign of woodpeckers, songbirds, deer, and elk.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership none

☒ riparian (specify): middle fork Rattlesnake headwaters ~ 1/10 mile to south

area of human habitation none

Species seen adjacent to sale unit: bear poop to north!!

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

B's camera:

1/25 8:03 header

8:22 slashpile very flammable (w) Hannah

(2) 8:35 unidentified flower-yellow/white flower

8:39 Hannah measuring 38 in PP

8:50 Hannah measuring 32 in PP

9:27 bark scaling on 8 PP

9:28 Hannah on OG DF stump

9:32 Hannah on really cool OG DF stump

10:32 adjacent to north - leaning 20 OG PP snags.

10:34 bear poop in adjacent OG PP grove

Recommendations
for sale unit:

DROP No NCT

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-12-19
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Ratonsville
UNIT N2850 E2B 40692d cont
SURVEYOR'S NAME Ben Hannah

Subjective evaluation of area: A lot of wonderful bird calls really nice up on slope & appreciate the OG P&GF a wide plant diversity in the Southern tip of unit forest looks very healthy

Roadless area ☒ Never logged ☐ Plantation ☒ Many old growth logs and snags

☒ Old growth/mature forest: PP & GF

Average tree size in "dbh": 16"

Examples of large tree diameter: 32" PP 30" GF 22.8" PP 32" GF

of old growth trees per acre: Live: 8 PP 4 GF Snags: 16 GF Logs: 6 PP 5 GF

Previously logged approx. age of trees

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 25-30% Mature PP 65-75% dense mixed conifers

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: Lots of OG GF OG PP mixed conifer seedlings

% of defoliation - species and age of trees affected: 10-40% lower limb loss in dense young mixed conifer w/ self thinning

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Tanager pair sighting, Hermit thrush heard, chickadee northern flicker, sup. siskin foraging, elk scat, ~~deer~~ deer foraging, deer sighting, medium size beaver, chipmunk 2. gliding, Turkey Vulture, black backed woodpecker, white breasted nuthatch,

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: None in unit, unit is sloped down

down slope to West is a stream that feeds to East fork Little Snake Creek flood plain & could be affected by logging on the slope

★ Riparian buffers? Adjacent steep slopes?

This unit slopes down to a riparian area.

Unusual plants?

Plant community types: Sagebrush, pine grove, snowberry, elk sedge

Soil type, quality, compaction

level(s): Dark brown & loamy w/ many boulders, leafy layer

Typical plants: Sticky sickle, Rose, pussy toes, Hawk's weed, phlox, bitter brush

Oregon grape, Service berry, Water leaf, Thin leaf lupine, many other lupines, yarrow, Indian Dandelion

Steepness of slope/aspect of slope (direction it faces): 10-18% West facing slope

☒ Landslide risk, describe: minor risk if land falls into creek

Density of roads (per sq. mi): 4.5 miles per sq mi

Effects of livestock grazing: Cowpie, cattle trail

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: 2 hunter camps adjacent to 480 & 28

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: Wood cutting

Describe sale unit overall: Stringer unit following rocky out cropping slope with patchwork

open mixed conifer OG & thickets of younger denser mixed conifer

Soil is healthy from decomposing OG Corp slope humus & been logged

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency F.S. ☒ private land, ownership _____

☒ riparian (specify): E Fork Battle Creek to SW

☒ Area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: Ben's Camera

2:38 Heade 2:40 Cherry (Sp) 2:44 heavy machine tire tracks in soil

2:56 Sapsucker foraging on young PP: 3:01 young tree defoliation 3:02 Wood cutting of PP log 3:05 Ben on rocky outcropping 3:14 Ben w/ 30" GF 3:37 possible flicker & Sapsucker foraging on OG PP snag

3:39 OG PP & OG GP crowns. 3:42 300' PP Snags 3:53 Ben forage on large log

4:34 Woodcutting adjacent to RD 28 looks like clear cut.

Drop

Fossil, OR 97830

SURVEYOR'S NAME Karen / Bea E/N & W

Easly think Saplings & J M PP B F & D F reaching mid story level
 & forming single diaphane tree competition stress to PP would be sufficiently reduced
 & there would be always mature PP over structure
 Roadless area Never logged Plantation Many old growth logs and snags

of old growth trees per acre: $\frac{27069}{168} = 161$

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets). describe:

OGPP stored

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☒ Doug Fir Western Larch ☒ Grand Fir Lodgepole Pine Engelman

Spruce ~~Subalpine Fir~~ Yew X Mt. Mahogany Aspen ~~Willow~~ Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): a lot of tall A: - Suplins cone 10 of seedling

Quality and type of canopy closure, %: 20% 4-M PP 45% 7-126 PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: *looks like dominant but has some DGGF*

% of defoliation - species and age of trees affected: patchy PP mostly by

species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Dark Sealing, Cassin's Vireo, White breasted nuthatch
Harry Woodpecker, Roughwing sparrow, Peewee, Pileated forager, heard probable
N. Pygmy owl, Pileated heard in unit, pileated sighting, red breasted nuthatch,
willowson sapsucker.

terrestrial area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: within Pottle Creek is to SW part
of 2210 & part additional narrow buffer for steep slope

iparian buffers? Adjacent steep slopes?

Unusual plants?

plant community types: snowberry, ~~alg~~ sedge, pine grove

oil type, quality, compaction

vel(s): 0.11 to 0.12

typical plants: Dead bone, Silk, arnica, green rabbit brush, OC, her
leaf, thorned cherry, sweet, grape, sereno cherry, sereno

Steepness of slope/aspect of slope (direction it faces): SW/5 12° @ 97° aspect

Landslide risk, describe: NA

Density of roads (per sq. mi): _____

Effects of livestock grazing: Cow fire

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: _____

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: None seen

Recreational use: _____

Describe sale unit overall: LOS continues throughout sale unit this is OOG

which has abundant OGPP lots of OGPP snags & fewer OGPP logs
& relatively dense understory of YPP & GF & F & very few mature trees other than OG

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland OOG to SW

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership None

☒ riparian (specify): W Fork Battle Creek across 2810 & narrow steep bluff

☐ area of human habitation None

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Karen's Camera 909: Heading 904 Bank grading

Photo #s & descriptions: 911 Mature PP snag 912. OG PP snag 922 OG PP 35.9 Ben

926 Ben 33.7' OGPP 925 Typical view OGPP w/ tall mid story YPP & GF 930 Top OGPP in

view 931 Base of OG 931 fresh Dilated foraging 935 OG GF 21.1" 940 OG 18 39" Ben

w/ white grove in OG count area 941 OG snag in OG count area 943 OG PP snag

952 Ben w/ OG snag & log Mature PD (955x2 photo) Down rock w/ per stem on GP) In all

957 Top of OG PP 958 37.1" OG PP Ben 10:00 Ben 26.2" OG GF

Ben 10:03 2 OGPP snag w bark scaling 10:07 Top of fms 10:08 Ben at base of OG PP snag

1012 OG PP 39' Ben 1012 Top OG PP line 10:15 small Woodpecker foraging 1014 Top PP snag 26.2" Ben

OGPP 10:18 Ben 37.4" OGPP snag 10:20 2 OGPP snag & M PP snag

encroachment
triple size of upstream culvert
to reduce pooling
situate lower.

NO HEAVY EQPT
Leave all conifers under 10" from stream for
bank stabilization

Recommendations
for allotment location:

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE 6-15-19

NTL FOREST MALHEUR

DISTRICT EMIGRANT

Grazing Allotment aspen restoration

Pasture T20S, R32E, Sec 1, 12

Location Coordinates

4 clumps along west fork Rattlesnake Creek

Surveyors Names COOPER

ENCE to EXCLUDE CATTLE

vet conifers under 21" only when in
open place or 50' from aspen.

Don't cut conifers near road which aren't in competition with aspen & alder.

Subjective evaluation of area:

examples of "low it should be" re-joining side channels, the. Small but present
channel, but predominantly, fast moving, no shade, bumpy alder areas, woodpiles in
more harm than conf. encroachment.

Type of Allotment Site:

Stream ☒ Spring ☒ Aspen Stand ☒ Other: ☐

Stream Conditions:

Overall Description: meandering channel, lots of fast moving water, some sand & gravel but more dirt/clay
riparian plants heavily discouraged by ahrs, p

-Channel:

Fine sediment level: Milky-blue

Width vs. depth ratio: not high enough. fast moving.

Bank stability: Low to medium. Cutting in some extreme.

Meander or straight: meander

Size of cobble: small-medium

Large wood: some but sparse

Signs of Livestock damage: Copies

Some trampling of moist areas.

Overgrazing in riparian area leaving

little shading in creek.

Some bare areas on W side under conf.
shade.

Riparian hardwoods: Aspen 2 Alder 1 Red Osier dogwood 2 Willow 3 Rocky Mt. Maple

Cottonwood: ☒ Other: ☐

Riparian Plants: Buttercup, Swamp currant,

Exotic invasive plants: thistle

Impoundments/livestock ponds/weirs: none! possible livestock ponds on W side (dry)

Spring Conditions:

Overall Description:

Trough ☐ Springbox ☐ Source Fenced off to cattle? ☐

Riparian hardwoods: Aspen ☒ Alder ☒ Red Osier dogwood ☒ Willow ☒ Rocky Mt. Maple ☒ all very small
near stream

Cottonwood ☐ Other: ☐

Riparian Plants: ☐

Exotic invasive plants: ☐

Signs of Livestock damage: ☐

Spring flow/Amount of flow:

Trough: Animal escapement device: ☐

Pipe into ground for overflow? ☐

Distance from Spring headwaters: ☐

Extent of fencing around spring: ☐

Aspen Stand Conditions:

of live Aspen: 35+ (50?) # of Aspen snags 10+ # of Aspen Logs

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Describe: Some encroachment, some intermixing, only on edge.

Old growth Large trees near Aspen? (>= 21" dbh) How many? Distance from Aspen? From what direction (N/S/E/W)?

Describe: 40" PP 42" double trunked PP

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Describe: Not fenced? no fences seen - no fences on map

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe:

Many (channels) hedged aspen under 3'. cattle are preventing aspen
& willow from shading & stabilizing stream.

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle scat, Cattle present? Describe: _____

cattle not yet released into this allotment

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: numerous stunted aspen & willow

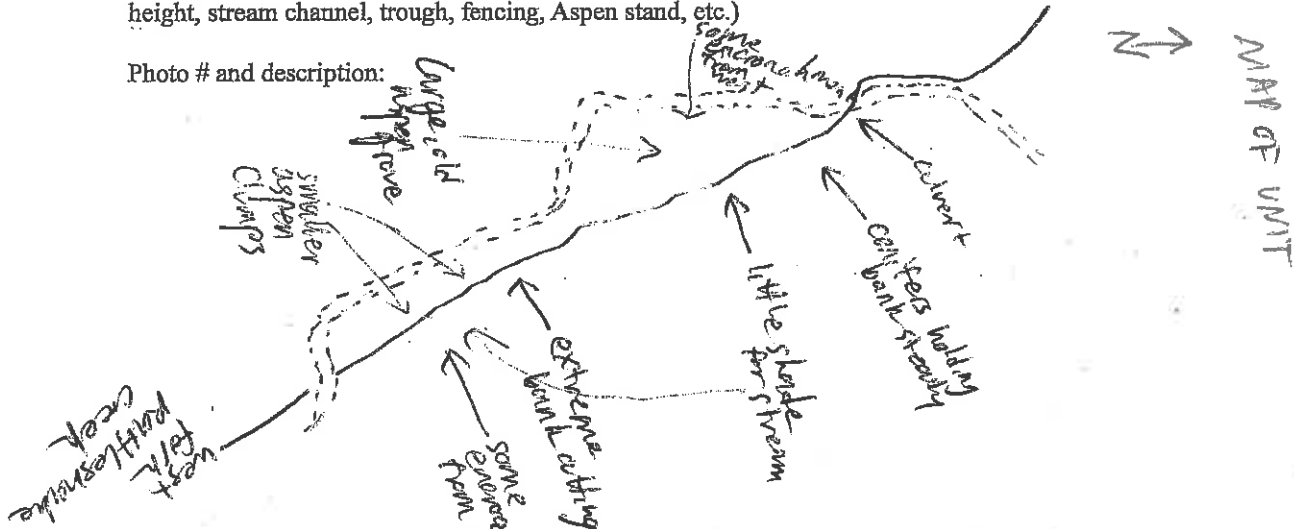
sedge height 3"-12". bare ground in shaded areas

highly impacted stream - ~~not near~~ strong lack of riparian

hummingbirds, woodpeckers seen. Tanagers?

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:



- 6 - aspen grove, no midsize or
- 5 - aspen shoots in aspen grove
- 4 - cutting trailing upstream tributary
- 3 - east of stream is rocky
- 2 - " " " "
- 1 - " " " "
- 0 - willow sprout hedging/hawking
- riparian plants
- long stretch with no shade/no
- 3 - " " " "
- 1 - bank cutting, center holding it
- 5 - aspen sprouts hedged
- 4 - culvert above water level
- 3 - pool on downstream side of culvert
- 2 - showing turbidity
- 1 - muddy debris collected across creek
- 1 - survey heading places where
- 1 - one of only a few places where
- 1 - survey heading
- 1 - Red Sony Steadyshot
- 18 - willow marshy area
- 19 - marshy area w/ aspen logs
- 20 - tadpoles!
- 21 - young, bushy
- 22 - two of very few aspen
- 23 - forage, nest holes in aspen snag cutting area
- 24 - inner crevice in aspen snag 52. hedged aspen
- 25 - lighting scars on aspen snag
- 26 - good side channel
- 27 - the garbage dumping
- 28 - mushrooms on aspen
- 29 - forage holes on aspen snag
- 30 - area of most major overgrowth
- 31 - winter camp signs
- 32 - a few aspen in conif. stand
- 33 - open-15k willow meadow
- 34-37 - trapped ground
- 38 - bank cutting
- 39 - cutting trailing upstream tributary
- 40 - alder shading meandering tributary
- 41 - meadow
- 42 - alder tributary - shady, slow
- 43 - " " " "
- 44 - " " " "
- 45 - " " " "
- 46 - lower aspen area
- 47 - shade on stream
- 48 - extreme
- 51 - bare ground
- 52 - good side channel
- 53 - Young populus
- 54 - Young populus

* neighboring NCT is unnecessary - already thin & spaced

Recommendations
for sale unit: thin up to
11" or 12".
buffer rock formation by 50'
marginal economics for CT.

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-15-2019
NTL FOREST MALHEUR
DISTRICT EMIGRANT
PROJECT RATTLESNAKE
UNIT LOS enhance, T205, R32E, Sec 35 along R6
SURVEYOR'S NAME COOPER + 2810

Subjective evaluation of area: in process of self-thin (from ice?) KAREN
some competition stress on live OG, some nice logs, older struggling mahogany,

Roadless area ☐ Never logged ☐ Plantation ☒ Many old growth logs and snags
☒ Old growth/mature forest: same OG pines & firs scattered throughout
Average tree size in "dbh": 6-8" 31
Examples of large tree diameter: 32" DF, 24" PP, 24" DF, 32" PP, 25.9" DF, 33" double trunked DF
of old growth trees per acre: PP 11, Shag 11, Log 11, DF 11
20 11 live PP 3 PP snag 3 PP log 3 live DF 24" DF 30" PP
Previously logged approx. age of trees 80-150+
Describe marking to cut: already flagged w/ orange tape & NCT sign (neighboring unit)
Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:
skid trails E and W of road
☒ Mixed conifer, specify species and number in descending order of prevalence: 1 ☒ Ponderosa Pine
4 ☒ Juniper 2 ☒ Doug Fir ☐ Western Larch 5 ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman
Spruce ☐ Subalpine Fir ☐ Yew 3 ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder
☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar other:
Tree seedlings (species, quantity): numerous DF, PP many GF seedlings
Quality and type of canopy closure, %: 10-30% some good quality PP canopy/branch
structure in pockets
☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe: OG fir logs & trees.

% of defoliation - species and age of trees affected: Pithy mortality in young PP, lower branch
mortality on some young DFs on shags + logs
Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): elk scat: Pileated forage, firethroat, small warblers + nuthatch
forage, large bittricks, squirrel midden deer scat, Yellow pine chipmunk seen,
Yellow rumped warbler, Junco, redbreasted nuthatch

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: intermittent, somewhat indistinct channel, getting grown over,
small cobble, lacking riparian plants

Riparian buffers? Adjacent steep slopes?

Adjacent rocky area

Unusual plants?

Plant community types: bitterbrush, elk sedge, snowberry, pinegrass

Soil type, quality, compaction

level(s): clayey, loamy in patchy

Typical plants: groundsel, Phlox, agoseris, Avena, death camas, checkermallow, Rosy prissy toes, plantain
Oregon grape, strawberry, lupine, fireweed, Yarrow, chocolate lily, many blue lops, baneberry
other: Larkspur, death camas, mountain blueberry, mountain yellow wood

Steepness of slope/aspect of slope (direction it faces): w part, flat E part, west-southwest
N 6000' elev 5700' elev

Landslide risk, describe:

Density of roads (per sq. mi): 3.5 mi incl. closed

Effects of livestock grazing: Coupiers

Evidence of Animal Damage Control

activities: were seen

Evidence of bait stations for hunting, hunters' camps: none seen

Mining Herbicide spraying ☐ Gopher trappings/poison Other: _____

Exotic weeds seen: none seen

Recreational use: none seen

Recreational use: none seen
Describe sale unit overall: flat, open-ish to spindly in patches, multiple tree species, intermittent streambed, well-distributed bc, very little brush, Highgraded, moderately impacted.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

roadless area(s) ☐ contiguous forest ☐ high gradient forest ☐
☐ wildlife corridor ☒ meadow ☐ grassland ☒ rocky upland

high desert seedlings pine plantation clear cut ☒ other cut: NCT

✓ public land, agency Forest Service private land, ownership

✓ riparian (specify): tributary to rattle snake creek

area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant, & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Unknown flower w/ 4 petals
light blue flower w/ each petal
green dot in center petal
green striped
speckled simple basal
4 stamens
long narrow simple basal
paired leaves halway up
paired stem
leaves rimmed with white
leaves rimmed with green
flowers in clusters coming
off 2" of stalk
off 2"

(Handwritten signature)

1131, 1132

10.28 - Paint brush (outwash)
10.29 - top of OC PP snag
10.33 - Cooper on OC PP loc
0.44 - Pileated forage in fire scarred OC PP snag
46 - more
10.47 - silene molle - yellow
10.51 - OC PP snag canopy w/ live PP canopy
10.54 - 31" OC PP
10.56 - OC PP canopy

PHOTOS: PARENTS CAMERA

R-48 - Survey heading
 R-51 - unknown white-edged
 R-56 - upstream intermittent
 - downstream

8:38 - deep snag
9:00 - recent + old pileated forage
9:02 - Cooper w/ CG DF
9:38 - fresh burrow

9-14 - chocolate lily
9-15 - 00 pp smg by branch
9-16 - smaller woodpecker
9-17 - 00 pp smg by branch

7121 - Cooper on log in old count area
7124 - the 06-PP in count area
7127 - Cooper w 2nd PP
7127 - Cooper w 3rd PP

7-12 - copper w/ DF log
7-17 - cooper w/ DF
7-18 - Cooper w/ DF log
7-19 - Cooper w/ DF log

610 - 2nd floor
650 - 1st floor
850 - 1st floor

life sightings, sensitive plant, & exotic
- Cooper, deer in meadow - rare
- live mt muskox in meadow - rare
- Shags w/ downy fl to west of lake
no mt muskox in meadow - rare

2001 #110.1111(1) 4-5 (P) #110.1111(1)

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle Sgat, Cattle present? Describe: cattle trails paralleling both sides of stream + crossing; cowpies in the water; flattened banks.
 Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: Cows haven't been here yet this summer but are rumored to arrive tomorrow. Thick grass in meadow, tall willows, but aspen sprouts are hedged 6-36."

(pair acting like defending a nest!)

wildlife sign: hairy woodpecker sighting, pileated woodpecker sighting (pair!) going into nest hole!
 red-naped sapsucker sighting, red-tailed hawk sighting, elk tracks

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

Ben's camera:

northern
stand

- ① heading
- ② closed road fresh aspen log
- ③ Hannah w/ sprouts hedged 24-30"
- ④ pool created by aspen rootwad ~~16"~~ 16" deep
- ⑤ vulnerable banks, overhanging
- x4 ⑥ pileated woodpecker
- ⑦ pileated woodpeckers' nest hole in OG aspen
- ⑧ Hannah w/ 32 in PP
- x2 ⑨ red-naped sapsucker in OG snag
- ⑩ sunny aspens in afternoon
- x2 ⑪ ~~near~~ couple in the stream
- ⑫ bright orange fungus on aspen log
- ⑬ sprout hedged at 18"
- ⑭ pools downstream in undefined stream channel/wetlands

southern
stand

- ⑮ typical view - largest aspen w/ 3 young aspen + willows
- ⑯ pileated forage on m 6F snag
- ⑰ bear forage on OG ~~PP~~ stump
- ⑱ aspen died off to ~5 feet w/H
- ⑲ sprout hedged at ~3 feet w/H
- ⑳ sprout hedged at ~30" w/H
- ㉑ mature aspen surrounded by clump of 4 6F
- ㉒ Hannah on cattle trail
- ㉓ cattle trail crosses creek - no banks, just mush
- ㉔ little waterfall, pool, boulder as bank
- ㉕ sprout path (20+) in opening along stream
- ㉖ young PPs shading creek
- ㉗ probable deer stand DIY in firs
- ㉘ B w/ 5 OG aspens (separate stand)

5204
13 INT

Recommendations
for sale unit:

DROP THIS!

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE June 13, 2009

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Section 24 - East of 329, South of 2830

SURVEYOR'S NAME Hannah

Subjective evaluation of area: This forest feels very natural with all ages of trees and many different species. There are so many good hiding places for critters, and pileated woodpeckers love foraging on the snags. The forest service has no business selling off one of the few whole feeling parts of this timber sale.

Readless area ☐ Never logged ☐ Plantation ☒ Many old growth logs and snags

☒ Old growth/mature forest: PP/6F/DF

Average tree size in "dbh": 16 inches dbh

Examples of large tree diameter: 32 in PP, 40 in PP, 33 in DF, 37 in PP, 28 in 6F

of old growth trees per acre: 9 live PP, 8 live 6F, 2 live DF, 2 PPSnags, 6 PP+4 6F logs

☒ Previously logged approx. age of trees all ages, mostly OG

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

lots of stumps, skid trails are mostly re-seeding, but some remain scarred

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine (1)

☒ Juniper (3) ☒ Doug Fir (2) Western Larch ☒ Grand Fir (1) Lodgepole Pine Engleman

Spruce Subalpine Fir Yew ☒ Mt. Mahogany (4) Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 65-70% under OG PP/6F+ young 6F; 70% under dense young 6F

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: OG PP/6F/DF+ interspersed seedlings, area has been affected by fire

% of defoliation - species and age of trees affected: Dense, young firs losing 10-50% of lower limbs, w/ self-thinning. OG PP/6F/DF have full green crowns, some losing 10-30% of lower limbs.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): deer forage, deer beds, hairy woodpecker calls, hermit thrush calls, elk scat, red breasted nuthatch calls, douglas squirrel sighting, chickadee calls, pileated woodpecker forage, male w. tanager sighting, large (1-6 x 6) nest holes, possible black backed woodpecker sighting, northern flicker, small woodpecker forage, bark scaling, small and medium burrows.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters; seasonal runoffs, creeks, rivers, lakes, ponds) describe: none in unit - Conl Creek - 1/2 mile to the south

Riparian buffers? Adjacent steep slopes?

none needed

Unusual plants? none seen

Plant community types: elk sedge, snowberry, pinegrass

Soil type, quality, compaction

level(s): dark brown loam w/ duff layer

Typical plants: dogbane, fireweed, heartleaf amaranth, oregon grape, winterleaf, smoke plume, hawkweed, serviceberry, pussytoes, lomatium, culm, oregon checker mallow, thimble lupine, many blue

Steepness of slope/aspect of slope (direction it faces): 10-12° westfacing slope, generally a mild to moderate slope.

NO Landslide risk, describe: _____

Density of roads (per sq. mi): ~2 3/4 mi/semi.

Effects of livestock grazing: owpies, some overgrazing but it seems to be difficult for them to access (probably due to so much downed wood).

Evidence of Animal Damage Control

activities: rare seen

Evidence of bait stations for hunting, hunters' camps: camp nearby (maybe within unit) off of road 2830 in NE section.

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: orchard grass

Recreational use: beer cans, camping

Describe sale unit overall: variable patchwork of OG mixed conifers, dense young firs, maturing mixed conifers and open areas with boulders or some junipers. Woodpeckers use the many snags as forage and bears forage on the many huge logs.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon ☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS NO private land, ownership _____

riparian (specify): _____

NO area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4X:

① header

② 32 in OG PP

③ pileated forage OG GF snag

④ bear forage OG GF log

⑤ OG PP log

⑥ OG PP snag + live OG PP

⑦ 4 OG PP (40 in in foreground)

⑧ massive GF stump

⑨ 33 in DF in OG count

⑩ pileated forage Y GF

⑪ open OG typical view

⑫ dense thicket self thinning firs

⑬ OG GF on way to becoming snag

⑭ skid trail

⑮ 37 in PP

⑯ flicker forage on m PP snag

⑰ bark scaling/pileated forage Y PPS snag

⑱ self thinning in fir thicket

⑲ skid trail w/ 2 live OG PP, OG PP snag

⑳ campsite in unit on rd 2830

Aspen stand unit to south on 2830 - 6 live mature trees, 2 snags, 2 logs, and 100s of sprouts. Cattle need to be excluded (they currently have open access), they are hedging sprouts from 6" 24" and are leaving coupies in the water. FENCE OFF THE ASPEN! They're also being shaded from most directions. Old growth should be left, but PP/DF/JU seedlings should be thinned up to 6" dbh. Living mature aspen are losing their crowns. Minimal bird activity. A female place to graze due to large amount of water hemlock.

Recommendations

for sale unit:

BUFFER DRAINAGE!
NCT by hand up to 6 inches dbh and leave the wood.
Do not cut snags.

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 13, 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Section 19 - north of rd 334

SURVEYOR'S NAME Hannah

Subjective evaluation of area: This forest has been made to be very inhospitable to birds which is completely unacceptable. It feels sterile here, like it has been groomed into a plantation. Place of death - saw a whole skeleton in the drainage. I hope it's a cow.

___ Roadless area ___ Never logged ___ Plantation NO Many old growth logs and snags

___ Old growth/mature forest:

Average tree size in "dbh": 14-16 inches dbh; mean density = 4-6 inches dbh

Examples of large tree diameter: 25 inch PP, 21 inch DF, 21 inch PP, 30 inch PP (in beauty strip 2830).

of old growth trees per acre: 2 live PP, 2 live DF; 0 snags, 0 logs.

☒ Previously logged approx. age of trees NCT and high-grade

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

plentiful OG MC stumps larger than any living tree.

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine (1)

☒ Juniper (3) ☒ Doug Fir (2) ☐ Western Larch ☒ Grand Fir (4) ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany (5) ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): PP/DF dominant - some thick patches but generally beneath large trees.

Quality and type of canopy closure, %: 15-20% under even-aged, spaced PP/DF; 25-30% under younger, denser PP/DF.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: PP/DF OG/seedlings interspersed, slope faces generally south but there is a seasonal drainage at the base of slope. Area affected by fire.

% of defoliation - species and age of trees affected: 20-60% lower limb loss in uniformly spaced maturing MC. Not much self-thinning or many snags.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.):

chickadee calls, redbreasted nuthatch calls, bear forage, elk or cow skeleton, pileated woodpecker forage, golden mantle ground squirrel sighting, elk scat, deer tracks, douglas ground squirrel calls

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe:

Seasonal drainage (currently dry) as partial southern boundary of unit - medium cobble, suitable culvert under road 2830, channel is defined + aided, meandering with slight bank erosion. Receives partial conifer shading, lacks hardwoods, some medium wood. Large stumps on banks. Flows into dug out cattle pond ~100 yds from rd 2830.

Riparian buffers? Adjacent steep slopes? Coupies in the bed and pools of water?

Buffer southern streambed 50 feet - rd 334 is a better southern boundary of unit.

Unusual plants? none seen

Plant community types: snowberry, elk sedge, pinegrass

Soil type, quality, compaction

level(s): dark brown loam w/ duff layer; ashier in open areas.

Typical plants: rosy pussytoes, phlox, fireweed, oregon grape, ceanothus, currant, heartleaf amica, yarrow, solomon's seal, many blue lilies, hawkweed, thinleaf lupine, mistletoe

-Conifer Encroachment Unit: Some mtn mahogany is being shaded out by conifers, but any cutting should be done by hand in this meadow of canas and chocolate lily. Large trees should be left, while dense juniper could be thinned to 6 inch dbh around mm. Livestock should be excluded from area.

Steepness of slope/aspect of slope (direction it faces): 60° is common, but up to 110° further up the mountain side - generally south facing.

Landslide risk, describe:

Density of roads (per sq. mi): $\sim 3 \text{ mi}/\text{sq. mi.}$

Effects of livestock grazing: coupies trails used by cattle, coupies in streambed and some bank erosion and slight potholing. Area is overgrazed; mtn mahog seedlings hedged - 6."

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other:

Exotic weeds seen: orchard grass

Recreational use:

Describe sale unit overall: Dominated by even-aged, uniform, maturing mixed conifers, with old growth along road 2830. Very little sign of birds foraging or habitation - very few logs and snags. Grasses grow spotty from heavy livestock presence.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS NO private land, ownership

☒ riparian (specify): Cow Creek tributary (Seasonal drainage) to south (part within unit) *

NO area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic

weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

① header

② undercut bank of dry stream

③ general view of streambed

④ pools of standing water

⑤ cow creek skeleton in bed; OG turned stump next to bed

⑥ OG PP stump along bank w/ DF/JU seedlings

⑦ cow pond dug out from stream

⑧ medium wood, conifer shading streambed

⑨ typical view - even aged MC, fairly open

⑩ tall mtn mahogany

⑪ pileated woodpecker forage on MGF snag

⑫ OG PP stump + boulders

⑬ pocket of PP/DF seedlings + DF maturing overhead

⑭ 21 inch DF in OG count

⑮ PP plantation - vibe, even aged, lined up

⑯ 36 inch PP off road 2830 (beauty strip)

⑰ healthy mtn mahogany

⑱ mtn M + conifers (x3)

⑲ OG juniper stump + mm

⑳ mtn M w/ 34 in OG PP within 30 feet

㉑ cluster of OG juniper w/ sapsucker forage (x2)

㉒ mature PP within 30 feet of mtn mahogany

aspen unit:

⑳ water flowing under 2850 in good culvert

㉑ general view of stream, aspen, OGPPs.

㉒ unidentified hot purple flower (x3)

㉓ sprouts (hedged 12-24") (x4)

㉔ mature aspens - 3 live, 1 snag (x2)

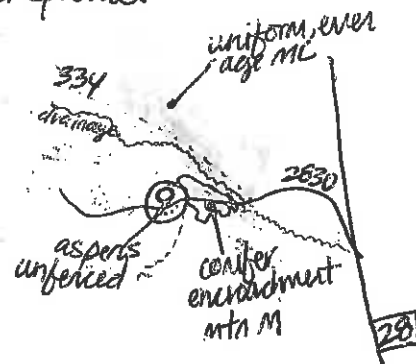
㉕ couple in wetland

㉖ 13 in aspen + 30 in PP

㉗ dense PP/OG/JU seedlings 30ft from aspens

㉘ dense seedlings

㉙ hedged sprouts on south side of 2830 - no sign of any older aspens, just about 20 scattered sprouts.



Recommendations

for sale unit: DROP

Logging in ROG is inappropriate. Enough natural mortality to deal with competition, relatively few impacts from past logging.

Subjective evaluation of area:

hard to get to.

Rocky slopes

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE 6-16-2019

NTL FOREST MALHEUR

DISTRICT EMIGRANT

PROJECT RATTLESNAKE

UNIT Los enhance, T21S R32E sec 13, 24

SURVEYOR'S NAME COOPER

SW of road

INCL. light green to west
& discontinuous LOS red
to south

Roadless area ☐ Never logged ☐ Plantation ☒ Many old growth logs and snags

✓ Old growth/mature forest: numerous large OG PP's w full crowns & great structure. some OG firs w comp. structure

Average tree size in "dbh":

Examples of large tree diameter:

of old growth trees per acre: 32" PP, 21" DF, 48" PP, 32" PP, 29" GF, 44" PP, 49" PP snag

PP = 15 logs 3 snags S. GF line 3 logs 4 snags S

Previously logged approx. age of trees: few stumps. prob highgraded?

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe: patches of low diameter PP thickets, not extensive.

Mixed conifer, specify species and number in descending order of prevalence: 1 ✓ Ponderosa Pine

4 ✓ Juniper 2 ✓ Doug Fir Western Larch 3 ✓ Grand Fir Lodgepole Pine Engleman

Spruce Subalpine Fir Yew ✓ Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): GF & PP seedlings scattered throughout

Quality and type of canopy closure, %: 10-40, natural gaps of low to closure, to OG clumps + mature continuous

✓ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: most OG PP, some firs - ~ 5300 ft.

% of defoliation - species and age of trees affected: some areas of defoliated / dead firs

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): woodpecker forage on logs, elk scat, roost holes in fir snags, burrows, squirrel middens, good deer/elk cover from young tree patches & half-fallen snags, woodpeckers heard

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: drainage headwaters for intermittent stream

Riparian buffers? Adjacent steep slopes?

steep slopes 1/4 to NE & SW

Unusual plants?

Plant community types: snowberry, pinegrass, bitterbrush, elk sedge

Soil type, quality, compaction

level(s): ashy, loamy

Typical plants: arnica, rush, pussytoes, gooseberry, western groundsel, oregon grape, pine drop, phlox, paintbrush, lupine, yarrow, many blue lilies, elderberry

add old growth unit for

live PP: 21

PP snags: 16 PP

logs: 5

Steepness of slope/aspect of slope (direction it faces): Shallow, 0-10° east facing
gentle west facing 0-10°

☒ Landslide risk, describe: Nearby but not in unit STEEP slopes

Density of roads (per sq. mi): 3.5 mi

Effects of livestock grazing: some barren areas, unclear whether they're livestock effects

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: beer can, fire ring at end of
771 road

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: gently sloping top of ridge running NW-SE, slopes predominantly
e facing & w facing. surrounded by rimrock & steep slopes. frequent oak PP w/ snag.
patches of mahogany. adequate downed logs incl. stacked. Good canopy structural branches

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☒ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership _____

☒ riparian (specify): west fork rattlesnake creek, unnamed intermittent stream to SW

☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

9438 - rugged southern slopes
9437 - rimrock
9436 - PP snag 49" great forage & habitat
9435 - mahogany grove
9434 - 2nd OG count area
[much the same except more
snags & mahogany]
9433 looking into neighboring unit to west
9432 " " " " " " " " " " " "
9431 dead / defoliated fir along ridge
9430 - natural openings
9429 - unknown fungus at base of PP snag
9428 - fir crown complexity
9427 - 48" PP
9426 - abundant large logs
9425 - typical western conifer
9423 - woodpecker forage on log
9422 - OG PP w/ tall canopy
101-9421 survey heading
same cybershot

Drop fence. conifer encroachment unit to east. cattle causing more damage than conif. to creek. heavy logging may destroy soil fertility, already impacted.

Recommendations for sale unit: Drop - leave alone to allow natural pine mortality and Fir seedlings to regenerate it to mixed conifer forest.

LEAGUE OF WILDERNESS DEFENDERS BLUE MOUNTAINS BIODIVERSITY PROJECT 27803 Williams Lane Fossil, OR 97830

DATE 6-16-2019 NTL FOREST MALHEUR DISTRICT EMIGRANT PROJECT RATTLESNAKE UNIT Commercial thin BA 20, adjacent to rd. 2810478 SURVEYOR'S NAME Cooper

Subjective evaluation of area: Okay place to be; struggling & boring. Does not want to be PP plantation. Not totally wrecked yet.

T215 R3212E sec 17

Roadless area ☐ Never logged ☒ Plantation Many old growth logs and snags Old growth/mature forest: ~~no OG - trees~~ remnant OG Average tree size in "dbh": 10"-18" very regular DBH - few/no OG or young. Examples of large tree diameter: 40" PP, 24" DF. Few far between # of old growth trees per acre: 3 PP live, 2 snags. This is the only place with more than 1.

Previously logged approx. age of trees 50-200 Describe marking to cut: Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe: even aged plantation. evenly spaced.

Mixed conifer, specify species and number in descending order of prevalence: 1 ✓ Ponderosa Pine ✓ Juniper ✓ Doug Fir Western Larch ✓ Grand Fir Lodgepole Pine Engelman Spruce Subalpine Fir Yew ✓ Mt. Mahogany Aspen Willow Alder Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): same DF seedlings Quality and type of canopy closure, %: poor structure, few/no large/complex tree crowns.

Historically natural mixed-conifer site: old growth mixed-conifer fire scars, north slope, moist area, high elevation, describe: self-restoring to mixed conifer from PP plantation

% of defoliation - species and age of trees affected: Clumps of young-mature PP 100% defoliated

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): deer scat. not many logs or large snags - poor habitat. mostly very poor cover due to high visibility

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: adjacent to E fork rattlesnake creek.

Riparian buffers? Adjacent steep slopes? steep slopes on E edge of unit abutting road

Unusual plants? Plant community types: pinegrass, snowberry, huckleberry

Soil type, quality, compaction level(s): ashy, compacted.

Typical plants: Yarrow, Western Gromwell, Gooseberry, many blue lips, fireweed, oregon grape lupine, chokecherry, soapstone, pinedrop, Rabbit brush, Cranophus, rosy pussytoes

Steepness of slope/aspect of slope (direction it faces): East facing. S-15°

☒ Landslide risk, describe: Some, not much holding the soil except PP to be cut.
Density of roads (per sq. mi): 3 mi
Effects of livestock grazing: a few coupes

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: none seen

Recreational use: none seen

Describe sale unit overall: predominantly young-mature PP evenly spread with no OS or underbrush, scattered OS remnants,

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☒ canyon

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership _____

☒ riparian (specify): E fork also, BLM > 1 mi to south

area of human habitation rattlesnake creek

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Sony Steadyshot

t- 9439: heading

9440: typical view S edge of unit
even age PP

9441: " " "

9442: PP mortality, self thinning

9443: vigorous young DF

9444: same even age & spacing
at ridge top

9445: Cone of DF found with
seedlings

9446 photo showing slope

Recommendations

for sale unit: 150' buffer for
creek NOT up to 6-8"

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE 6/16/19

NTL FOREST Mathews

DISTRICT Knappton

PROJECT Rattlesnake

UNIT CT 50 overlapping Sec 18 Sec 7

SURVEYOR'S NAME

Subjective evaluation of area:

steep slope but variable plan
allow removal of bank stability & stream shade steep slope would
introduce sediments into stream & silt ecological
Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags
Old growth/mature forest: ☐
Average tree size in "dbh":
Examples of large tree diameter: 28.6 PP 20.6 GF
of old growth trees per acre:

Previously logged approx. age of trees

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☒ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 20% OGDF MDF MPP 85% Y/MDF/PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: defoliated by PP

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Solitary vireo, Robins

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Meandering channel w/ good flow and adjacent pools & waterfalls close to headwaters, perennial stream w/ good flow natural conifer shading. Small stable

Riparian buffers? Adjacent steep slopes?

150'

Unusual plants?

Plant community types: Shrubland

Soil type, quality, compaction

level(s): Dark brown loam

Typical plants: Antelope, many Blue hys, fire drops, yarrow

Steepness of slope/aspect of slope (direction it faces): 22° slope

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: _____

Evidence of Animal Damage Control

activities: _____

Evidence of bait stations for hunting, hunters' camps: _____

Mining Herbicide spraying Gopher trappings/poison Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: _____

Surrounding area: contiguous forest high-graded forest never logged area _____ canyon

roadless area(s) _____ wildlife corridor _____ meadow _____ grassland _____ rocky upland _____

high desert seedlings pine plantation clear cut other cut: _____

public land, agency _____ private land, ownership _____

riparian (specify): _____

area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: 1648 heading 1649 Assoc. Box 1653 B-70.66F 165

7 DF (165%) M106 DF Based 732 130233% 13048/2000

$$1.00 \pm 0.01 = 1.01 \pm 0.01$$

new pools

Recommendations

for sale unit: Don't log trees

over 21" don't log on steep slopes
Don't log conifer thickets of stunted
S. Arcon / Bunk

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE 6-16-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Ruckelshaus

UNIT CT 30 NW Arcon Restoration Section 4

SURVEYOR'S NAME Kuren / Ben W6 R049
N of 2810
W6 Ruckelshaus
Sack
Green

Subjective evaluation of area:

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☐ Old growth/mature forest:

Average tree size in "dbh":

Examples of large tree diameter: 26.2" 6F 25.2" 1P 26.3" 6F

of old growth trees per acre:

☐ Previously logged approx. age of trees

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

☐ Mixed conifer, specify species and number in descending order of prevalence: ☐ Ponderosa Pine

☐ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engelman

☐ Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 60% Y-M PP 1V6F 10% Y-M PP 1M6F

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: young pine snags or defoliation in lower crown

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): W. Tanager

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe:

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: Elk seepage Pine grass, manzanita

Soil type, quality, compaction

level(s):

Typical plants: ~~Shasta~~ Red Fir, OLMP, W. Columbine, Huckleberry, Arica mt Berry
service berry Sweet cicely

Steepness of slope/aspect of slope (direction it faces): 20° SE slope

 Landslide risk, describe:

Density of roads (per sq. mi):

Effects of livestock grazing:

Evidence of Animal Damage Control

activities:

Evidence of bait stations for hunting, hunters' camps:

 Mining Herbicide spraying Gopher trappings/poison Other:

Exotic weeds seen:

Recreational use:

Describe sale unit overall:

Surrounding area: contiguous forest high-graded forest never logged area canyon

 roadless area(s) wildlife corridor meadow grassland rocky upland

 high desert seedlings pine plantation clear cut other cut:

 public land, agency private land, ownership

 riparian (specify):

 area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: 1620 Animal In sign 1621 Headway 1626 up stream
1629 down stream tributary needs 50' buffer 1630 Typical view 1632 Skid trail
Coming into tributary 1633 20° slope 1636 Base/top of Aspen crowded by conifers +
near w/ 26.5" GP 1640 stream 1641 Aspen log pool flowers

* aspen recommendations: Drop defoliating conifers into drainage (under 12 inches dbh by hand). Leave large trees. Exclude cattle!

Recommendations

for sale unit:

XOP north of road 943 + buffer south side for slope erosion!

XOP WHOLE UNIT! no need to thin (especially the massive junipers!)

X NOT CUT OLD GROWTH

Subjective evaluation of area: cut first I thought this had never been logged, with continuing south, but northern stretch is incredible! I saw a white-headed woodpecker - cool, knowing they have many nests along west fork Rattlesnake Cr! Roadless area Never logged Plantation Many old-growth logs and snags

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 16, 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT section 17 - W of 478 (northern section of unit)

SURVEYOR'S NAME Hannah

* includes aspen stand unit at northern tip *

✓ Old growth/mature forest: ~~OG~~ mature or cusp of OG - some remaining structure.

Average tree size in "dbh": 14-16 inch dbh; mean density = 8 inches dbh

Examples of large tree diameter: 25 in PP, 30 in GF, 27 in GF, 32 in PP

of old growth trees per acre: 10 live PP, 2 live GF, 1 live GF, 1 live juniper; 5 PP snags, 1 GF snag; 1 PP log, 2 juniper logs.

✓ Previously logged approx. age of trees NOT around OG; OG cut (south of rd 943)

Describe marking to cut: none seen.

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

some stumps & some recovering skid trails

Mixed conifer, specify species and number in descending order of prevalence: ✓ Ponderosa Pine ①

✓ Juniper ② ✓ Doug Fir ② Western Larch ✓ Grand Fir ② Lodgepole Pine Engelman

Spruce Subalpine Fir Yew ✓ Mt. Mahogany ② ✓ Aspen ② Willow ⑤ Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other: cherry ⑤

Tree seedlings (species, quantity): mixed PP/GF/GE, dense in some places open in others

Quality and type of canopy closure, %: 45-50% under even spaced maturing PP; 50-60% under OG to maturing GF.

✓ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: mixed PP/GF/GE/JW/MN OG & seedlings in moist slope with many drainages, previous burn, ~5,200 foot elevation.

% of defoliation - species and age of trees affected: Even aged maturing PP losing 20-80% of lower limbs. OG generally open/green crowns. Young/mature dense trees self-thinning.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): red breasted nuthatch calls, white breasted nuthatch sighting, elk scat, chipmunk sighting, white-headed woodpecker sighting, chickadee calls, male western tanager sighting, hairy woodpecker sighting, red-tailed hawk sighting, elk tracks, bear forage, deer tracks

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe: Stream currently flowing from aspen stand - defined meandering channel w/ small-medium cobble, low sediments, receives nearly full conifer shading, partial aspen shading on willow up the bank. Banks are held by rocks & roots. Some large wood.

Another drainage bed - currently dry, sand lined channel, no cobble partial conifer shading & serviceberry.

Riparian buffers? Adjacent steep slopes? (where the white-headed woodpecker was)

* Buffer all riparian drainages!! Buffer slopes!! *

Unusual plants? mugwort

Plant community types: snowberry, pinegrass, elk sedge, short sagebrush

Soil type, quality, compaction

level(s): lighter brown loam w/ ash layer + duff layer

Typical plants: canas, yarrow, serviceberry, heartleaf amica, sweet cicely, burnitt, mossy pussetoes,

Driedrops waterleaf, silky lupine, ranunculus, ceanothus fireweed, buckwheat, bitterbrush, green rabbitbrush, anoleaf balsamroot

#Aspen stand count & description: # live: 11(5) #snags: 1(1) #logs: 11(2) #sprouts: 1(2)
Aspen is in a concerning state. Mature are defoliating & sprouts don't even exist. They are being shaded out down a
deep draw by mixed conifers of all ages, including significant OG. Younger conifers are defoliating and
could be dropped into the drainage (mean density = 8 inches dbh)
Steepness of slope/aspect of slope (direction it faces): 20-22° NE-facing slope (unbuffered to stream
& aspen!); 16° east-facing slope.
* ✓ Landslide risk, describe: most of unit, particularly on both sides of road 943 *
Density of roads (per sq. mi): ~ 3 1/2 mi/sq. mi. (+ 1/2 mile decommissioned roads)
Effects of livestock grazing: infrequent conifers, ungrazed grasses. perhaps the slope is
too steep for cattle to bother.
Evidence of Animal Damage Control
activities: none seen
Evidence of bait stations for hunting, hunters' camps: none seen

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: tall thistle, orchard grass

Recreational use: beer cans

Describe sale unit overall: Unit lies on generally east & north-facing slopes with many dry
drainages & one flowing stream w/ aspen. Varies between patchwork of mixed conifers of
all ages northward, and more PP dominant high grade as walking south.

Surrounding area: ✓ contiguous forest ✓ high-graded forest _____ never logged area _____ canyon

_____ roadless area(s) _____ wildlife corridor _____ meadow _____ grassland _____ rocky upland

_____ high desert _____ seedlings _____ pine plantation _____ clear cut _____ other cut: _____

✓ public land, agency FS NO private land, ownership

✓ riparian (specify): Main Rattlesnake Creek ~ 1/4 mile to east; West fork Rattlesnake ~ 1/3 mile to west

NO area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest
holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn
if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy
mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different
areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic
weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

① heading

② mugwort & canas in flowing stream

③ cable in defined stream

④ unidentified riparian wildflower (x2)

⑤ stream dries up ~ 100 ft from road - intermitten pool & large wood in bed

⑥ maturing aspen by streambed (shaded by maturing GF in pm)

⑦ aspen sprout ~ 4 feet tall

⑧ aspen snag dangling to life

⑨ 2 OG PFS both within 10 feet of previous aspen (25 in foreground)

⑩ flicker / small woodpecker forage on a mature PP snag

⑪ willow & serviceberry by stream

⑫ 20-22° slope down to stream & aspen (unbuffered)

* ⑬ maturing live aspen experiencing bank erosion/sliding - curved trunk (x2)

⑭ 30 in defoliating GF ~ 30 feet from aspen

⑮ maturing live aspen & 35 inch PP growing 5 feet apart

⑯ aspen sprout hedged at 24 inches

⑰ cherry tree growing under OG PP along bed

⑱ ceanothus serviceberry, cherry understory & OG PP overstory

⑲ slope erosion down to road 943

⑳ tall mt mahoe & young dead juniper - part of 'conifer encroachment' area

㉑ 2 OG junipers in 'conifer encroachment' area

㉒ self-thinning large conifers

㉓ first stump seen (PP)

㉔ young disk PP dominant mixed conifers w/ no sub-thin yet

② pileated forage on OG GF snag in OG count

② first OG (PP) stump seen

② 27 inch GF

③ bear forage under rock

③ bark scaling on maturing PP in snag cluster

③ 32 in PP

③ typical open spaced view (PP)

③ red orange slash star flower hanging downward

on slender, long stems. Leaves like moth wing shape

③ intermitten pool & large wood in bed

③ shaded by maturing GF in pm

③ 25 in foreground

③ forage on a mature PP snag

③ by stream

③ (unbuffered)

③ curved trunk (x2)

③ 30 feet from aspen

③ 35 inch PP growing 5 feet apart

③ hedged at 24 inches

③ along bed

③ OG PP overstory

③ road 943

③ part of 'conifer encroachment' area

③ area

③ large conifers

③ (PP)

③ no sub-thin yet

Recommendations

for sale unit:

DROP BOTH UNITS!

soil is very compacted in LOS unit,
2nd slope of stringer unit is very steep.

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 16, 2019

NTL FOREST Malheur

DISTRICT Brigant

PROJECT Rattlesnake

UNIT LOS section 13 - S of S18, W of 7N

SURVEYOR'S NAME Hannah

*Includes adjacent unit to west
(east of 769) tiny stringer *

Subjective evaluation of area: No need for thinning.

I suspect the clearing of young dense fir in stringer
is related to white-headed woodpecker nests in the area, but there is plenty of open area for them
to forage and slopes and soil do not need to be put in harm's way. Cool to see no grazing sign!

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest: Replacement OG unit on cusp

Average tree size in "dbh": LOS: 18-20 in dbh // stringer: 16 in dbh; mean density = 46 in dbh.

Examples of large tree diameter: 23 in DF, 24 in GF, 22 in PP // 34 in PP

of old growth trees per acre: Very low in both units

☒ Previously logged approx. age of trees all ages, NCT to OG high grade

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

many large stumps, compacted soil barren // dense fir thickets in stringer

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine ⁽¹⁾

stringer ☒ Juniper ⁽⁴⁾ ☒ Doug Fir ⁽²⁾ ___ Western Larch ___ ☒ Grand Fir ⁽¹⁾ ___ Lodgepole Pine ___ Engelman

Spruce ___ Subalpine Fir ___ Yew ^{stringer} ___ Mt. Mahogany ⁽³⁾ ___ Aspen ^{one in stringer} ___ Willow ⁽⁵⁾ ___ Alder

___ Shasta Red Fir ___ Sugar Pine ___ ^{only} White Pine ___ Incense Cedar ___ other: ___

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 35-40% under mature OG cusp open-spaced GF/PP //
45-50% under dense mature GF; 65-70% under young dense GF.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe: PP/GF/DF OG + seedlings interspersed, largely on northern
slopes ~5,400 feet elevation. LOS unit for dominant.

% of defoliation - species and age of trees affected: Generally green crowns, some M snags in LOS //
young dense firs self-thinning w/ mistletoe (?) ~10-40% lower limb loss common in stringer.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): elk scat, male western tanager sighting, pileated woodpecker
forage, small nest holes, dark-eyed junco calls, hermit thrush calls, deer scat, bear forage,
elk tracks, chipmunk sighting, red-breasted nuthatch calls, douglas squirrel calls,
pileated woodpecker sighting, unidentified hawk sighting.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: Separating units is a currently dry intermittent drainage, with
undefined, wide channel, no cobble, receives conifer shading, no riparian hardwoods.

Adjacent intermittent stream to west - currently dry, defined meandering channel, OG stumps on banks,
Riparian buffers? Adjacent steep slopes? Some large wood, no riparian hardwoods, receives partial
young to mature PP/GF shading.

Unusual plants? mored mushroom

Plant community types: pinegrass, snowberry, elk sedge

Soil type, quality, compaction

level(s): dark brown loam w/ duff layer; boulders.

Typical plants: fireweed, silky lupine, rose yucca, toes, hawkweed, dogbane, pinelops, oregon grape,
many blue lips, indian paintbrush

Steepness of slope/aspect of slope (direction it faces): 18° NE facing slope (down to road 771),
10-16° NE facing slope (down to road 518) // *20-25° E facing slope w/ OG stumps
✓ Landslide risk, describe: young dense GF on 20°+ slopes (do not cut!)
Density of roads (per sq. mi): ~ 1/2 mi/sq mi (+ 2 1/4 mi/sq mi decommissioned roads)
Effects of livestock grazing: none seen, likely due to intense topography of slopes.

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: orchard grass

Recreational use: shot up deer cars

Describe sale unit overall: Replacement OG is open, maturing mixed conifers on a small hilltop and draw. The straggler unit is largely on an east slope and most trees are young but with some taken OG PP. Both have been previously logged but livestock don't appear to graze here.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland
☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS NO private land, ownership _____

☒ riparian (specify): intermittent stream adjacent to west

NO area of human habitation

Species seen adjacent to sale unit: hairy woodpecker

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

- ① heading
- ② small nest hole; pileated forage on m GF snag
- ③ typical view - maturing GFs
- ④ skid trail, OG PP stump, barren soil
- ⑤ large logs, self-thinned
- ⑥ 23 in DF
- ⑦ bear forage on m GF log
- ⑧ pileated forage on m GF snag
- ⑨ skid trail, OG fir stump, barren soil
- ⑩ typical view - even aged DF/GF
- ⑪ 24 in GF
- ⑫ little draw w/ undefined drainage channel
- ⑬ rock outcropping in LOS unit border

- ⑭ dense y GF/DF stand
- ⑮ skid trail w/ OG PP live
- ⑯ 34 in PP crown (x2)
- ⑰ OG PP? log decaying + boulders
- ⑱ 20-25° slope w/ dense young GF, OG GF stump (x3) *
- ⑲ 4 orange bark PP
- ⑳ wildlife LOG w/ pileated forage

Big hawk circling
white/grey/brown
spotting underwings
faintly white at tips
Little brown bird w/
beige tummy, black
white wingbar, beige
throat, brown head,
longer elegant tail
seen in dry draw

live PPM 111-111

Shrub PPM 111

logs PPM 112 6F1

Recommendations
for sale unit: DRP* / Dog

which is not subject
monthly RHEA buffer

**LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT**

27803 Williams Lane
Fossil, OR 97830

DATE 6/14/19
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT DOG Marked as LOS Sec 18 S06 24

SURVEYOR'S NAME Karen, Apr 18 2019

Subjective evaluation of area: This section of Vash Rattlesnake Creek would be
laterally shaded by N-Os considering the north slope. Maher no sense to log on steep slopes
above major creek in good condition. It would detract from scenic values
* Hazard tree on this unit to 2810

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: High OG count in Wildcat part of Unit however hazard tree reduction red
Average tree size in "dbh": Variable Count

Examples of large tree diameter: 21.2 OG DP 22" DP 21.5 OG GF 28.1 OG DP

of old growth trees per acre: 14 DP Log 7 PP 6 GF Snags 4 PP

Previously logged approx. age of trees UCTed on East and Hazard tree logging unit to 2810

Describe marking to cut: None

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:
Already UCTed

Mixed conifer, specify species and number in descending order of prevalence: X Ponderosa Pine

Juniper X Doug Fir Western Larch X Grand Fir Lodgepole Pine Engleman

Spruce Subalpine Fir Yew Mt. Mahogany Aspen X Willow X Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): Mostly GF some DF

Quality and type of canopy closure, %: 15% to 40% mature GF 70% 9-11 GF PP

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe: Mostly OG PP w/ some DF & GF over 21'
5000' + elevation

% of defoliation - species and age of trees affected: Self thinning X GF

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): fresh Pileated foraging in Y GF snag; possible w/ Loran
Warbler seen possible Cordilleran flycatcher, desert scot, N. Phoebe
foraging, W. Tanager head, Brown Creeper, Cassin's Vireo

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: Cow person ID, Sticky Lament golden and
clean water with cloudy pool 22" gravel bar meadowy slight, little bit of
Algae, tall buttercup

Riparian buffers? Adjacent steep slopes?

Neck 150' buffer on each side which would encompass most

Unusual plants? Thin flower heads white petals conspicuous calyx yellow/green center of flower
Plant community types: cedr ridge, Pine grass

Soil type, quality, compaction

level(s): Thin buff Dark Brown loam

Typical plants: Wild rose, Azalea, Elderberry, Pine drop, Shuman seed

3-4 ft
young flower
white petals
yellow center
w/ red
calyx

Unit 2 and plant: division unit
stem is hollow near base in red soil

Steepness of slope/aspect of slope (direction it faces): Very Steep in S^W part of unit

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: Cow pie

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: _____

Mining _____ Herbicide spraying _____ Gopher trappings/poison _____ Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: Amundt-Gopp structure some OGGF/DF adjacent

Beautiful stretch W fork Rattlesnake Creek whole sale unit should be
protected DOG R HCA Rattlesnake unit

Surrounding area: ☒ contiguous forest ☒ high-graded forest _____ never logged area _____ canyon

_____ roadless area(s) _____ wildlife corridor _____ meadow _____ grassland _____ rocky upland

_____ high desert _____ seedlings _____ pine plantation _____ clear cut _____ other cut: _____

☒ public land, agency FS _____ private land, ownership None

☒ riparian (specify): W F Rattle snake boundary unit

_____ area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: 1076 Heading 1077 306 PP Snags & mature PP Snags

1045 Grove of OG PP + Snags 1052 Looking up stream next to

small cobble wide channel w/ ripples & pool 1054 on ID riparian plane

11:00 on ID riparian plant 11:01 base of stream 11:04 large wood gravel bar 11:06 log

from log OGGF 11:07 Red 3/4 Wood forest canopy shading 11:10 Alder 11:11 Natural

Conifer shading 11:11 elderberry (11:13) fish N. basket foraging snag/long 11:16 OG GF snag OG PP

on opposite side of creek 11:18 Ben large OGGF log 11:21 P. leucos forage 11:21 close up forage

11:22 fire scar 11:24 Ben 27.5" PP 11:25 Red oak dogwood / Alder 11:25 Top of Alder

11:27 Red Osier dogwood over creek 11:27 leaves stone Red Osier dogwood

OGGPP log OGGF OGGF 11:24 B 306 PP log OGGF M PP 11:30: OG PP log forming meander

11:31 underwater plants 11:51 Scenic view W F Rattlesnake OG PP log Red Osier dogwood

11:56 Ben OG PP 11:57 V. fischer foraging on OGGP 11:58 Alder cover 12:01

white water around boulders 12:02 Ben Boulder log 12:03 Illegal firewood cutting

12:04 Top OG DF snag 12:05 Waterfall & big pool 12:05 meander from pool + Alder 12:06 meander among

boulder 12:10 View of Red Osier dogwood covering creek 12:23 - 12:24 top of flat boulder

more than 1" soil more many blue lily, Aster flower, etc

alleged conifer encroachment unit

Recommendations

for sale unit:

*NCT around mountain
mahogany up to 12 inches
Leave large trees > 21 inch dbh.
Remove dead limbs from mtn mahog.

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 12, 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Section 5 - W of 28, N of 480

SURVEYOR'S NAME Ben + Hannah

Subjective evaluation of area: what is the conifers encroaching on? lupines? boulders?
OR I see the point - some mountain mahogany are dying in there, but so are conifers.
What if instead of cutting down conifers to protect the mtn mahogany, cattle were excluded
from the area to protect the abundant seedlings?

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest:

Average tree size in "dbh": 12-14 inch dbh, mean density = 8 inch dbh

Examples of large tree diameter: 33 in PP

of old growth trees per acre: 8 live PP + 2 live GF; 0 snags, 3 PP logs.

☒ Previously logged approx. age of trees 06

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): MM every couple feet - generally hidden at 6" some PP/GF in openings.

Quality and type of canopy closure, %: 30-35% under dense, everaged GF; 20% under open maturing PP.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: 06 GF/PP + seedlings.

% of defoliation - species and age of trees affected: 10-50% lower limb loss in dense young conifers.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): douglas squirrel sighting, hawk scolding, deer scat, pileated woodpecker forage, turkeys, elk tracks, northern flicker (?) forage, nest holes in snags, hermit thrush calls, chickadee calls, chipmunk sighting, bear forage

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: east fork Rattlesnake creek adjacent to south.

Riparian buffers? Adjacent steep slopes?

Unusual plants? CAMUS

Plant community types: snowberry, elk sedge, sagebrush, pinegrass

Soil type, quality, compaction

level(s): dry, light tan and ashy; large rocks

Typical plants: Oregon grape, dogbane, many blue lips, hawkweed, waterleaf, 1084 pussytoes, senecio, arnica, yarrow, bitterbrush, phlox, graceful cinquefoil, indian paintbrush.

Steepness of slope/aspect of slope (direction it faces): moderate south-facing

Landslide risk, describe: ---

Density of roads (per sq. mi): ---

Effects of livestock grazing: conifers, hedged mountain mahogany sprouts.

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: hunt camp in southeast corner of unit

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: ---

Exotic weeds seen: orchard grass

Recreational use: camps, beer cans

Describe sale unit overall: Some old growth structure remaining, with semi-dense young mixed conifers shading mtn mahogany. It has been logged before. Firs and PP still maturing with balance of juniper + mtn mahogany. Good woodpecker foraging due to snags.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: ---

☒ public land, agency FS NO private land, ownership ---

☒ riparian (specify): east fork rattlesnake creek to south

NO area of human habitation

Species seen adjacent to sale unit: ---

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn of fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Ben's camera:

7:59 Hannah measuring 33 in PP w/ rock outcropping

7:59 Header

8:01 mt mahogany, OG PP, 3 young 6F nearby

8:03 3 OG PP stumps + 2 mature PP stumps

8:04 Hannah w/ OG PP + rock outcropping

8:12 more open area w/ OG PP stumps, very few seedlings

8:15 Hannah w/ fire scarred OG snag

8:16 mt Mahog w/ 6 y PP snags

8:19 defoliating mm w/ defoliating PP

8:20 healthier mm w/ OG PP in background

8:23 mm snags

8:24 mm healthy!

8:29 mm w/ PP logs, 2 live maturing PPs

8:31 mm seedling w/ couple

or, drop; cannot enhance LOS characteristics w/ cutting

Recommendations

for sale unit: Leave all

trees >21", Leave all fir +
Juniper, drop area of healthy
undergrowth, no yarding or
pulling in rocky openings

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-21-2019

NTL FOREST MALHEUR

DISTRICT EMIGRANT

PROJECT RATTLESNAKE

UNIT LOS enhance, T21S R32W E,

SURVEYOR'S NAME Cooper Sec 14,

adjacent to Rd
2815700

Plant fir Subjective evaluation of area: hard to summarize - variable -
beetle areas, shocking. pleasant surprises in
northern portion. Parts on N edge feel sacred.

Roadless area Never logged Plantation Many old growth logs and snags

✓ Old growth/mature forest: remnant OG PP, few far between tho

Average tree size in "dbh": 12"

Examples of large tree diameter: 34" PP, 34" PP, 28" PP, 28" GF, 32" PP, 19" Juniper 28" Juniper 24"

of old growth trees per acre: estimate, 4 PP live, 1 Juniper, 1 GF.

1 snag 2 logs.

Previously logged approx. age of trees

Describe marking to cut: no he seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets) describe:

regen PP is succumbing to beetle kill

Mixed conifer, specify species and number in descending order of prevalence: 1 ✓ Ponderosa Pine

2 ✓ Juniper 4 ✓ Doug Fir Western Larch 3 ✓ Grand Fir Lodgepole Pine Engelman

Spruce Subalpine Fir Yew ✓ Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): DF seedlings vigorous.

Quality and type of canopy closure, %: 50% in dense Y. PP, to 10% 20%

in average stand of mortality & other species

✓ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: Firs of all ages doing well, a few

OG firs present.

% of defoliation - species and age of trees affected: Beetle kill? Lots of Y-M PP mortality

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): Elk scat, deer scat, burrows, beetle kill piles,

rocky areas, elk beds, some areas of excellent cover,

- Defecit of OG snags.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe: ~~the~~ ~~above~~ Cow Creek 1/4 NW.

E. cow creek headwaters 1/2 to SW.

Riparian buffers? Adjacent steep slopes?

steep slopes to NE to cow creek.

Unusual plants? unusually vigorous brush/understory, fall chokecherries

Plant community types: snarberry, Sagebrush, bitterbrush, fescue

Soil type, quality, compaction

level(s): ~~rocky~~ to clayey to loamy.

Typical plants: Oregon grape, Yarrow, ceanothus, Gooseberry, Oregon checkermallow

rose, rosy physalis, Geranium, Saskatoon, onion, chokecherry, paintbrush, arnica

Steepness of slope/aspect of slope (direction it faces): B-15° E facing

✓Landslide risk, describe: minor - adjacent rocky openings may be unstable
Density of roads (per sq. mi): 2-5 mi (open) 3.5 mi (excl. closed)
Effects of livestock grazing: none seen

Evidence of Animal Damage Control activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: ☐
Exotic weeds seen: bill thistle

Recreational use: none
Describe sale unit overall: mostly PP w/ some firs + mahogany, Juniper well established along opening edges. Mosaic of forested + open. Many areas of severe weather kill. Some vigorous undergrowth, deficit of large snags, generally
Surrounding area: ☒ contiguous forest ☒ high graded forest ☐ never logged area ☒ canyon very dry
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland very dry
☐ high desert ☐ seedlings ☒ pine plantation ☐ clear cut ☐ other cut: none
☒ public land, agency FS, BLM ☒ private land, ownership 1 mi to E E E
☒ riparian (specify): Cow Creek mainstem 1/4 W, E cow creek headwaters 1/2 mi SW
☐ area of human habitation

Species seen adjacent to sale unit: none

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

2283 - happy 6f
2281, 82 - unknown 1224 under
2280 - + riparian view showing slope
2279 - healthy M 6f
2278 - unknown fern
2277 - solid mat of anemone
2274 - 15' - beetle kill bar
2273 - beetle kill canopy
2272 - ornith. barometer
2271 - adjacent rocky openings
2270 - vigorous 6f
2268 - fallen beetle kill? Pines 2287 - fir, snowberry, cholla
2266 - view of SE corner
2265 - healthy
2284 - fall cholla domes
2285 - beetle kill
2286 - chipmunk
2287 - fir, snowberry, cholla
2288 - wiggle wiggle pop
2289 - large forage / habitat snag
2290 - trio of OG - Juniper

Recommendations

for sale unit:

Not up to 11" don't
cut on steep slopes or on
hilltop

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE

6-21-19

NTL FOREST

Malheur

DISTRICT

Emigrant

PROJECT

Rattle Snake

UNIT

Sec 14 N of 2815 711

SURVEYOR'S NAME

Ph

w of

Subjective evaluation of area:

Not that far off

Not exactly a pine plantation but

E of 2815 711
2815 711
Los unit

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh": 9-12"

Examples of large tree diameter: 28.106 PP 21.206 PP

of old growth trees per acre: few

Previously logged approx. age of trees 06/M/Y High grade

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

High grade

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): many PP some Juniper

Quality and type of canopy closure, %: 65% M-maturing, PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: 50-70% 100% in some areas

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Elk scat, bear foraging medium burrows

chipmunk nest hole, chipmunk couple, chipmunk sighting, Western Tanager sighting

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Filler in sand dry creek bed adjacent to E end of unit

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: Sagebrush, snowberry, Elk edge

Soil type, quality, compaction

level(s): Thick duff brown loam clay base

Typical plants: Wild onion, currant, witchweed, yarrow, romneya, will, rose, thin leaf lupine, spring cinquefoil, hawk weed, Oregon grape, green rabbit ear

Steepness of slope/aspect of slope (direction it faces): 18° S

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: conifers

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: mostly dense even aged mature PP w/ scattering of Juniper & Mt Mahogany up slope. Area was high graded good land habitat some steeper slopes

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership none

riparian (specify): _____

area of human habitation none

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Penin Camera

Photo #s & descriptions: 476

474 Heading 475 UNID'd plant 477 06 PP Stump 478 Bear foraging
479 06 11 Stump log 480 Typical view SE part of unit even aged mature PP 60-80% lower limb loss 482 UNID'd plant 483 Scenic view at top of hill in N. central part of unit 485 Mt Mahogany 486-7 06 Stump w/ multiple med size burrows
488-9 28.1 06 PP Base/crown 490 06 PP Smoky Woodpecker foraging 491 Woodpecker nest hole in PP snag 492 female hairy woodpecker 493 fire scar in 06 PP snag

Recommendations

for sale unit:

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6/19/14

NTL FOREST Maheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT LOS in Quad 18 south of road 507

SURVEYOR'S NAME ~~see~~

Some thinning ok to
allow older trees more
moisture b/c of this area's
dryness

Subjective evaluation of area: fun to travel through! lots of large juniper & dam
but the presence of damage from cattle was sad to see. I would have also
liked to have heard & seen more birds

☐ Readless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: many ~~PP~~ PP & Juniper & some OG, but also many young

Average tree size in "dbh": 12-14" mature PP & some seedling

Examples of large tree diameter: 38" Juniper, 24" PP, 34" PP, 26" PP

of old growth trees per acre: 11 PP, 2 PP logs (count in northern sector), fewer
trees in southern sector, but more OG logs & snags (still not many though)

☒ Previously logged approx. age of trees OG to young w/ little middle ground

Describe marking to cut: none

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

OG PP ~~logs~~ primarily in southern sector & some non commercial thinning

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine or

☒ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☒ Engleman eastern

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☒ Alder border

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): some PP but not overstocked, some Juniper

Quality and type of canopy closure, %: 50% mostly mature PP & Juniper, some OG PP
w/ some variation in height, mostly the same throughout

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: no evidence of this being mixed conifer, no
living or dead firs.

% of defoliation - species and age of trees affected: none seen

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): chipmunk, elk track, elk scat, sap sucker

forage on mature juniper, bear scat, bear forage on OG PP log, deer scat
pitted forage on PP log

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: none east (downhill) of unit is a very

small, slow moving, turbid stream looking in shade & down
good, very soft banks due to overgrazing, generally unhealthy
looking

Riparian buffers? Adjacent steep slopes?

Unusual plants? none

Plant community types: snowberry, elk sedge, bitter brush, big sage brush

Soil type, quality, compaction

level(s): compacted ashy, dry soil

Typical plants: Oregon grape, chuckwallow root, dogs bone, false SS, wild rose
gooseberry, varrow, cinquefoil, service berry, arrowleaf balsam root, lupine

Steepness of slope/aspect of slope (direction it faces): 18° east facing, sometimes 25°, curving gradually to ESE & 18°

Landslide risk, describe: none

Density of roads (per sq. mi): 1 mile open, 1.5 decommissioned

Effects of livestock grazing: clearly defined cow trails, some cow pies, bare spots & soil compaction

Evidence of Animal Damage Control

activities: none

Evidence of bait stations for hunting, hunters' camps: none

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: bull thistle

Recreational use: 1 bear can

Describe sale unit overall: young & mature PP & Juniper dominant w/ few snags & logs, dry & compacted soils from overgrazing. seemingly on its way to regaining the OG PP which has been cut & also creating more understructure

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon & habitat

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☒ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency ☐ private land, ownership _____

☒ riparian (specify): creek east of unit

☐ area of human habitation _____

Species seen adjacent to sale unit: robin, ground squirrel, turkey vulture

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

72 - Header

73 - rocky east facing slope w/ large juniper

74 - idam w/ 38" Juniper

75. typical view of mature junipers & rocky topography in northern sector

76. sap sucker forage on juniper

77. bear scat

78. adam w/ 34" PP

79. OG PP log

80. typical view showing an OG PP, mature, young, & seedling

81. young juniper, & an absence of snags & logs

82. adam on OG PP log

83. one of very few OG PP snags showing extensive foraging

84. closest of woodpecker forage on OG PP snag

85. meadow west of unit

86. bear forage on OG PP log

87. 26" PP split trunk w/ half missing

PP
+ + + + +
S
L II

987. pillated forage on PP log

988. 3 OG PP stumps

989. barren soil due to overgrazing



robin size, maybe smaller

quickly rising/falling whistle; three seconds long

④ It was really hard to determine the boundaries of the Easternmost LOS unit but it appeared to be a never logged mosaic of OG & m PP w/ healthy Mt. Mahogany & Bittercherry - fairly open.

Recommendations

for sale unit: Could NOT &

thin up to 12" dbh max.

or DROP - already self

thinning - small unit, not

much economic value

Subjective evaluation of area: Low # of large old growth

apparently due to past high grading, w/ high # of younger mature P. pines -

was this planted?

Roadless area

Never logged

Plantation

Many old growth logs and snags

part to Soldier #9

☒ Old growth/mature forest:

Average tree size in "dbh": about 11.5" dbh, but most density = loss 25" GF,

Examples of large tree diameter: 30.3" PP, 34.7" PP, 36.2" PP, 36.3" PP, 40.2" PP, 39.2" PP, 40.3" PP

of old growth trees per acre: Easternmost sale unit: 9 OG live PPs, 0 OG snags, & 4 OG PP logs

☒ Previously logged approx. age of trees

large OG PP stumps from past high grading

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

cut OG logs left, large OG PP stumps, looks planted - even age younger mature PPs

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☐ Juniper ☐ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): PP, GF, & DF on SE slope

Quality and type of canopy closure, %: variable but mostly very open & park-like

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: Looks historically Ponderosa pine dominant

Hardly any Grand fir

% of defoliation - species and age of trees affected: younger P. pine mortality, self-thinning

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): elk scat, Juncos, Hermit Thrush, Carpenter ants,

a possible Cassin's finch heard, Chipping sparrow, Swallowtail butterflies,
Northern Flicker foraging

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: None

Riparian buffers? Adjacent steep slopes?

N/A

Unusual plants? lucky cap mushrooms

Plant community types: snowberry/leek sedge, some sagebrush

Soil type, quality, compaction

level(s): clay

Typical plants: Larkspur, Groundsel sp., Chokeberry, Agoseris sp., Yarrow, Blackberry,
Manna Blue Vines, Waterleaf, Chocolate Vile, Death Ranunculus, Indian Paintbrush

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 19th, 2019

DROP IT.

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake T213 R31.5E

UNIT 2 LOS units NW of rd 598, N

SURVEYOR'S NAME Jean C. of 2820,

sections

8 & 5

adjacent in

part to Soldier

#9

Oregon checker mallow root
nearby P. w. or Sunflower, Sweet Birch

Steepness of slope/aspect of slope (direction it faces): ridge top w/ mild SE slope

Landslide risk, describe: N/A

Density of roads (per sq. mi):

Effects of livestock grazing: cow pies

Evidence of Animal Damage Control activities:

Evidence of bait stations for hunting, hunters' camps:

Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: ☐

Exotic weeds seen: None seen

Recreational use:

Describe sale unit overall: The Easternmost sale unit is highgraded LOS w/ consequently low #s of live OG PP (about 7-9 per acre or less), low #s of OG PP snags (only 3 seen) & mostly cut & left OG logs, but some big remaining OG PP's

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☒ grassland ☒ rocky upland & rest = mostly younger
☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: None
☒ public land, agency FS ☐ private land, ownership None Mature PP's averaging 212" dbh
☐ riparian (specify):
☐ area of human habitation None

Species seen adjacent to sale unit: a nearby elk trail

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Paron's Canon 14:24 Survey heading w/ map

Photo #s & descriptions: 14:32 - me next to a 30.3" dbh OG PP w/ side trunk

14:36 - me sitting on a large OG PP log (14:40) me hugging a 34.7" dbh OG PP

14:44 - a big OG PP stump w/ 13" long clipboard for scale

14:49 - a cut OG PP log w/ OG PP stump (14:51) Typical view w/ 2 OG PP stumps & mostly even-age younger mature PP's

14:56 - me hugging a 36.3" dbh OG PP (15:06) 2 majestic large old Ponderosa pines

15:08 - me sitting next to the base of a 39.2" dbh OG PP (on right in photo #15:06)

15:17 - me hugging the 40.7" dbh OG PP (on left in #15:06) (15:35) Indian paintbrush

15:22 - full green crown of a 25" dbh OG GF

15:30 & 15:31 - another big OG PP log: 1) length, 2) me sitting on it

15:36 - a huge OG PP snag w/ a huge OG live PP (15:37) another OG PP snag

15:40 Rocky upland w/ Bittercherry (15:43) Flowers

No photos - too hard to determine location even w/ GPS,

16:02 - big slash pile in Soldier unit 7 (adjacent)

UG 11 Canon: OG PP live: 3, 2, 1
OG PP snags:
OG PP logs: 3, 1

⑩ Much better plant diversity than in heavily logged stands.

⑪ This should be a Dedicated Old Growth stand.

⑫ Leave all mature trees >9-10" dbh as they are needed for forest structural integrity & future LOS development

*) DROP Recommendations

LEAGUE OF WILDERNESS

DATE June 19th, 2019

for sale unit: Very high quality

DEFENDERS

NTL FOREST Malheur

old growth Ponderosa pine

BLUE MOUNTAINS

DISTRICT Emigrant

habitat - although low on snags

BIODIVERSITY PROJECT

PROJECT Rattlesnake

& logs now, they will be recruited.

27803 Williams Lane

UNIT LOS, sec. 21, R32E, T21S, E of rd

Fossil, OR 97830

SURVEYOR'S NAME Karen C. 2820-50

Subjective evaluation of area: This LOS stand is in better shape than most SE of Soldier Creek in the sale area - healthier OG P. pines, more variable density w/ openings, fewer thickets, fewer snags but still some. This really only needs minor netting, including some juniper.

Roadless area ☒ Never logged? ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: Very high line OG const w/ normal dry site lower OG snags

Average tree size in "dbh": variable - most density < 10" dbh 31.3" PP, 32.2" PP & log #s

Examples of large tree diameter: 29" PP, 23" PP, 25" PP, 30.6" PP, 29.1" PP, 36.7" PP, 32.7" PP, 33.2"

of old growth trees per acre: 42 line OG PPs, 2 OG PP snags, & 1 OG PP log (in a rectangle next to East boundary in NE corner.)

Previously logged approx. age of trees very little signal of logging - does not look commercially logged.

Describe marking to cut: None

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe: only a few big PP stumps, 1 skid trail

Mixed conifer, specify species and number in descending order of prevalence: 2 ☒ Ponderosa Pine

2 ☒ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): patches of PP seedlings in some openings, also some juniper

Quality and type of canopy closure, %: about 57% under 3 OG & 2 m PPs

about 40-45% under 2 OG PPs & 2 m PPs

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: Looks historically Ponderosa pine dominant, further south in sale area on W. facing slope w/ no creek immediately below

% of defoliation - species and age of trees affected: some defoliation of mid-level limbs on OG PPs though upper crowns appear healthy; self-thinning of some net-size y trees

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging, nesting, roosts, dens, burrows, beds, hives, etc.): Western Tanager heard, elk scat, rabbit scat, Juncos, a hairy woodpecker heard, songbird w/ a fast warbling song, Ravens, fresh Pileated foraging.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: None

10:19-10:20
Unided plants, cont. Unided woody shrub w/ gray bark, w/ fuzzy simple leaves & stems, leaves & stems, leaves & stems only at tips
Riparian buffers? Adjacent steep slopes? N/A. smaller basal leaves, single stem - about 10" tall
10:00 photos - Arrowleaf groundsel? (long large dark green narrow simple opposite leaves - does directly straight)

Unusual plants? Unided Penstemon - 9:52-9:54 photos - deep blue to pink blossoms

Plant community types: Snowberry/Elk sedge w/ some Bitterbrush & Sagebrush near the road, also Pinegrass

Soil type, quality, compaction more typical plants: Water Hemlock

level(s): Light brown ash layer on clay

Typical plants: OR Cheekmallowroot, OR grape, Brewweed, Indian Paintbrush, Arnica, possible Arrowleaf groundsel. This local Indian. Maroon. Linaria. Salvia. Coriaria.

06 PPSnaps-21
06 PPSnaps-191
06 PPSnaps-191

12:00 - Wild onion sp.

12:03 (2) limited white gilled mushroom w/ smooth convex cap, no annulus ring or veil,
12:07 (2) thick stalk, creamy white to tan, white gills, sometimes w/ center cracks in cap
Steepness of slope/aspect of slope (direction it faces): West aspect, about 16° on upper slope, & about 17° on lower slope - see photo 12:18

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: some cow pies, otherwise good

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: None seen

Recreational use: pleasant place to wander

Describe sale unit overall: an 06/mature P. pine stand on a West facing slope w/ abundant live 06 PPs & some 06 PPSnaps & logs, w/ Mt. Mahogany (limited extent) & some young juniper & diverse plants. Not clear that it's ever been logged.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☒ grassland ☐ rocky upland

to N. → ☒ high desert uphills seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership None

☒ riparian (specify): Soldier Creek to North

area of human habitation None

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: Karen's Canon 9:47 - 2 views of survey heading & map

2) elk seat in Pinegrass (10:03) 3 views of different live Mt. Mahogany along North

06 count
10:07 - typical view - already variable density with boundary of sale unit
openings w/ small tree density self-thinning (9:52-9:54) limited penstemon
10:09 - Top(s) of a fork topped 06 PPSnap (10:19-10:20) limited woody shrub w/ fuzzy leaves & stems
10:24: 1) 4 06 PPs w/ full green crowns, 2) 2 06 PPs w/ full green upper crowns & an 06 PP
10:30 - 2 more 06 PPs w/ full green upper crowns (10:40) me at the base of a 30.6" 06 PP
10:35 - a chokecherry small tree (10:46) me sitting at the base of a 29.1" dbh 06 PP
10:49 - me at the base of a 36.7" dbh 06 PP (10:57) big 06 PP w/ 3 big forking trunks at mid-story
11:01 - me at the base of the same 32.7" 06 PP as in 10:57. = 32.7" dbh
11:05 - 2 views of a big 06 PP log in the 06 count (11:08) lemonweed in bloom
11:24 - a fork topped 06 PPSnap (11:26) Currant growing out of the top of a rock outcrop
11:30 - 2 more 06 PP logs (11:28) 37
11:31: 1) another 06 PP log & 2) fresh P. leucogaster woodpecker foraging in a down log
11:36: 1) full green crowns of 06 + m PPs, 2) full green crowns of m + 06 PPs over healthy PP saplings
11:37: 1) ~~full green crowns~~ top & 2) base of a large fork topped 06 PP - 33.2" dbh
11:45 - me at the base of the 33.2" 06 PP in 11:37 (11:54) me at the base of the 32.2" 06 PP in
11:48 - bases of 3 06 live PPs - one on left = 31.3" dbh, one on right = 32.2" dbh photo # 11:48

Recommendations

for sale unit:

high wildlife value,
unstable soil

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-18-2019

NTL FOREST MALHEUR

DISTRICT EMIGRANT

PROJECT RATTLESNAKE

UNIT Darkgreen CT50

(SURVEYOR'S NAME COOPER, BEN

location, T215 R32E

Sections 10, 15

Unit 434

characteristics

Subjective evaluation of area:

moderately healthy

interesting, unpredictable

if left alone, would develop

☐ Roadless area

☐ Never logged

☐ Plantation

☐ Many old growth logs and snags

☐ Old growth/mature forest:

Average tree size in "dbh":

10"

Examples of large tree diameter:

31.4" DF

of old growth trees per acre:

not enough to count

☒ Previously logged approx. age of trees OG & mature, 100-250

Describe marking to cut: recently flagged borders!

Former logging sign (skid trails, stumps, lack of regen. ~~dense~~ overstocked spindly ~~thickets~~, describe:

patchy

Mixed conifer, specify species and number in descending order of prevalence: 2 ☒ Ponderosa Pine

☒ Juniper 1 ☒ Doug Fir

☐ Western Larch

3 ☒ Grand Fir

☐ Lodgepole Pine

☐ Engelman

☐ Spruce ☐ Subalpine Fir

☐ Yew

☒ Mt. Mahogany

☐ Aspen

☒ Willow

☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine

☐ White Pine

☐ Incense Cedar

☐ other:

Tree seedlings (species, quantity): many fir, some pine variable

Quality and type of canopy closure, %: 10% in young DF+GF

up to 30% in fir thickets

☒ Historically natural mixed-conifer site: old growth ~~mixed-conifer~~, fire scars, north slope, moist small

area, high elevation, describe: elev 6000' variable tree composition forest pocket

on microclimate: trees on ridge & around clearings, fir in thickets

% of defoliation - species and age of trees affected: GF young, mortality

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): woodpecker forage on log, deer scat, many forage

logs & snags, woodpecker heard, squirrel midden, deer/elk beds &

hiding cover screens, bear forage on OG stump, witches broom on young DF

Burrows, woodpecker heard

Possible chickadee, white eyestripe on black head, grey elsewhere

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe: aspen unit ~~is~~ adjacent to west,

small moisture pocket w/ willow (seep)

Riparian buffers? Adjacent steep slopes?

Unusual plants? Thistle

Plant community types: Strawberry, pinegrass, sagebrush,

Soil type, quality, compaction

level(s): in places, ashy & barren - thickets: dark, loamy

Typical plants: Yarrow, onion, larspur, meadow rue, may huckleberries, lupine, checkerberry

western groundsel, Oregon grape, paintbrush, arnica, false salomon's seal, hawthorn

Steepness of slope/aspect of slope (direction it faces): NE facing slope mild slope

Landslide risk, describe: no
Density of roads (per sq. mi): 2 mi (open) 4+ (incl closed)
Effects of livestock grazing: carcasses, possible contributing to barren areas,

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: ☐

Exotic weeds seen: Thistle

Recreational use: none seen

Describe sale unit overall: Y-M mixed conifers, decent plant divers. excellent w/white habitat, variable density and thickets & openings

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: ☐

☒ public land, agency FS ☐ private land, ownership ☐

☒ riparian (specify): Aspen unit to west

☐ area of human habitation ☐

Species seen adjacent to sale unit: ☐

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

9503 - survey heading
9504 - reddish stem on 10' plant
9505 - typical view
9506 - woodpecker foraging on log
9507 - boundary log - unit 434
9508 - 02 pp with white foraging snag
9509 - old plant w/ large pods - three sections
9510 - barren area
9511 - wash / extreme rocky soil
9512 - forage - bear
9513 -
9514 - forage on fir log
9518 - unknown dried mushroom

① The OG count area opposite the N. heading bend of rd. 229 is high quality OG habitat - see

Recommendations

for sale unit:

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 18th, 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT LOS sec. 15x14 E of 2820-28

SURVEYOR'S NAME Karen C. S. of

2820-229

S. of aspen unit

near McKinney

mill site

NCT only -
upto 8-9" dbh

This sale unit is within
the 100' RPCA buffer for the
wet meadow

Subjective evaluation of area:

Not very high quality old growth - already

CTed with high graded before, & a small area. However it's within the RPCA

Valuable as a wildlife buffer from road 28.

Roadless area

Never logged

Plantation

Many old growth logs and snags

✓ Old growth/mature forest:

better OG in middle to so. end 42.5" PP 29.8" DF, 29.8" PP

Average tree size in "dbh":

Most density < 9" dbh / 25.1" GF 24.9" GF, 28" GF 27.7" GF, 21.7" DF

Examples of large tree diameter:

20.3" GF, 26.3" PP, 23.2" GF, 19.4" GF, 23.5" PP, 29" PP, 22" DF

of old growth trees per acre:

13 OG live GF, 4 OG live GF, 3 OG DF (20 total), w/ OG snags 2

OG snags: 6 OG GF & 2 OG DF, 2 OG logs: 3 OG GF & 1 OG fir (hard to identify)

✓ Previously logged approx. age of trees

m-OG PP & fir stumps

Describe marking to cut:

old orange leave tree marking to save on OG GFs & DFs

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

mostly in more logged North end

✓ Mixed conifer, specify species and number in descending order of prevalence:

✓ 2 Ponderosa Pine

✓ Juniper 3

✓ Doug Fir

Western Larch 2

✓ Grand Fir

Lodgepole Pine

Engleman

Spruce

Subalpine Fir

Yew

Mt. Mahogany

Aspen

Willow

Alder

Shasta Red Fir

Sugar Pine

White Pine

Incense Cedar

other:

Tree seedlings (species, quantity):

Mostly GF w/ PP & DF in openings, a few juniper

Quality and type of canopy closure, %:

50% near the meadow under m-OG PP

Variable overall

✓ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: live OG GFs, NE aspect, adjacent to wet meadow &

tributary stream, live OG DF, an OG GF log, +/- 5800 ft. elevation, huge OG GF snags & logs

% of defoliation - species and age of trees affected:

Self thinning of younger mature GF

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.):

Likely yellow-rumped Warbler heard, Douglas squirrel,

Star flower, Hermit Thrush, Western Tanager, or yellow warbler, Robin

Chipping Sparrows, Black-capped Chickadees, a Western Tanager seen,

Red-tailed Hawk, wing feathers & coppers hawk?, small bones - likely a fawn

a white-headed woodpecker heard, a Williamson's Sapsucker heard, Douglas squirrel

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe:

a stream & meadow adjacent to North

See photos & survey sheet for adjacent aspen restoration sale unit

Riparian buffers? Adjacent steep slopes? Needs at least a 100' buffer from the meadow

& stream, which would eliminate a lot of the sale unit on the N/NE + NE/E

Unusual plants?

side

Plant community types: Elk sedge, Snowberry,

Soil type, quality, compaction

level(s): Clay & Ash

Typical plants: Anemone, Mt. Penny, Arnica, Many Bluebells, Star flower, Hawkweed,

Buriant,

[illegible]

Effects of livestock grazing: cow bones in the sale unit

[illegible]

④ A 29.7 "dbh aspen!

Recommendations
for allotment location:

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE June 18th, 2019

NIL FOREST Malheur

DISTRICT Emigrant

Grazing Allotment Rattlesnake

Pasture Aspen restoration sale unit

Location Coordinates off rds 2820-2292-215

Sections 10+15 adjacent to LOS unit

Surveyors Names' [unclear] to S, SE

Thin conifers up to 21" dbh
at the most. Leave all
conifers ≥ 21 " dbh. Fence off aspen areas & close

Subjective evaluation of area:

This aspen stand does need
conifer thinning, but not of trees ≥ 21 " dbh, of which there are few, of rd 2820
w/ most to the N of the aspen. Cattle need to be kept out of the aspen & the
whole meadow + stream. There is hardly any aspen sprout regeneration compared
to the original size of the aspen stand,
w/ many aspen logs - about 37

Type of Allotment Site:

Stream ☐ Spring ☐ Aspen Stand ☒ Other: ☐

Stream Conditions:

Overall Description: a small stream coming off the wet meadow
but w/ good flow. Lacks riparian plants, downcut, overgrazed.

Channel:

Fine sediment level: ?

Width vs. depth ratio: not very wide to wide

Bank stability: downcut, trampled & shallow

Meander or straight:

Size of cobble: not noticeable

Large wood: Not much at all

Signs of Livestock damage:

overgrazed to almost bare ground in
places by stream channel, cowpies,
channel deeply downcut,
trampling of wet ground by stream,
heavily browsed & dead aspen
sprouts

Riparian hardwoods: Aspen ☒ Alder ☒ Red Osier dogwood ☐ Willow ☒ Rocky Mt. Maple ☐

Cottonwood ☐ Other: ☐

Riparian Plants: Riparian sedge sp., Blue Camas, Tall Buttercup, Swamp gooseberry

Exotic invasive plants: exotic grass sp., Bull thistle

Impoundments/livestock ponds/weirs: None seen

Spring Conditions:

Overall Description:

Trough ☐ Springbox ☐ Source Fenced off to cattle? ☐

Riparian hardwoods: Aspen ☒ Alder ☒ Red Osier dogwood ☐ Willow ☐ Rocky Mt. Maple ☐

Cottonwood ☐ Other: ☐

Riparian Plants: under alder by stream: Swamp gooseberry, in openings - tall Buttercup

Exotic invasive plants:

Signs of Livestock damage:

Blue Camas
in meadow

Spring flow/Amount of flow:

Trough: Animal escapement device:

Pipe into ground for overflow?

Distance from Spring headwaters:

Extent of fencing around spring:

Aspen Stand Conditions: +8 Aspen sprouts - only 1 seen! about 4 dead seen

of live Aspen: 214 # 20 # of Aspen snags 28910 # of Aspen Logs 925 = 14 + 11 = 25 + 5 = 30 + 2 = 37

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Describe: Not many OGPP - most are N of aspen so don't matter re: shading

Old growth/Large trees near Aspen? (> 21 " dbh) How many? Distance from Aspen? From what direction (N/S/E/W)?

Describe: Most OGPPs are to the North of the aspen, if not all - 4+

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Describe: No fencing, great lack of sprouts w/ cattle trampling & overgrazing

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe: About 97 total, may have missed some

severely hedged, up to 2 1/2' tall, many dead

Wildlife: Western Tanager, Douglas squirrel, Williamson's Sapsucker,
a Hairy or Downy woodpecker seen, likely Yellow warbler heard,
white-headed woodpecker heard, nest hole in a 17.4" dbh aspen,

No cattle present.

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle scat, Cattle present? Describe: Downcutting of stream channel, barren overgrazing near channel, lack of riparian plants, old
Yes → Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: simplified plant community w/ exotic grass sp., hardly any aspen sprouts, downcutting of stream banks, overgrazing next to stream channel

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description: 12:50 & 12:51 Survey heading & map

- Karen's Canon (13:00) Alder by the meadow
- 12:56 - 2 live aspen by the meadow w/ OG aspen logs
 - 12:57 - 2 big aspen logs - closeup (next to the 2 live aspen)
 - 13:02 - a long big aspen log (13:03) me leaning against a really big aspen log
 - 13:04 - Viola adunca (13:07) 2) a large & a leaning aspen snag & 2) an aspen snag by the meadow
 - 13:11 - wet meadow w/ flowing small stream channel & a big aspen log
 - 13:13 - 1) wet meadow w/ water flow 2) pool in downcut from meadow flow
 - 13:14 - strong flow small waterfall from wet meadow into pool
 - 13:16 - cattle damage w/ almost bare soil (& cowpies) by downcut meadow pool & alders
 - 13:17 - main stream channel w/ flowing water
 - 13:20 - more overgrazing & downcutting of the stream channel
 - 13:21 (1) & 13:22 (2) - 2 more waterfalls coming off the meadow
 - 13:24 - 5 more live aspen next to alder & an OG FP
 - 13:26 - fresh antler rubbing sign on an aspen (13:27) old antler rubbing on another aspen
 - 13:29 - the stream flowing beneath alders
 - 13:34 - likely cattle trampling of wet ground by stream & meadow
 - 13:36 - hunters' blind platform by meadow between an aspen snag & a m-OG FP
 - 13:39 - a bird box on a live large aspen = 17.4" dbh
 - 13:41 - 2 of aspen bark on a 17.4" dbh aspen (live)
 - 13:44 - 4 live aspen w/ conifers behind them N. of them
 - 13:46 - tops & bases of 2 live large aspen w/ 3 OG FPs behind them to the North
 - 13:51 - 2 badly hedged sprouts (in 2 photos)
 - 13:57 - e.g. of a dead aspen sprout (13:59) a neothale in one of the 17.4" dbh aspens
 - 14:02 - 1) top & 2) base w/ me of a huge aspen log
 - 14:10 - 5 live aspen w/ only 1 PP > 21" dbh, rest much smaller
 - 14:13 - 1) base of 29.7" dbh huge aspen 2) top of same, 3) me hugging the base of the same aspen
 - 14:25 - a brown moss-textured conk on the 29.7" dbh aspen

Aspen tally - 1400 p.m.: 43 aspen sprouts, 21 live

Recommendations

for sale unit:

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-17-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Sec 5 E of E Fork Rattlesnake Creek

SURVEYOR'S NAME Hannah / Ben Newell

Subjective evaluation of area:

Beautiful OG PP & Aspen largest measured trees Rd 2800807
Section. Most of stand looks like plantation Sec 5 Lot

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh":

Examples of large tree diameter: 50.5" PP 42" PP 27.8" Aspen

of old growth trees per acre: few

☒ Previously logged approx. age of trees NCT OG High quality

Describe marking to cut: NA

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): PP dominant

Quality and type of canopy closure, %: 40% M PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: 40-100% defoliation in even aged PP

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Red winged Blackbird, Elk tracks, small mammals, black scaling & foraging

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Intermittent drainage currently dry and overgrown at SE end of unit. Receive partial shading No riparian hardwoods, E Fork Rattlesnake creek bordering E end of unit w/ no buffer. Healthy Aspen stand live OG snags & logs & healthy dense young trees

Riparian buffers? Adjacent steep slopes?

* Thin by hand by ~~cut~~ E Fork Rattlesnake creek up to 8" *

Unusual plants?

Plant community types: shrub sage, snowberry, service berry, sagebrush

Soil type, quality, compaction

level(s): Thick duff layer dark brown loam

Typical plants: V. l. rose, yarrow, clovers, sticky fish foot, water leaf, Oregon Grape, fire chaps, larks spur

Steepness of slope/aspect of slope (direction it faces): mild

Landslide risk, describe: NA

Density of roads (per sq. mi): 2 mi.

Effects of livestock grazing: Cow pie, cattle ponds, barren soil from overgrazing, post holing in meadow out side of fence

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen:

Recreational use:

Describe sale unit overall: Dense young to mature plantation like PP stand next to an Aspen stand on E Fork Rattlesnake creek some small tree density & defoliation. Intermittent stream bed through unit

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership NA

☒ riparian (specify): E Fork Rattlesnake creek

area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. 1 Beauty shot adjacent to unit 2. 2m meadow 50.5" PP

Photo #s & descriptions: 1 crown of 50.5" IP 4 heading 5.06 Chopped log 6 Bank Siding on mature PP Snow 7 1/2 typical view of dry stream bed looking up stream more defined Down stream more overgrazed 9 Trees in row similar to plantation 10. Spring in unit 11 cow trough 12 Ben stepping on fence in spring 13 cut fence 14 dug out cow pond w/ barren soil 15 Aspen grove adjacent to unit 16 27.8" Aspen adjacent to unit

Recommendations
for sale unit:

OROP

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE June 17 2019
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT Section 8 - west of fork Rattlesnake Cr. at S
SURVEYOR'S NAME Bert Hannah end of road 481

Subjective evaluation of area: Pretty grim. Sterile feeling.
Do not make a grassland for cattle grazing.

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☐ Old growth/mature forest:

Average tree size in "dbh": 14-16 in dbh

Examples of large tree diameter: 21 in DF, 30 in PP

of old growth trees per acre: not enough to count

☒ Previously logged approx. age of trees NET - M - some OG

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

mostly firs cut

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine (1)

☒ Juniper (2) ☒ Doug Fir (3) ☐ Western Larch ☒ Grand Fir (3) ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany (4) ☐ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): PP & juniper dominant, some CF/DF

Quality and type of canopy closure, %: 15% under open uniform PP/CF; 15-20% under open uniform PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: PP dominant - tot fir seedlings

% of defoliation - species and age of trees affected: 10-40% common in uniform PP stands.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): hairy woodpecker sighting, redbreasted nuthatch calls, chickadee calls, 4 turkey vultures seen, deer scat, chipmunk sighting, elk scat & tracks

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: none seen

Riparian buffers? Adjacent steep slopes?

none needed

Unusual plants? none seen

Plant community types: pinegrass, elk sedge, snowberry

Soil type, quality, compaction

level(s): dark brown ashy loam w/ duff layer

Typical plants: hawkweed, thimbleleaf lupine, Oregon grape, currant, may hew lips, yarrow, green rabbitbrush, heartleaf arnica, buckwheat, indian paintbrush

Steepness of slope/aspect of slope (direction it faces): mild southeast facing

NO Landslide risk, describe:

Density of roads (per sq. mi): ~2 mi/sq mi (+ 1 1/2 mi/sq mi decommissioned)

Effects of livestock grazing: cows, invasive grasses, patches of burnt soil from overgrazing

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: bull thistle

Recreational use: beer can

Describe sale unit overall: Uniformly spaced, even aged plantation-vibe maturing PP. with very few firs + many redpines. Very dry due to being near the summit of this hill. Low plant + wildlife diversity, compacted soils.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership _____

☒ riparian (specify): Fork Rattlesnake Cr to east

NO area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

4x canon:

① heading

② hannah + slashpile

③ typical view even aged PP

④ skid trail unregenerated

⑤ H measuring 30 in PP

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS

BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE 6-17-19

NTL FOREST Malheur

DISTRICT Emigra

PROJECT Rattlesnake

UNIT Sec 5 & 8 W of 28 E of 28 N 10 490

SURVEYOR'S NAME Hannah/1/24/5 of 28004

Subjective evaluation of area: Drop for soil concerns ~~Area~~ Soil is very dry and ash y and logging would further degrade area. CT 40

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☐ Old growth/mature forest:

Average tree size in "dbh": 16"

Examples of large tree diameter: 28" PP

of old growth trees per acre: few

☐ Previously logged approx. age of trees Y-M

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

☐ Mixed conifer, specify species and number in descending order of prevalences: / Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☒ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): Juniper PP dominant

Quality and type of canopy closure, %: 45-50% MPP

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: Patches of PP Juniper 20-50% lower limb loss

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Jack rabbit, Elk scat, hawk, Screech owl, Red breasted nuthatch, probable pygmy nuthatch

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: NA

Riparian buffers? Adjacent steep slopes?

NA

Unusual plants?

Plant community types: Sage forest, Snowberry, Elk aspen

Soil type, quality, compaction

level(s): light brown compacted clay w/ ash layer

Typical plants: Dark spurs, heart shaped Anemone, timothy, long mossy toes

Thin leaf lupine, Green rabbit brush

Steepness of slope/aspect of slope (direction it faces): None Very Mild E facing

Landslide risk, describe: NA

Density of roads (per sq. mi):

Effects of livestock grazing: cow peas, historic grazing but degraded area

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: none seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen:

Recreational use:

Describe sale unit overall: Plantation like uniformly spaced even aged PP w/ interspersed Juniper & Mt Mahogany, very dry high levels of defoliation

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership None

riparian (specify):

area of human habitation None

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Ban's Camera 1. Survey heading 2. Mt Mahogany

Photo #s & descriptions: Survey 2 Ponderosa Pine 3. 28" PP 4. Nest hole in 7 PP Survey 5. Survey w/ Big Mt Mahogany 6. Typical view of unit 7. 6. Buck scaling on M PP Survey

Recommendations
for sale unit:

DROP THIS!
DO NOT CUT LARGE TREES!

**LEAGUE OF WILDERNESS
DEFENDERS**

**BLUE MOUNTAINS
BIODIVERSITY PROJECT**

27803 Williams Lane
Fossil, OR 97830

DATE June 17, 2019

NTL FOREST Nathur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Section 32 - N of 1st both sides 28

SURVEYOR'S NAME Haiman & Ben

Subjective evaluation of area: Dense seedlings aren't shading anything out or encroaching on anything, and they will self thin naturally. Provides good cover for deer. We could hardly see one deer in a patch of seedlings only 30 feet away.

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: PP lacks maturing trees

Average tree size in "dbh": varies between OG & seedlings

Examples of large tree diameter: 28.3 in PP, 31.5 in PP, 22.5 in PP

of old growth trees per acre: 17 live PP, 0 snags, 0 logs.

☒ Previously logged approx. age of trees NCT & high grade, leaving some open PP

Describe marking to cut: none seen.

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

many OG stumps - most firs (all large firs) have been removed.

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine 1

☒ Juniper 3 ☒ Doug Fir 2 ☐ Western Larch ☒ Grand Fir 4 ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☒ Willow 5 ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): extremely dense stand of PP, occasional DF/6F.

Quality and type of canopy closure, %: 45-55% under dense young PP; 5-15% under open OG PP.

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: PP dominant

% of defoliation - species and age of trees affected: 10-40% lower limb loss in dense young PP.

OG have full, green crowns.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): hermit thrush calls, elk scat, bear forage, deer tracks

redtail hawk sighting, douglas squirrel calls, deer scat, large burrow, red breasted

southatch calls, possible northern flicker/small woodpecker forage, deer sighting.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: intermittent stream adjacent ~100 yards to east.

Riparian buffers? Adjacent steep slopes?

already buffered

Unusual plants? none seen

Plant community types: elk sedge, pinegrass

Soil type, quality, compaction

level(s): light brown clay w/ ashy layer. small rocks

Typical plants: dogbane, cranethus, silky lupine, indian paintbrush, heartleaf arnica, hawkweed
cinquant, rosen russians, fireweed, many blue lilies, strawberry, bitterbrush, Oregon checker mallow.

Steepness of slope/aspect of slope (direction it faces): 14-18° east-facing slope down to road 28

NO Landslide risk, describe:

Density of roads (per sq. mi): 2 1/2 mi/sq mi. (+ 1 3/4 mi/sq mi decommissioned roads)

Effects of livestock grazing: completes, cattle trails, barbed wire fencing, moderate overgrazing some areas of bare soil.

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: adjacent camps along road 154 w/ deer stands

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: full thistle, orchard grass

Recreational use: arrow seen from hunters, beer cans

Describe sale unit overall: Small unit adjacent to camps with eastward slope. Previous high grading has resulted in dense seedlings. Firs were removed almost entirely. Remaining OG are healthy w/ full crowns.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership _____

☒ riparian (specify): intermittent stream to east ~100 yds

NO area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Ben's camera:

- ① heading
- ② sea of seedlings PP w/ ceanothus understory
- ③ mature fir stump - most fir has been removed
- ④ ceanothus understory + Hannah
- ⑤ OG PP log + snag + Hannah
- ⑥ bear forage on OG PP log
- ⑦ typical view facing east - seedlings + OG PP
- ⑧ OG PP stump + Hannah
- ⑨ large burrow
- ⑩ fire scarred OG PP stump surrounded by dense seedlings
- ⑪ unidentified hardwood (x2)
- ⑫ little boy deer

live
snag
log

FIX CATTLE EXCLOSURE FENCING AROUND SPRING & STREAM TO EAST!!!

Recommendations

for sale unit:

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 17 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT LDS ~~XXXXXX~~ E+V of 28, Section 32

SURVEYOR'S NAME Hannah & Ben

NCT ONLY UPTO

6 INCHES DBH!

Leave some downed wood.

DONOT CUT LARGE TREES!

Subjective evaluation of area:

Grazed by how much water is present within unit! a spring, a stream & an adjacent large stream! Good bird watching. Interesting to see so much fir adjacent to a unit where it had largely all been cut.

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest: ___

Average tree size in "dbh": 14-15 inches dbh, mean density = 6 inches dbh

Examples of large tree diameter: 34 in GF, 36 in GF, 29 in PP, 32.5 in PP

of old growth trees per acre: 5 live PP + 2 live GF; 0 snags; 1 PP log + 3 GF logs.

☒ Previously logged approx. age of trees ACT + high grade

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

many stumps & unregenerated skid trails; areas of dense young defoliating GF/PP.

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine ①

☒ Juniper ② ☒ Doug Fir ② ___ Western Larch ☒ Grand Fir ① ___ Lodgepole Pine ___ Engleman

Spruce ___ Subalpine Fir ___ Yew ___ Mt. Mahogany ___ Aspen ___ Willow ___ Alder

___ Shasta Red Fir ___ Sugar Pine ___ White Pine ___ Incense Cedar ___ other: ___

Tree seedlings (species, quantity): patches of GF/PP.

Quality and type of canopy closure, %: 30-35% under open OG PP; 45% under dense variably aged V-M GF.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: interspersed PP/GF OG + seedlings, affected by fire, on north east facing slope, ~5,400 feet elevation.

% of defoliation - species and age of trees affected: Dense GF losing 20-100% of lower limbs but are self thinning. Crowded OG losing branches where seedlings are under drip line.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): bear forage; pine needle nest in PP; white breasted nuthatch sighting, chipmunk sighting, pileated woodpecker + smaller woodpeckers forage, douglas squirrel sighting, chickadee calls, robin sighting, turkey vulture sighting, pileated woodpecker calls, hairy woodpecker sighting, elk tracks

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Adjacent intermittent stream - currently more like a boggy meadow full of canas. Lbistort, receiving full sun with no riparian hardwoods. Many OG PP growing along edges of meadow, lots of bird activity. Very undeveloped channel but currently flowing/pooling, fairly straight with no large wood or cable. Cattle excluded, but FENCE IS DOWN!

Riparian buffers? Adjacent steep slopes?

Intermittent stream need buffers, no steep slopes.

Unusual plants? none seen

Plant community types: elk sedge, pinegrass

Soil type, quality, compaction

level(s): dark brown loam w/ drift layer

Typical plants: cleavers, graceful cinquefoil, many blue lps, sweet cicely, yarrow, native thistle, oregon grape, dogbane, fireweed, sweet cicely

Many old alders shading spring & wild rose bramble. Fence down in two places but sedges within are ungrazed.

Spring originates being piped into a separate cattle trough over flow drains down to stream. Ponds full of algae & muck. Cattle have full access. Receives conifer shading partially.

*Leaving stream north west part of unit - adjacent channel *muddying, lot out of a cattle pond full of algae. muck & riparian sedge, one huddled willow. Hairy woodpecker

Steepness of slope/aspect of slope (direction it faces): mild northeast facing slope

NO Landslide risk, describe:

Density of roads (per sq. mi): 2 1/2 mi/sq mi (+ 1 3/4 mi/sq mi decommissioned roads)

Effects of livestock grazing: conifers, cattle trails, barbed wire fencing around spring & adjacent stream, overgrazing near ponds with barren soil.

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: many camps within unit w/ deer stands.

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other:

Exotic weeds seen: orchard grass

Recreational use: camping, beer cans

Describe sale unit overall: Maturing mixed conifers w/ many riparian areas adjacent. Some areas of dense defoliating young trees. old growth is a little crowded in some areas.

Young snags covered in woodpecker foraging. Major recreational campsite within unit.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership

☒ riparian (specify): intermittent stream/meadow to east ~ 100 yards

NO area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Ben's camera:

- ① heading
- ② hannah measuring 34 in CF gone tree
- ③ bear forage on 06 PP snag & log
- ④ nest up in maturing PF made of needles
- ⑤ hannah measuring 36 in CF
- ⑥ hannah standing both sides of down cattle enclosure fence to meadow - tree fell and cattle now have access to riparian area!
- ⑦ pileated & small woodpecker forage on 06 PP snag
- ⑧ cattle pond/though muddy w/ algae & reptiles
- ⑨ pool within unit from spring - cattle access
- ⑩ another crushed fence & hannah, around spring & alders
- ⑪ CF was a fence post to spring enclosure until it fell over; + 06 CF/06 PP snags
- ⑫ 06 PP cut for firewood very sloppily
- ⑬ skid trail unregenerated w/ 2 06 PP stumps
- ⑭ hairy woodpecker (x2)
- ⑮ intense bark scaling on CF snag
- ⑯ pileated forage on 06 PP snag
- ⑰ cattle pond full of algae

Recommendations
for sale unit:

UCT up to 13"

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-20-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Sec 17 CT 40.50 S of Jct 28/

SURVEYOR'S NAME 2815

E28

Σ 8W 2815

Subjective evaluation of area:

Thin area looks like split

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest: ___

Average tree size in "dbh": ___

Examples of large tree diameter: 25.6" Juniper

of old growth trees per acre: ___

___ Previously logged approx. age of trees ___

Describe marking to cut: ___

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe: ___

___ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine
☒ Juniper ___ Doug Fir ___ Western Larch ___ Grand Fir ___ Lodgepole Pine ___ Engelman
Spruce ___ Subalpine Fir ___ Yew ☒ Mt. Mahogany ___ Aspen ___ Willow ___ Alder
___ Shasta Red Fir ___ Sugar Pine ___ White Pine ___ Incense Cedar ___ other: ___

Tree seedlings (species, quantity): ___

Quality and type of canopy closure, %: 20% under maturing PP

___ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: ___

% of defoliation - species and age of trees affected: 25% ~~under~~ maturing PP 5/ 70-100%
low under low

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Red tail hawk, chipmunk, Robin, S. Flycatcher
Woodpecker foraging, pileated group

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: ___

Riparian buffers? Adjacent steep slopes? ___

Unusual plants? ___

Plant community types: Sagebrush, Snowberry

Soil type, quality, compaction
level(s): ___

Typical plants: Oregon checkered mallow root, common point grass, rabbit brush
old growth forest, old growth forest, old growth forest, heart shaped Arundo

Steepness of slope/aspect of slope (direction it faces): 18° W

 Landslide risk, describe:

Density of roads (per sq. mi):

Effects of livestock grazing:

Evidence of Animal Damage Control

activities:

Evidence of bait stations for hunting, hunters' camps:

 Mining Herbicide spraying Gopher trappings/poison Other:

Exotic weeds seen:

Recreational use: Bear can, shell casing

Describe sale unit overall: looks like a pine plantation w/ some juniper and a scattering of Mt Mahogany mixed in

Surrounding area: contiguous forest high-graded forest never logged area canyon

 roadless area(s) wildlife corridor meadow grassland rocky upland

 high desert seedlings pine plantation clear cut other cut:

 public land, agency private land, ownership

 riparian (specify):

 area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. 470 Heading 471 Maturity PP defoliation

Photo #s & descriptions: Ben's camera, 472: nest hole in live 25.6 Juniper
473 typical view of dense 100% defoliated PP w/ young live trees in background

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE 6/19/19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Quad 164.05 unit 1/4 Sec 10 of Section 16

SURVEYOR'S NAME Ben Adams

Subjective evaluation of area:

Area is lacking foraging habitat for woodpeckers & bears from lack of down trees & snags. Lacks tree diversity

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest: ___

Average tree size in "dbh": ___

Examples of large tree diameter: 21" Juniper 37.4" OSPO

of old growth trees per acre: Live 10 PP Corp 3 PP Snags 1 PP

___ Previously logged approx. age of trees high gradient

Describe marking to cut: ___

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe: ___

___ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ___ Doug Fir ___ Western Larch ☒ Grand Fir ___ Lodgepole Pine ___ Engelman Spruce ___ Subalpine Fir ___ Yew ___ Mt. Mahogany ☒ Aspen ___ Willow ___ Alder

___ Shasta Red Fir ___ Sugar Pine ___ White Pine ___ Incense Cedar ___ other: ___

Tree seedlings (species, quantity): PP

Quality and type of canopy closure, %: 30-40% M PP

___ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: ___

% of defoliation - species and age of trees affected: ___

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Elk scat, deer scat, chipmunk

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: low grade, straight, mild flow

Riparian buffers? Adjacent steep slopes?

150' buffer

Unusual plants?

Plant community types: Strawberry, oak sedge, sage & rush, bitterbrush

Soil type, quality, compaction

level(s):

Typical plants: Yarrow, Arrowleaf buckhorn root, Hairleaf lupine, common paintbrush, wild onion, Oregon grape, Hawk weed, Fire weed, Deer cane, Lemon verbena, false Solomon seal

Steepness of slope/aspect of slope (direction it faces): 20-22° W above riparian area

☒ Landslide risk, describe: steep slope in part of unit

Density of roads (per sq. mi): .5

Effects of livestock grazing: cow pies

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: Bull thistle

Recreational use: soda bottle

Describe sale unit overall: alice meadow to NE of unit, PP dominant w/some

Juniper. Steep slopes in some areas, above creek to west of unit,

very few snags & logs.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency BFS ☐ private land, ownership None

☒ riparian (specify): creek feeding into Soldier creek

☐ area of human habitation None

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Ben's camera 400headcam

Photo #s & descriptions: 401 OG PP low 402 OG PP snag 403 OG PP 404 typical
view young mature PP 406 typical view sagebrush meadow w/ OG PP 407 unideal
plant 408 3rd OG PP 34.4" 409 Typical view of mature PP

Recommendations

for sale unit: don't buy over 21". DEFENDERS

clear buffers around aspen grove +

fence it in. don't fell any snags.

don't log close

Subjective evaluation of area:

LEAGUE OF WILDERNESS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-20-2019

NTL FOREST MALHEUR

DISTRICT Emigrant

PROJECT RATTLESNAKE

UNIT South 1/2 of LOS; T21S R32 1/2 E

SURVEYOR'S NAME cooper sec. 8+1

Roadless area ☐ Never logged ☒ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh": 18"

Examples of large tree diameter: 25" PP, 53" PP, 11" aspen, 30" PP, 32" Juniper, 22" DF, 32" PP, 45" PP

of old growth trees per acre: 9 luc pine, 5 pine logs, snags = 1

☒ Previously logged approx. age of trees Some enormous. 300-400

Describe marking to cut: none

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: 1 ✓ Ponderosa Pine

2 Juniper ✓ Doug Fir Western Larch ✓ Grand Fir Lodgepole Pine Engelman

Spruce Subalpine Fir Yew 3 ✓ Mt. Mahogany ✓ Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): Juniper + PP

Quality and type of canopy closure, %: Variable, 10-60%, many simple canopy

Y-M PP, plantation closure

✓ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: Probably high grade + fir eradicated

% of defoliation - species and age of trees affected:

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Burrows, elk scat, Sapsucker forage, roost/nest holes

A few enormous snags, mostly poor habitat, improving due to natural mortality + breaking tops. Lots of rocky outcrops for habitat.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: seep?? why "alder grove"?

Riparian buffers? Adjacent steep slopes?

steep slope to west, above Hwy 28

Unusual plants? Aspen grove w/ no clear water source - 7 snags, 6 logs, 20 sprouts

Plant community types: Snowberry, pinegrass

Soil type, quality, compaction

level(s): clayey, compacted

Typical plants: ~~sh~~ Paintbrush, Oregon grape, Chokecherry, Lupine, Yarrow, gooseberry

oak, wheat, western groundsel, Phacelia, etc. etc. etc. clear area

Steepness of slope/aspect of slope (direction it faces): Moderate thruout, 20°-25°
flat in places west to south facing
Landslide risk, describe: steep, ^{bare} slopes between Rd 28 + unit bdy.
Density of roads (per sq. mi): 2 mi, 4 incl closed roads
Effects of livestock grazing: campfires, fences

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: none

Exotic weeds seen: none

Recreational use: none

Describe sale unit overall: ponderosa dominant w/ juniper mixes, patches of mt mahog, scattered as + big snags but mostly even aged, low level of downed wood but increasing natural mortality improving stand

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☒ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership

riparian (specify):

area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

1219 - heading
2220 - view of middle of unit
2221 - in old fir
2222 - white fir in log
2223 - typical young pp plantation
2224 - rocky area
2225 - evergreen cut log
2226 - alder grove
2227 - showing canopy diverse
2228 - old fir
2229 - mature pp snags
2230 - one of very tall firs
2231 - paper birch forage on old pp
2232 - contrasted by burned snag
2234 - old snag
2235 - burned
2236 - pp mortality
2237 - epic forage + high mt mahog
2238 - clover on nest holes
2239 - very large old log
2240 - broken top of juniper

Recommendations
for sale unit: Prop.
will not benefit
from thinning.

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6/20
NTL FOREST Mahogany
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT Northern half of 108 unit in
SURVEYOR'S NAME Adam Quad 8

Subjective evaluation of area: before the high grading, this would have been a beautiful, healthy place. There are still huge, inspiring
Northern
Junipers.

☐ Roadless area ☐ Never logged ☒ Plantation ☐ Many old growth logs and snags
☒ Old growth/mature forest: mature PP & Juniper, some OG PP & many OG PP stems
Average tree size in "dbh": 12-16"

Examples of large tree diameter: 37" Juniper, 23" PP, 32" PP, 30" Juniper, 26" PP
of old growth trees per acre: 11 PP, 10 PP logs, 4 PP snags (southern sector), 16 PP, 4 logs, 1 snag
35" PP
41" S
45" S

☒ Previously logged approx. age of trees very old, maybe 300-400 yrs

Describe marking to cut: none

Former logging sign (skid trails, stumps, lack of regen, dense overstocked spindly thickets), describe:

mature PP stumps, OG PP stumps (MANY) & skid trail

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☒ Lodgepole Pine ☒ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☒ Aspen ☒ Willow ☒ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): some PP, some Juniper

Quality and type of canopy closure, %: 30% PP young to mature & mature Junipers,
roughly uniform height

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: no evidence of ever having been mixed

Conifer (no firs at all)

% of defoliation - species and age of trees affected: none seen

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): ELK scat, woodpecker forage on OG PP snag, bear scat, bear forage on OG PP stump, un id'd burrow, sap sucker forage on 37" Juniper, bear claw marks on OG Juniper, deer scat, game trail, squirrel midden on OG PP stump, chipmunk ELK tracks

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: none

Riparian buffers? Adjacent steep slopes?

none

Unusual plants? none

Plant community types: big sagebrush, snowberry, ELK sedge

Soil type, quality, compaction

level(s): mid compaction, ashy, rocky, dry soil

Typical plants: arrowweed, balsam root, dog bone, wood groundsel, indian paintbrush, grape, service berry, hawkweed, bulk wheat, chucker mallow root

willie on
circulation
arr. Ca
mfn parts lot

Steepness of slope/aspect of slope (direction it faces): west facing, 10° slope on western border, 23° on eastern

Landslide risk, describe: possible risk of landslide if OG trees are removed
Density of roads (per sq. mi): 1 mile of open road, 3 decommissioned
Effects of livestock grazing: some cow scat seen, not much. no effects seen. on steep slopes

Evidence of Animal Damage Control

activities: none.

Evidence of bait stations for hunting, hunters' camps: none

Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: ☐

Exotic weeds seen: none

Recreational use: none

Describe sale unit overall: Previously high graded ~~OG~~ PP dominant mature to OG forest w/ some logs, few snags, decent plant diversity, some wildlife sign transitioning to pine plantation style forest in northern pocket, likely 40BA.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland

☐ high desert ☐ seedlings ☒ pine plantation ☐ clear cut ☐ other cut:

☐ public land, agency ☐ private land, ownership

☐ riparian (specify):

☐ area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

36. chipmunk

37. typical view looking down at OG PP, aspen, alder, & PP seedlings

39. These aspens, which are their own unit are shaded by large OG PP & nothing else
40. rocky outcropping w/ mtn. mahogany

38. chipmunk

41. adam w/ 4 1/2" Juniper

43. adam w/ 4 5/8" Juniper

44. crown of 4 5/8" Juniper

45. typical view of pine plantation forest in northern sector

4. header

5. OG PP snag w/ fire scar & woodpecker forage
for adam on bear foraged OG PP stump

7. adam w/ 37" Juniper

8. sap sucker ^{forage} on Juniper

1-20. bear claw marks on OG Juniper

21. OG PP stumps w/ bear & woodpecker forage

22. typical view of wide spacing between mature PP

seedling PP, & Juniper & some downed wood

23. un id'd scat on top of OG PP stump

24. adam w/ OG PP stump

25. OG PP stump

26-8. large OG PP stumps w/in 20' of each other

29. old skid road

30. aspen w/ sprouts

31-2. hedging on sprouts

33. beautiful old broken top OG PP

34. adam w/ 4 1/2" fire scarred OG PP

35. rocky upland adjacent (east) of sale

Recommendations

for sale unit: Drop:

*there are not too many
young & seedling pps
competing w/ OG*

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6/20/19

NTL FOREST Mulheer

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT LOS on road 402 in

SURVEYOR'S NAME Adam Owed

Subjective evaluation of area: unit feels like it could be a good safe
haven for smaller wildlife (weasels, squirrels, birds) as there are many
oulders to hide between.

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: some old growth PP but many mature PP & juniper

Average tree size in "dbh": 12" PP, 8" Juniper

Examples of large tree diameter: 32" PP, 24" PP, 34" PP, 37" PP, 36" PP, 21" Juniper

of old growth trees per acre: 6 OG PP, 3 logs, 1 snag (southern sector of unit), 9 OG PP, 4 OG PP snags, 2 OG PP logs (mid-sect unit), 35" PP, 24" S

☒ Previously logged approx. age of trees OG PP, likely 200+

Describe marking to cut: none

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

OG PP stumps

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☒ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): some PP seedlings

Quality and type of canopy closure, %: 50%, young to mature PP mostly,

mostly uniform height, generally more open.

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: no evidence of ever being mixed conifer

(no fir snags, stumps, or logs)

% of defoliation - species and age of trees affected: none seen

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): chipmunk, elk scat, pileated forage on OG

PP snag, woodpecker forage on OG PP snag, 4 elk spotted,

squirrel midden on OG PP stump, un id'd burrow, sp. sucker forage

on Juniper, bear forage on PP log

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe: none

Riparian buffers? Adjacent steep slopes?

no

Unusual plants? none

Plant community types: bitterbrush, snowberry, elk sedge

Soil type, quality, compaction

level(s): Somewhat compacted, dry, ashy soils, rocky as well

Typical plants: rabbit brush, chuckermallow, root dog bone, oregon grape, knut knut

groundsel, madra paint brush, conque foil, arnica, arrowhead, scotch berry

wool

Steepness of slope/aspect of slope (direction it faces): 20° & less on a west facing slope, some flat areas too

Landslide risk, describe: none

Density of roads (per sq. mi): 3.5m active roads

Effects of livestock grazing: some cows trails & cow pies seen, few bare patches but they are present

Evidence of Animal Damage Control activities: none

Evidence of bait stations for hunting, hunters' camps: none

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: bull thistle

Recreational use: none

Describe sale unit overall: Young & mature PP dominant w/ some OG PP & signs of logging. rocky in southern portion & more open in the rest w/ few OG snags & logs. moderate plant diversity & evidence of

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon wildlife.

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☒ rocky upland

☐ high desert ☐ seedlings ☒ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency ☐ private land, ownership _____

☐ riparian (specify): _____

☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

11. pine plantation adjacent to unit
12. OG fir snag
13. fire scarred OG PP w/ woodpecker forage

1991. Header

12. 32" PP w/ willow, mtn mahogany, & rocky outcropping

13. OG PP snag & nest

14. adult on OG PP log

15. woodpecker forage on OG PP snag

16. Taban w/ 37" PP

17. OG PP stump

18. OG PP log

19. un id'd burrow

20. typical view of open area w/ young PP, PP seedling, Junipers, some down wood, & no OG.

21. OG PP snag

22. stand of young PP

23. sapsucker forage on Juniper

24. adult w/ 24" Juniper

25. bear forage on PP log.

26. pileated forage on PP snag

Drop

27803 Williams Lane
Fossil, OR 97830

DATE 6-20-19
NTL FOREST Mulhearn
DISTRICT Emigrant
PROJECT Rattle snake
UNIT Sec 33 Los Sob 2850 E43
SURVEYOR'S NAME Ben

2850400
wob
2852395

Subjective evaluation of area: Area is pretty open & trees aren't being crowded no logging or thinning is necessary

Old growth/mature forest:

Average tree size in "dbh": 13⁴¹

Examples of large tree diameter: 32.9" 1A 33.9" 1D

of old growth trees per acre: Live PP: 10 Snags PP: 6 Cops: 116

Previously logged approx. age of trees 4106

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: λ Ponderosa Pine

☒ Juniper ☒ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engelman

Spruce Subalpine Fir Yew Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): Morleya PP some Juniper

Quality and type of canopy closure, %: 15-20% 106 PP 7 PP

____ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation – species and age of trees affected: 30-50% y pp

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): *Pileated forage, bear forage, white breasted nut hatch, yellow breasted warbler*

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Cow Creek adjacent

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: Pine grove, Elk ridge, Snowberry

Soil type, quality, compaction

level(s): Thick dark light brown cone w/ clay further down

Typical plants: Rosinberry, currant, blackberry, ocean grape, strawberry

Thin light, more more blue line line read 100 to 1000

Steepness of slope/aspect of slope (direction it faces): flat - western mild slope

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: Cow pies

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: none seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: area ~~containing~~ has been heavily thinned in parts w/ a few OG Stumps. Nice rocky hill side on NE side of unit. Very open canopy. not a lot of Y M trees.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area. ☐ canyon roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland ☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership None

riparian (specify): Cow creek to West

area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Benio Camera 455: Heading 456 OG PP snag w/

Photo #s & descriptions: Bark Scaling 457 Bear foraging 458 Pileated foraging

459. Scenic view in OG count area 460 Bear foraging 461 2 OG PP

462 - 4 Typical view 465 Pileated forage 468 Woodpecker nest hole

469. pileated foraging Wood pecker nest

Recommendations

for sale unit:

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-20-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Sec 33 Aspen Unit Mostly

SURVEYOR'S NAME Ben

S of 2850

E of 2850

2850400

DROP unit has practically no Aspen & shows no sign of being a true Aspen grove. Creek & banks area has already been heavily logged. The unit has enough sun & open canopy to allow for Aspen expansion. Logging or further thinning could damage frog, fish, woodpecker & bird habitat.

Subjective evaluation of area:

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh": 10"

Examples of large tree diameter: 51.7" dbh 41.500" dbh 60.3" dbh

of old growth trees per acre:

☒ Previously logged approx. age of trees Y-M heavy thinning

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☒ Aspen ☒ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): Mostly PP some Juniper

Quality and type of canopy closure, %: 10% 100% PP Y-M PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: 30-50% lower limb lower PP

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Red tail hawk, white breasted nuthatch, pileated foraging, possible Columbia Spotted Frog sighting, fish sighting in cow creek, Robin sighting, elk tracks, possible bear track sighting deer scat chipmunk

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Cow creek runs through unit flow moderate. Some large wood in creek. Partial shading gone under cutting providing edges for wildlife. 4" frog seen 2 (2 1/2") fish seen, braided channel

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: Snowberry, Sagebrush, pinegrass

Soil type, quality, compaction

level(s):

Typical plants: Greenleaf cinquefoil, Thin leaf lupine, Rongpusky toes, Yarrow, wild Shasta rabbit brush water lent, Pearly sun, Green Grass, Sticky cinquefoil, Oregon checker

Steepness of slope/aspect of slope (direction it faces): _____

Landslide risk, describe: _____

Density of roads (per sq. mi): 3-3.5 mi/sq mi

Effects of livestock grazing: cow pies, cow trails,

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: Bees cons

Describe sale unit overall: Sale unit has Cow Creek ~~area~~ bisecting unit, unit has been heavily thinned & has many large old growth trees & some snags. No Aspen, Sprouts, ~~or~~ Aspen snags or Crowsnest. S of 2850. 3 sprouts seen on edge of 2850

Surrounding area: ☐ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency _____ ☐ private land, ownership _____

☐ riparian (specify): _____

☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Per camera 428, heading 429 Tire in creek

Photo #s & descriptions: 430 cow creek 06 PP w/ heavy thinning & 06 logs 431 lots of wood & logs in cow creek 432 206 PP Snags 1 06 PP 433 pileated foraging on 06 PP Snag 434 06 PP 435 435 unid'd yellow flower 436 unid'd blue-purple flower 437 Willow 438 60.7" 06 PP 439-450 attempt to catch photo of fish 452 typical view facing N @ S end of unit 454 typical view

Over 1' riparian zone seen S of 2850

Subjective evaluation for LOS 'sale unit' So. of 347, sections 36 & 42, E of 2810-478 rd, W of 480 rd along upper Middle Fork Rattlesnake Creek: Another culture would revere this rock "council" hollow as a sacred place & never log it. That's our recommendation: DROP IT! It's a unique habitat for wildlife. ^{see margins 2-}

Recommendations

for sale unit: For 347: Drop the

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE

June 11th, 2019 ^{Also notes for}

NTL FOREST Ulaheer

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT 347 CT30 E/W of 2820-480,

SURVEYOR'S NAME Yann C.

section 36

North half above rd. 842, only NOT the So. half, which has been logged to death & has no "excess" mature trees & hardly any OG trees.

Subjective evaluation of area:

Has some of the highest quality old growth habitat I've seen yet, but the FS does not rate unit 347 as LOS. How much other LOS is hidden in sale units not called LOS? This is the most natural, nicest old growth mature stand I've seen so far except for

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags 2 LOS unit - leave it alone!

☒ Old growth/mature forest:

Average tree size in "dbh":

Examples of large tree diameter: 28.5" PP, 27.2" GF, 22.2" GF, 34.3" PP, 35.6" PP, 36" DF

of old growth trees per acre: 32 OG live PS, 1 OG live GF, w/ 12 OG PP snags & 1 OG GF snag, & 3 OG PP logs & 1 OG GF log.

☒ Previously logged approx. age of trees in OG PP stumps, OG DF stump

Describe marking to cut: None

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☐ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engelman

☐ Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): mostly PP seedlings in openings, w/ some GF in shade

Quality and type of canopy closure, %:

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected:

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Western Tanager heard, Red breasted nuthatch, Hermit thrush, woodpecker bark scaling typical of white headed & black backed, smaller woodpecker & possible N. Flicker foraging, white breasted nuthatch heard, Native Bumblebee, red & black ants, bear foraging, mixed songbird w/ long song, deer tracks, chipmunks,

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: None seen

Riparian buffers? Adjacent steep slopes?

NA

Unusual plants? None seen.

Plant community types: Pinegrass

Soil type, quality, compaction

level(s): Dark brown loamy

Typical plants: OR grape, Silky Lupine, Hawk weed, Arnica, Thinleaf Lupine, Larkspur, OR Checkermallowroot, A. sp., Lomatium (Dissectum?), Fireweed,

LOS & CTSO So. of 347 notes: E/k tracks, OG PP, mostly same plants as 347 plus yarrow, P. n. yarrow, Phil.
Photos: Hermit Thrush, chipping sparrow, bear foraging, m. DF, Snowberry, some GF Mt. Mahogany, Junco
Large trees: 35.7" PP, 33.5" PP, 35.7" PP, 28.2" OG DF, OG PP stumps, 30.7" DF, wild Rose, choke cherry,
Steepness of slope/aspect of slope (direction it faces): 347 has a short E-aspect slope pitch
in the NW corner in the middle; otherwise mostly flat
Landslide risk, describe: N/A / LOS unit S. of 347: wildlife count: Steller's jay
Density of roads (per sq. mi.): Los Private road,
Effects of livestock grazing: Photos sent: rock formation hollow wonderland w/ OG DF & PP;
Not significant. Starts at 16:21, 16:27 - bare tops of 4 OG PPs in rock hollow
Evidence of Animal Damage Control 16:35 - Tops of OG PPs in rock hollow area (16:45) an
activities: None seen. / 16:41 - a tangle of OG DF & PP logs in OG count area (LOS) OG DF snap
Evidence of bait stations for hunting, hunters' camps: a hunters' camp w/ deer rack, table,
chair, & cleared space in 347, SW end near rd. 476-482
Mining _____ Herbicide spraying _____ Gopher trappings/poison _____ Other: _____
Exotic weeds seen: None seen
Recreational use: a hunters' camp in the SE end by intersection of 480 & 482 rds. 15:12
Describe sale unit overall: The North end of 347 (N of rd 482) is nice mature old growth
stands & should be dropped; the SE end of 347 is slashed from past logging w/ more stumps
than live trees & should be only sparingly noted or dropped. Little forest structure left in
Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland / LOS Photos
☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: / Sent 16:56 → =
☒ public land, agency FS ☐ private land, ownership None / LOS in rock hollow
riparian (specify): None seen / 17:01 - base & top of a 30.7" dbh OG DF
area of human habitation None
Species seen adjacent to sale unit:
Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest
holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn
if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy
mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different
areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic
weed locations. Identify camera used. Karmis Canon 13:41 Survey heading
Photo #s & descriptions: 13:42 - already variable density w/ OG PP & full-crowned m. GF
13:44 - Top of an OG PP snap (13:50) me standing next to a 29.2" dbh OG Grand fir
13:51 - healthy PP overstory & GF midstory (13:54) a large OG GF log
13:55 & 13:56 - Bark scaling on the OG PP snap in 13:44 (13:56) Oregon Grape flower
13:58 - many m+OG PP snaps near the ridge top on W. side (14:01) Boundary sign
14:02 - smaller woodpecker or Northern Flicker foraging w/ bark scaling on an OG PP snap
14:08 - an OG PP grove (14:10) me sitting on another OG Grand fir log
14:15 - me sitting on a big long OG PP log (14:19) 6 OG PP snaps in the OG count
14:26 - tops of 6 OG PPs in OG count (14:31) a big open grown OG PP = 35" dbh
14:34 - an OG ske GF snap (14:35) woodpecker roost holes at the top of the OG GF snap
14:51 - 4 OG GF logs & 1 m GF log (14:52) Bear foraging in an OG GF log
14:56 - 7 OG PP stumps near open rd 2810 - 476 at N. end - likely illegal firewood cutting
15:03 - tops of overstory line OG PPs & OG PP snaps w/ some midstory Grand fir
15:05 - top of a big OG PP snap (15:06) large fire scar in base of OG PP snap in 15:05
15:12 - a hunters' camp deer rack w/ 3 yellow ropes hanging down
(2) 15:19 - Road closure sign for rd 480 "for vegetation, soil & watershed protection, get the FS would
reopen this road"
15:30 (2) - Top & base of 36" OG DF w/ full green crown (15:32) a large OG DF stump w/ clip board
15:37 - already logged wide open in so. end of 347, w/ no excess density (mature)
15:44 - " tip ti - typical view (End of 347 photos)

Recommendations
for sale unit: *Prof.*

*Unlikely that younger trees
are competing w/ O.G. 6/c
of B.A. (S somewhat low).*

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE *6/20/19*
NTL FOREST *Malheur*
DISTRICT *Emigrant*
PROJECT *Rattlesnake*
UNIT *LOS in T 21S, R 32E, Q 22*
SURVEYOR'S NAME *Adam*

Subjective evaluation of area: *Somewhat sad unit as half of it is a plantation.
It was good to see the elk here.*

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags
☐ Old growth/mature forest:

Average tree size in "dbh": *12-14"*

Examples of large tree diameter: *30" PP, 33" PP, 35" PP, 37" DF, 33" PP*

of old growth trees per acre: *20 O.G. PP, 1 PP log, 2 snags. Count down
in northern end, number of O.G. only decreases as you go south.*

☒ Previously logged approx. age of trees *100 (many young to mature PP stumps)*

Describe marking to cut: *none*

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Skid trail, stumps, piles of cut logs

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ 2 Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ 4 Mt. Mahogany ☒ 3 Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): *some PP & Juniper, few aspen & a handful of DF*

Quality and type of canopy closure, %: *65% canopy cover w/ O.G. & mature PP
& a PP snag, variable height*

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe: *no evidence of having been mixed
conifer*

% of defoliation - species and age of trees affected: *none seen*

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): *two elk sighted, deer scat, elk scat,
woodpecker forage on PP stump, squirrel burrows, sap sucker forage
on PP snag, bear forage on PP snag, owl feather found, woodpecker
heard.*

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: *Cow Creek is in unit. Intermittent, lacking
definition on bank, poorly shaded, no cobble, some downed wood.
Couples raft nearby. It looks like it rarely runs.*

Riparian buffers? Adjacent steep slopes?

needs buffer

Unusual plants? *none*

Plant community types: *pine grass, elk sedge, snowberry*

Soil type, quality, compaction

level(s): *Somewhat moist loam, loose compaction, w/ a lot of partially decayed matter*

Typical plants: *Yarrow, wood groundsel, Oregon grape, hawk weed, wild onion, chokecherry
leaf bone, checker mallow, rat tail, solomons seal, Prairie will, rabbit brush, redbud, alders*

Steepness of slope/aspect of slope (direction it faces): 20-25° ESE facing
gradually wrapping to SE mid unit & flattening to 10°-20° in SE pocket

Landslide risk, describe: none

Density of roads (per sq. mi): 3.5-4 miles of road

Effects of livestock grazing: some tracks near creek, cow pies, ~~cow~~ trail

Evidence of Animal Damage Control

activities: none

Evidence of bait stations for hunting, hunters' camps: none

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: none

Recreational use: none

Describe sale unit overall: Northern half is PP dominant many mature & young PP, some OG seedlings, somewhat openly spaced w/ few logs & snags. South half is much more open & plantation like w/ many young to mature PP stumps, probably 4D B. A.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency

☐ private land, ownership

☒ riparian (specify): aspen unit & cow creek

☐ area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

3. Header

4. typical view looking down at cow creek
a 10° slope w/ wide spaces between OG PP,
matt PP log & snag, & mature PP stumps

5. dry cow creek

6. old skid road

7. adam w/ 35" PP

8. squirrel burrows around base of OG GFDF

9. sapsucker forage on PP snag

10. bear forage on PP snag

11. typical view of widely spaced young to mature PP
PP snag

12. aspen s (dark bark, not healthy looking)

13. aspen snag

14. OG PP stump

15. intermittent cow creek (no bank destruction)

16. typical view of open area w/ some mature,
young, & seedling PP & PP stumps & logs

75. slash pile in cow creek

76. at the mid point between the

North & South PP at the unit, the
forest transitions into a plantation

Here, 10 PP stumps are visible

In a quarter acre

78. adam on OG PP log

SSW facing to slopes

Recommendations

for sale unit: DROP

very high quality habitat for
earr, cougar, elk, & more.

interest to log due to rocky
outcrops & cliffs throughout

Subjective evaluation of area:

LEAGUE OF WILDERNESS
DEFENDERS

BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE 6-20-19

NTL FOREST MALHEUR

DISTRICT EMIGRANT

PROJECT RATTLESLAKE

UNIT LOS enhance; T205 R32 1/2 E,

SURVEYOR'S NAME Cooper

sec 3:

mostly E

00 R2 2855

395

Roadless area 7 Never logged Plantation Many old growth logs and snags

X Old growth/mature forest: same areas probably never logged. Very mixed species

Average tree size in "dbh": 12"

Examples of large tree diameter: 15" GF, 28" PP, 23" PP, 28" Juniper, 28" PP

of old growth trees per acre: live PP 6, live GF 1, GF logs 4 PP logs 3

X Previously logged approx. age of trees 100-200

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: 1 ✓ Ponderosa Pine

3 ✓ Juniper Doug Fir Western Larch 3 Grand Fir Lodgepole Pine Engelman

Spruce Subalpine Fir Yew 4 ✓ Mt. Mahogany Aspen ✓ Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other: chokecherry

Tree seedlings (species, quantity): mixed, PP, GF & Juniper

Quality and type of canopy closure, %: variable but low due to patchiness of rock
outcrop, 10-30%

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe: huge snags + logs, lots of downed wood,

large trees in marginal places, &

% of defoliation - species and age of trees affected: a fair PP defoliated, lots

of natural mortality from windthrow

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): squirrel middens, chickadee heard, elk scat,
elk skeleton, rabbit scat, cougar scat, multiple fresh bear scats
multiple bear forage (horn apart logs)

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: rocks seem to hold water for chokecherry &
large fish.

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: snowberry, elk sedge,

Soil type, quality, compaction

level(s): loamy, dry, ashy

Typical plants: Yarrow, western groundsel, false Solomon's seal, chokecherry, Oregon grape
paintbrush, Ribwort, heart moss, W. wood vine, Pinelimo, Arctostaphylos, gooseberry

Steepness of slope/aspect of slope (direction it faces): mostly flat, slight S facing

✓ Landslide risk, describe: boulders + rocky slope could become unstable

Density of roads (per sq. mi): 2 mi (open) 4 mi (incl. closed)

Effects of livestock grazing: none none seen

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

Mining	Herbicide spraying	Gopher trappings/poison	Other:
--------	--------------------	-------------------------	--------

Exotic weeds seen:

Recreational use:

Describe sale unit overall: Rocky ridge runs N-S thru middle of unit. Extensive

Savannah wood of all sizes incl. stacked logs. Many burrowden spots among rocks.

Openings with mahogany, as juniper, windbroken structural or canopies, hiding cover.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☒ never logged area ☐ canyon *Scrub*

roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland

high desert seedlings ☒ pine plantation clear cut other cut:

☒ public land, agency FS ☒ private land, ownership Perry Meadows to Yang of

✓riparian (specify): Cow Creek 1/4^{mi} to west

area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

2201: (old bear scat)
2202: three clumps of bear scat close together

2201: 100% 500

2208: large ant. bear scat

2199: rocky approx 06 ft, pine, juniper

2197: tops of 11 showing broken/shrivel
2198: nearly 06 flr broken top

21962 truck 05-513, running and loaded

2194: 2195: 2196: 2197: 2198: 2199: 2200: 2201: 2202: 2203: 2204: 2205: 2206: 2207: 2208: 2209: 2210: 2211: 2212: 2213: 2214: 2215: 2216: 2217: 2218: 2219: 2220: 2221: 2222: 2223: 2224: 2225: 2226: 2227: 2228: 2229: 2230: 2231: 2232: 2233: 2234: 2235: 2236: 2237: 2238: 2239: 2240: 2241: 2242: 2243: 2244: 2245: 2246: 2247: 2248: 2249: 2250: 2251: 2252: 2253: 2254: 2255: 2256: 2257: 2258: 2259: 2260: 2261: 2262: 2263: 2264: 2265: 2266: 2267: 2268: 2269: 2270: 2271: 2272: 2273: 2274: 2275: 2276: 2277: 2278: 2279: 2280: 2281: 2282: 2283: 2284: 2285: 2286: 2287: 2288: 2289: 2290: 2291: 2292: 2293: 2294: 2295: 2296: 2297: 2298: 2299: 2300: 2301: 2302: 2303: 2304: 2305: 2306: 2307: 2308: 2309: 2310: 2311: 2312: 2313: 2314: 2315: 2316: 2317: 2318: 2319: 2320: 2321: 2322: 2323: 2324: 2325: 2326: 2327: 2328: 2329: 2330: 2331: 2332: 2333: 2334: 2335: 2336: 2337: 2338: 2339: 2340: 2341: 2342: 2343: 2344: 2345: 2346: 2347: 2348: 2349: 2350: 2351: 2352: 2353: 2354: 2355: 2356: 2357: 2358: 2359: 2360: 2361: 2362: 2363: 2364: 2365: 2366: 2367: 2368: 2369: 2370: 2371: 2372: 2373: 2374: 2375: 2376: 2377: 2378: 2379: 2380: 2381: 2382: 2383: 2384: 2385: 2386: 2387: 2388: 2389: 2390: 2391: 2392: 2393: 2394: 2395: 2396: 2397: 2398: 2399: 2400: 2401: 2402: 2403: 2404: 2405: 2406: 2407: 2408: 2409: 2410: 2411: 2412: 2413: 2414: 2415: 2416: 2417: 2418: 2419: 2420: 2421: 2422: 2423: 2424: 2425: 2426: 2427: 2428: 2429: 2430: 2431: 2432: 2433: 2434: 2435: 2436: 2437: 2438: 2439: 2440: 2441: 2442: 2443: 2444: 2445: 2446: 2447: 2448: 2449: 2450: 2451: 2452: 2453: 2454: 2455: 2456: 2457: 2458: 2459: 2460: 2461: 2462: 2463: 2464: 2465: 2466: 2467: 2468: 2469: 2470: 2471: 2472: 2473: 2474: 2475: 2476: 2477: 2478: 2479: 2480: 2481: 2482: 2483: 2484: 2485: 2486: 2487: 2488: 2489: 2490: 2491: 2492: 2493: 2494: 2495: 2496: 2497: 2498: 2499: 2500: 2501: 2502: 2503: 2504: 2505: 2506: 2507: 2508: 2509: 2510: 2511: 2512: 2513: 2514: 2515: 2516: 2517: 2518: 2519: 2520: 2521: 2522: 2523: 2524: 2525: 2526: 2527: 2528: 2529: 2530: 2531: 2532: 2533: 2534: 2535: 2536: 2537: 2538: 2539: 2540: 2541: 2542: 2543: 2544: 2545: 2546: 2547: 2548: 2549: 2550: 2551: 2552: 2553: 2554: 2555: 2556: 2557: 2558: 2559: 2560: 2561: 2562: 2563: 2564: 2565: 2566: 2567: 2568: 2569: 2570: 2571: 2572: 2573: 2574: 2575: 2576: 2577: 2578: 2579: 2580: 2581: 2582: 2583: 2584: 2585: 2586: 2587: 2588: 2589: 2590: 2591: 2592: 2593: 2594: 2595: 2596: 2597: 2598: 2599: 2600: 2601: 2602: 2603: 2604: 2605: 2606: 2607: 2608: 2609: 2610: 2611: 2612: 2613: 2614: 2615: 2616: 2617: 2618: 2619: 2620: 2621: 2622: 2623: 2624: 2625: 2626: 2627: 2628: 2629: 2630: 2631: 2632: 2633: 2634: 2635: 2636: 2637: 2638: 2639: 2640: 2641: 2642: 2643: 2644: 2645: 2646: 2647: 2648: 2649: 2650: 2651: 2652: 2653: 2654: 2655: 2656: 2657: 2658: 2659: 2660: 2661: 2662: 2663: 2664: 2665: 2666: 2667: 2668: 2669: 2670: 2671: 2672: 2673: 2674: 2675: 2676: 2677: 2678: 2679: 2680: 2681: 2682: 2683: 2684: 2685: 2686: 2687: 2688: 2689: 2690: 2691: 2692: 2693: 2694: 2695: 2696: 2697: 2698: 2699: 2700: 2701: 2702: 2703: 2704: 2705: 2706: 2707: 2708: 2709: 2710: 2711: 2712: 2713: 2714: 2715: 2716: 2717: 2718: 2719: 2720: 2721: 2722: 2723: 2724: 2725: 2726: 2727: 2728: 2729: 2730: 2731: 2732: 2733: 2734: 2735: 2736: 2737: 2738: 2739: 2740: 2741: 2742: 2743: 2744: 2745: 2746: 2747: 2748: 2749: 2750: 2751: 2752: 2753: 2754: 2755: 2756: 2757: 2758: 2759: 2760: 2761: 2762: 2763: 2764: 2765: 2766: 2767: 2768: 2769: 2770: 2771: 2772: 2773: 2774: 2775: 2776: 2777: 2778: 2779: 2780: 2781: 2782: 2783: 2784: 2785: 2786: 2787: 2788: 2789: 2790: 2791: 2792: 2793: 2794: 2795: 2796: 2797: 2798: 2799: 2800: 2801: 2802: 2803: 2804: 2805: 2806: 2807: 2808: 2809: 2810: 2811: 2812: 2813: 2814: 2815: 2816: 2817: 2818: 2819: 2820: 2821: 2822: 2823: 2824: 2825: 2826: 2827: 2828: 2829: 2830: 2831: 2832: 2833: 2834: 2835: 2836: 2837: 2838: 2839: 2840: 2841: 2842: 2843: 2844: 2845: 2846: 2847: 2848: 2849: 2850: 2851: 2852: 2853: 2854: 2855: 2856: 2857: 2858: 2859: 2860: 2861: 2862: 2863: 2864: 2865: 2866: 2867: 2868: 2869: 2870: 2871: 2872: 2873: 2874: 2875: 28

2192: skeleton - 6/12
2193: showing skull size

21/12/92 : skeleton - 21/12/92

2017: unknown frequency
2016: bottom

21:00: unknown broadcast, top
Average in first half

2189: 6812
2190: 6812

1187 48" fir snag

86 = 100% of 100 = 100

85: Typical view of edge of unit

Armen PowerShot

2203 - Closer up of one of the 7 insect mounds
2204 - Fresh plicated forage
2205 - Extensive, stretched downed road.
2206 - boundary area, flycatcher
2207 - W of yellow edge: M.F.H.
2208 - torn up bag
2209 - stretched bag in basking area
2210 - Broken top jumper
2211 - extensive forage on P. shag
2212 - Bear forage on bark

Recommendations

for sale unit: Drop

Cannot enhance LOS w/ logging -
Unstable slopes.

#100' Buffer for creek +

spring/seep. Fence out cattle

Subjective evaluation of area:

Awesome! a lot packed into a moderate area.
Prob great for diversifying species/gene pool - dry + moist + intermixed
fun to explore, idyllic streamside path.

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest:

Average tree size in "dbh": 12" - even aged mature, w/ scattered >21"

Examples of large tree diameter: 24" PP, 22" PP

of old growth trees per acre: not enough to count.

✓ Previously logged approx. age of trees 150-200

Describe marking to cut: none

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

cables, skid trails up hill over rocks

Mixed conifer, specify species and number in descending order of prevalence: 1 ✓ Ponderosa Pine

2 ✓ Juniper ___ Doug Fir ___ Western Larch ___ ✓ Grand Fir ___ Lodgepole Pine ___ Engleman
Spruce ___ Subalpine Fir ___ Yew 3 ✓ Mt. Mahogany ___ Aspen ___ Willow ___ Alder

___ Shasta Red Fir ___ Sugar Pine ___ White Pine ___ Incense Cedar ___ other: ASH Chokecherry

Tree seedlings (species, quantity): mostly PP, some juniper + mt mahogany

Quality and type of canopy closure, %: 10-35%, non-continuous canopies

slightly shadier by stream

___ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe:

% of defoliation - species and age of trees affected: lower limb mortality on Y PPs

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): large elk scat, squirrel midden, woodpecker seen foraging

chipmunk seen, mid-grass ground nest found, burrows, elk feces,
caterpillar nests, possible bear forage, coyote or bobcat scat,

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: soldier creek is SE edge of unit, riparian

area w/ running water, some areas of multiple channels, usually shady,

small, medium cobbles, gravel, boulders, some logs, some fall

woody debris, willow + chokecherry. Also - seep/spring near S corner

Riparian buffers? Adjacent steep slopes? entire extent stream is

no buffer! deserves one. Rocky steep slope

Unusual plants?

Plant community types: sagebrush, snowberry, bitterbrush,

Soil type, quality, compaction

level(s): loamy, in bare areas, ashy.

Typical plants: lupine, gooseberry, ceanothus, oregon grape, strawberry, yarrow, columbin,

strom groundsel, chequer mallow, cineroid meadow rue miners, lettuce, false Solomon's seal

DATE 6-19-2019

NTL FOREST MALHEUR

DISTRICT EMIGRANT

PROJECT RATTLENAKE

UNIT LOS enhance T21S R32E sec

SURVEYOR'S NAME Cooper

16, 17
20, 21

↓
south of
2820507
NW 3E
Soldier Cr.

← pine tree, arnica, rabbit brush
salsify, spleenwort

Steepness of slope/aspect of slope (direction it faces): 30° E facing - steep + rocky

☒ Landslide risk, describe: land risk of sedimenting up creek or letting rocks loose

Density of roads (per sq. mi): open, 1.5 mi not closed, 4.5 mi

Effects of livestock grazing: campfires, trail near stream, possible
weeding of riparian shrubs

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen: none seen

Recreational use: none seen

Describe sale unit overall: East slope down to riparian area of Soldier's Creek
high habitat value due to riparian area, rocky areas, and despite general
lack of variability in tree young-mature ponderosa stands. Seeps,

Surrounding area: ☐ contiguous forest ☒ high-graded forest ☐ never logged area ☒ canyon opening

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland diverse

☐ high desert ☐ seedlings ☒ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☒ private land, ownership 2 mi to south

☒ riparian (specify): Soldier Creek

area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used!

Photo #s & descriptions:

2135: log over stream, photo
2134: 3
2133: barren area
2132: barren area
2131: barren area
2130: barren area
2128: barren area
2127: barren area
2126: barren area
2125: barren area
2124: barren area
2123: barren area
2122: barren area
2121: barren area
2120: barren area
2119: barren area
2118: barren area
2117: barren area
2116: barren area
2115: barren area
2136: barren area
2137: barren area
2138: barren area
2139: barren area
2140: barren area
2141: barren area
2142: barren area
2143: barren area
2144: barren area
2145: barren area
2146: barren area
2147: barren area
2148: barren area
2149: barren area
2150: barren area
2151: barren area
2152: barren area
2153: barren area
2154: barren area
2155: barren area
2156: barren area
2157: barren area
2158: barren area
2159: barren area
2160: barren area
2161: barren area
2162: barren area
2163: barren area
2164: barren area
2165: barren area
2166: barren area
2167: barren area
2168: barren area
2169: barren area
2170: barren area
2171: barren area
2172: barren area
2173: barren area
2174: barren area
2175: barren area
2176: barren area
2177: barren area
2178: barren area
2179: barren area
2180: barren area
2181: barren area
2182: barren area
2183: barren area
2184: barren area
2185: barren area
2186: barren area
2187: barren area
2188: barren area
2189: barren area
2190: barren area
2191: barren area
2192: barren area
2193: barren area
2194: barren area
2195: barren area
2196: barren area
2197: barren area
2198: barren area
2199: barren area
2200: barren area

- * The FS used to recognize that the last old growth stands needed to be protected from logging (e.g. the FS "OG habitat-Do Not Cut" signs & Forest Plan prohibition on logging DOGS....
- * This was fun to explore in the West-end old growth & rock formations - lots of wildlife sign.

Recommendations

for sale unit: NCT only up to

8-9" dbh or DROP

This is a DOG, which is not supposed to be subject to regularly

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE June 10th, 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake off rd 2820-348

UNIT 40 CT DOG sections 26 & 35 Waf

SURVEYOR'S NAME Jaren C. rd 499

Subjective evaluation of area: Scheduled harvest, which the Rattlesnake sale is.

Looks like this has been logged before, as there's a logging access road, skid trails, & it's lacking abundant old growth. Also there's stumps - m-OG fir - large OG GF stumps.

Roadless area ☐ Never logged ☐ Plantation ☒ Many old growth logs and snags

☒ Old growth/mature forest:

Average tree size in "dbh": Most density = < 9" dbh

Examples of large tree diameter: 31.5" DF, 26.6" PP, 32.9" PP, 26" GF (OG), 26.6" GF, 27.4" GF, 27.9" GF

of old growth trees per acre: 7 OG PP's, 5 OG GF's, 2 OG DF's, w/ OG snags: 2 PP, 2 GF & 1 DF, & OG logs: 4 GF & 2 PP - in a narrow band near the ridge top (W side of sale unit)

Previously logged approx. age of trees

Describe marking to cut: None

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine (1 for overstory)

☐ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

☐ Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): Mostly GF w/ some PP & DF

Quality and type of canopy closure, %: Variable, w/ openings, fairly even spacing, & some y tree thickets on lower slope

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist OG line GF, area, high elevation, describe: large OG GF stumps OG DF, moisture off Cow Creek below,

East-facing slope, lots of GF seedlings & saplings

% of defoliation - species and age of trees affected:

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Hermit Thrush heard, Douglas squirrel heard,

yellow-rumped warbler heard, Mt. Chickadee heard & seen, Robins, elk tracks,

a hairy woodpecker heard, at least 3 woodrat nests in big rock overtop,

fresh Pileated woodpecker foraging, a female Western Tanager seen - 17:09-17:11

a deer & elk trail, deer scat, a male Western Tanager seen - 17:30, Redbreasted

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Cow Creek across rd 2820-499 to East

Riparian buffers? Adjacent steep slopes? N/A

small white gilled mushrooms

Unusual plants? Unidentified Penstemon Britton's head-like groundcover w/ purple blossoms - 16:25

Plant community types: Elk sedge, Snowberry,

Soil type, quality, compaction

level(s): Very rocky, clay

Typical plants: Arnica, Linckmick, "ground" lichen, Thimbleleaf lupine, Hawkweed, Dogbane,

Oregon grape, a Penstemon sp. or Monkshood?

Wildlife, cont: Sapsucker foraging, Bear foraging,

17:35 - me sitting next to a 29.1" OG GF w/ OG characteristics - bark, lower branch die-off, etc.
17:40 - A 3rd "Old Growth - Do Not Cut..." sign in the sale unit (17:47) another big OG GF stump
17:48-17:49 - a *Penstemon* sp. groundcover (17:52) Bear foraging in a m fir snag
Steepness of slope/aspect of slope (direction it faces): East aspect

Landslide risk, describe: N/A

Density of roads (per sq. mi):

Effects of livestock grazing: very simplified plant community - hardly any diversity

Evidence of Animal Damage Control

activities:

Evidence of bait stations for hunting, hunters' camps:

Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen: None seen

Recreational use:

Describe sale unit overall:

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☒ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership None

☒ riparian (specify): Cow Creek across rd. 2820-499 to East

☐ area of human habitation None

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Karen's Canon 15:30 Survey heading

Photo #s & descriptions: 15:30 "Old Growth Forest - Do Not Cut or Remove Wood From

Behind this Sign" FS sign in front of the sale unit - so why is this Dedicated old growth area planned for logging against the Forest Plan prohibition?

15:31 - an ineffective road closure on rd. 348 entering the DOG

15:39 - me hugging a 31.5" dbh OG DF (15:44) - me leaning over a large OG GF stump

15:47 OG PP w/ an OG DF & OG PP snags (15:54) another "OG Forest - Do Not Cut..." sign in the sale unit

15:56 - Typical view w/ very few OG trees - all PP (15:58) 2 line OG PP & 3 OG PP snags

16:05 - looking at the wide crown of a 32.9" dbh OG PP (16:07) Me hugging the base of the same

16:11 - an OG GF log (16:15) a large rock formation w/ a big old DF next to it 32.9" dbh OG PP

16:18 - #1 a big woodrat nest in a cavernous crevice of the rock formation,

& #2 - me standing next to the big OG DF standing against the rock formation,

16:21: 1) fresh Pileated woodpecker foraging in a Ylm GF snag & 2) 2 more woodrat nests in the rock formation (16:28) fresh & recent Pileated foraging in a m GF snag

16:31 - me sitting on an OG PP log (16:33) Tops of 2 big OG PP snags

16:39 - a lightning-struck OG DF snag (16:55) an OG GF snag w/ OG GF log

16:57 - a large OG GF stump w/ 13" long clipboard (17:28) me sitting at the base of

17:09 - 17:11 - a female Western Tanager a 27.9" dbh OG GF (left)

17:19 - Tops (green) of 2 OG GFs next to each other (17:30) a Male Western Tanager

17:21 - tops of an OG GF (left) & an OG DF (right) (20" dbh)

UG Count: OG PPS - 444, 441
OG GFs - 444, 441
OG DFs - 144, 141
OG snags - 1DF, 1GF, 3 PP, 1GF

OG logs - 1GF, 1GF, 1GF, 1PP, 1GF, 1PP, 1PP, 1PP

(the OG area)

Recommendations
for allotment location:

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE 6-10-19
NTL FOREST Malheur
DISTRICT Emmigan
Grazing Allotment NA Rattle Snake Sub
Pasture NA
Location Coordinates 43°20'49" N 120°49' W
Aspen grove
Section 28
Surveyors Names Ben Hannah
Red winged Blackbird

Subjective evaluation of area:

Roost whole in every snag. It was great seeing Red winged Blackbird

Type of Allotment Site:

Stream ☐ Spring ☐ Aspen Stand ☒ Other: ☐

Stream Conditions:

Overall Description: undefined channel, partial hardwood & conifer shading
slow moving like marsh or wetland

-Channel:

Fine sediment level: low but muddy in some places
Width vs. depth ratio: wide & shallow
Bank stability: solid
Meander or straight: straight w/ slight curves
Size of cobble: NA
Large wood: None

Signs of Livestock damage: Cow pies
Port holing

Riparian hardwoods: Aspen ☒ Alder ☐ Red Osier dogwood ☐ Willow ☒ Rocky Mt. Maple ☐
Cottonwood ☐ Other: ☐

Riparian Plants:

Exotic invasive plants:

Impoundments/livestock ponds/weirs: None seen

Spring Conditions:

Overall Description:

Trough ☐ Springbox ☐ Source Fenced off to cattle? ☐
Riparian hardwoods: Aspen ☐ Alder ☐ Red Osier dogwood ☐ Willow ☐ Rocky Mt. Maple ☐
Cottonwood ☐ Other: ☐

Riparian Plants:

Exotic invasive plants:

Signs of Livestock damage: port holes & cow pies hedging aspen sprouts & willows

Spring flow/Amount of flow:

Trough: Animal escapement device: ☐ Pipe into ground for overflow? ☐

Distance from Spring headwaters:

Extent of fencing around spring:

Aspen Stand Conditions:

of live Aspen: 20-28 # of Aspen snags 13-17 # of Aspen Logs 16-18

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Describe: Young firs interspersed w/ dying Aspen Southern stand is shaded on

Old growth/Large trees near Aspen? (>= 21" dbh) How many? Distance from Aspen? From what direction (N/S/E/W)?

Describe: 27" PP 10' from Aspen in S. Stand | 38" PP 80' away from aspen But is in N. Stand!

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Describe: No cattle enclosure fence

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe: 6 S Aspen sprouts overhanging
hedged at 3 feet Northern stand: 4 S sprouts hedged 16"-3'

12" Aspen 27" DP 17" Aspen

Coyote scat cat scat elk scat

1. fence out cattle from Aspen
stand & from stream; 2. plant
alders in areas of direct sun & remove young conifer from stand
Some NCT up to 10"

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle scat, Cattle present? Describe: _____

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: Cattle trail connecting Aspen stands, 5 cut in water, port holing, 18" - 3' hedging & some down to 6"

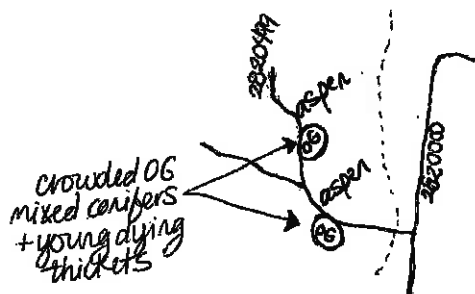
Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

938 headless. 938 Wasp nest 938 OG PP w/ 2 aspen Snags 940 OG Aspen Coys
954 Red tipped sap sucker (3 pictures) 957 loop & willow 958 Big cow pie
10:02 aspen hedged @ 2 feet 10:03 port holing in mud 10:04 nest hole
possible Red tipped sap sucker in aspen snag 10:09 willow hedged to death
@ 3'. 10:13 Think willows on creek 10:20 Conifer encroachment from W & S
10:25 Ben 29.2 PP 10:26 Crown of mature aspen 10:31 foot wide burn
in root wad 10:37 Ben 17" Aspen 10:37 crown of 17" Aspen 10:43 Aspen
sprouts stream background very little willows light shading
10:45 OG PP Coys Berhoul cropping OG PP Snags 10:47 cattle trail & overgrazing
10:52 Ben ~~OG~~ Stump & Skid trail 10:54 Whole second Aspen Stand 10:55
fire ring 10:59 nest hole ~~in~~ in Aspen snag w/ young GF behind 11:01 Aspen sprout
hedged 18" 11:06 3 OG PP Snags 11:06 typical view of Northern Aspen Stand
11:23 Typical view of N. old Growth Stand 11:25 Ben pile of OG Coys

Community indicator: Sagebrush

Typical
wild Strawberry, Thin leaf lily, sweet cicely, yarrow, fireweed, false Solomon
seal, ceanothus, native thistles, graceful pink fole, snow berry, tall butter
cup, comies



Recommendations
for sale unit:

NCT up to 8 inches dbh.
Do not cut OG or snags -
leave some wood.

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE June 10, 2019
NTL FOREST Mathew
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT Section 29 - S of Cow Creek E of rd 337
SURVEYOR'S NAME Hannah

Subjective evaluation of area: There are a lot of wonderful OG groves here but they are being crowded out by small trees, creating snags with covered in bark scaling forage. It smells amazing here and some timber is making a beautiful song.

☐ Roadless area ☐ Never logged ☐ Plantation ☒ Many old growth logs and snags ☒
☒ Old growth/mature forest: PP dominant

Average tree size in "dbh": ~18 inches dbh; mean density ~ 6-8 inches dbh

Examples of large tree diameter: 29 in PP, 34 in PP, 33 in PP

of old growth trees per acre: 12 live PP, 7 PP snags, 10 PP logs

25 live PP, 9 PP snags, 2 PP logs

☒ Previously logged approx. age of trees Y-OG

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

many stumps, area regenerating, but small trees choke out OG in some areas.

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine (1)

☒ Juniper (2) ☒ Doug Fir (4) ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany (3) ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): same PP in openings

Quality and type of canopy closure, %: 45-55% under young spindly thicket; 35-40% under OG PP.

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: historically PP dominant, almost no firs.

% of defoliation - species and age of trees affected: 10-100% lower limb loss in OG; 30-50% lower limb loss common in thickets of young PP - some self thinning.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): small woodpecker (northern flicker?) forage on OG PP snag, elk scat, deer scat, elk tracks, douglas squirrel calls, bark scaling on OG PP snags, chickadee sighting, orange butterflies, robin sighting, bear forage on log, small holes + burrows, old pileated woodpecker forage + nest holes in snag, hairybees

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Cow Creek to the north is on private property and fenced off, but appears to have an undefined channel, like a marsh, and I see a willow and canas. Standing muddy water in many places, shade is rare.

Riparian buffers? Adjacent steep slopes?

already buffered, no slopes.

Unusual plants? rare seen, mugwort

Plant community types: pinegrass, elk sedge, fescue, short sagebrush

Soil type, quality, compaction

level(s): light brown and ashy, some small rocks

Typical plants: yellow, thinleaf lupine, hawkeweed, amica, phlox, water leaf, fireweed, heartleaf arnica, oregon grape, wild onion, many bluebells, bitterbrush, dandelion.

Steepness of slope/aspect of slope (direction it faces): mild north-facing gradual slope

Landslide risk, describe: none

Density of roads (per sq. mi): ~2 1/4 mi/sq mi

Effects of livestock grazing: cowpies, barbed wire fencing, trails, overgrazing to bare soil and compaction

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: hunt camp off of 28 + 71

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: orchard grass

Recreational use: wood cutting adjacent to west

Describe sale unit overall: This unit contains lots and lots of old growth - in some places they're being killed by thickets. Small trees are defoliating and self thinning. Very dry, low plant diversity. Lots of old growth snags + logs!

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☒ private land, ownership to north and east

☒ riparian (specify): Cow Creek to north

☐ area of human habitation possible

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

① header

② 2 OG PP snags

③ 29 in OG PP

④ bark scaling on OG PP snag

⑤ spindly thicket

⑥ 8 PP snags

⑦ orange bark grove beauty shot

⑧ OG + seedlings

⑨ more bark scaling OG PP snag (x2)

⑩ spindly thicket

⑪ twin PP log + awesome rootwad

⑫ overgrazing + 2 OG PP logs

⑬ self thinning Y PP

⑭ old pileated forage + nest holes OG PP snag

⑮ fire scar in living OG PP

⑯ Cow Creek far away, private property

⑰ Cow Creek closer - still and muddy (x2)

⑱ cowpie in cow creek tributary

Recommendations
for sale unit:

DROP THIS UNIT!

**LEAGUE OF WILDERNESS
DEFENDERS**

**BLUE MOUNTAINS
BIODIVERSITY PROJECT**

27803 Williams Lane
Fossil, OR 97830

DATE June 10, 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT Section 29 - S of Cow Creek, W of rd 33

SURVEYOR'S NAME Hannah

Subjective evaluation of area: There are a lot of beautiful, orange bark, old growth Ponderosa!! Area is lacking in plant biodiversity and the soil is compacted. It feels like the next generation of trees are coming in joyfully under their parents - on its way to feeling 'whole' and it smells delicious!!

☐ Roadless area ☐ Never logged ☐ Plantation ☒ Many old growth logs and snags

☒ Old growth/mature forest: PP dominant, plentiful OG

Average tree size in "dbh": ~18-22 inches dbh

Examples of large tree diameter: 34 in PP, 29 in PP, 28 in PP, 38 in PP

of old growth trees per acre: 7 live PP, 1 PP snag, 7 PP logs (was 1 of road 337); 28 live PP, 2 PP snags, 4 PP logs (east of road 337).

☐ Previously logged approx. age of trees OG and OG

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

many OG stumps + soil compaction w/ some bare areas.

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine (1)

☒ Juniper (2) ☒ Doug Fir (4) ☐ Western Larch ☒ Grand Fir (3) ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): very PP dominant - small stands in openings.

Quality and type of canopy closure, %: 20% under 30G PP open-growing; 25-30% under even-spaced Y-M PPs.

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: historically PP dominant. Only saw one DF, 2 GFs.

% of defoliation - species and age of trees affected: 10-40% lower limb loss in denser mature PP. OG looks generally healthy green crowns, not too crowded.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): robin sightings, turkey vulture sightings, red breasted nuthatch calls, douglas squirrel calls, possible northern flicker forage, bear forage, coyote scat, old pileated woodpecker forage, nest holes in snag, small burrows, elk scat, deer and elk tracks.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Stream/wet meadow adjacent to west: very wide, very wet, full of camas and cowpies, nearby cabin. Receives very little shading. Flows into Cow Creek very, very slowly. Lots of cowpies, peavly everlasting.

Riparian buffers? Adjacent steep slopes?

already buffered, slopes fairly mild.

Unusual plants: none seen

Plant community types: short sagebrush, piñon, fescue

Soil type, quality, compaction

level(s): light brown and ashy; some rocky areas.

Typical plants: heartleaf arnica, thistle lupine, yellow hawkweed, tittertush, phlox, man blue lvs, toadflax, squirrel tail, cream maple, mistletoe, fireweed, smoky plum.

Steepness of slope/aspect of slope (direction it faces): 10-14° westfacing slope; 6-12° eastfacing slope

Landslide risk, describe: _____

Density of roads (per sq. mi): ~2 1/4 mi/sq mi.

Effects of livestock grazing: compius, cattle trails, rancher currently camped adjacent to west near cabin and hunting camp.

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: camp seen adjacent to west.

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: orchard grass

Recreational use: hunting camp adjacent to west, beer cans in unit, recent firewood cutting.

Describe sale unit overall: Unit is upon a small rise with slopes in three directions and lots of nearby water. Orange bark + OG PP are plentiful and happy, though there are also a lot of OG PP stumps in OG groves. Generally low plant diversity.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☒ private land, ownership cabin + fence to north

☒ riparian (specify): low Creek to north; stream to west

area of human habitation possibly at the cabin sometimes

Species seen adjacent to sale unit: prairie dog?

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

- ① header
- ② wetland adjacent to west - camas meadow
- ③ OG PP along northern property line
- ④ 2 OG PP logs, 3rd stump
- ⑤ 5 live OG PP, 1 OG PP snag
- ⑥ 34 in PP; crown (x2)
- ⑦ small woodpecker forage on m. PP snag
- ⑧ 6 orange bark PP
- ⑨ old pileated forage + rust holes in Y PP snag
- ⑩ recent wood cutting (x2)
- ⑪ typical view PP OG
- ⑫ slight lower limb loss in Y PP
- ⑬ gorgeous orange bark PP grove
- ⑭ 36 in PP w/ bear forage (live tree)

Recommendations

for sale unit:

Don't CT w/in RHCA

of E. Fork Rattle Snake Creek

Net up 8" is OK Thin up to 27803 Williams Lane

12" DBH only Rattle Snake Creek Fossil, OR 97830

Subjective evaluation of area:

In natural mixed conifer area including East of creek should not be down to 8" Rattle Snake Creek
50' 50' because mixed conifer is naturally dense, cumulative impact concern

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: Small patches but logged before

Average tree size in "dbh": up to 12"

Examples of large tree diameter: 31" PP 24" 27" PP 47" PP

of old growth trees per acre: 10 PP 3.6 F Snags 11 PP Cap 3 EF 1 PP

Previously logged approx. age of trees lots of M-06 PP Stumps some 06 GF

Describe marking to cut: None yet

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

06 PP Stumps, large 06 GF Stump, unregenerated skid trail

Mixed conifer, specify species and number in descending order of prevalence: X Ponderosa Pine

X Juniper X Doug Fir Western Larch X Grand Fir Lodgepole Pine Engleman

Spruce Subalpine Fir Yew X Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, % 50% closure under 06 GF young to mature

100% under 06 PP / seedling PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: large 06 GF log. Some 06 GF live 106 GF

Snags

% of defoliation - species and age of trees affected: Insected patches defoliated young

- mature PP possible pine bark beetle or pine butterfly some browsing

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/feeding, roosts,

dens, burrows, beds, hives, etc.): Hairy Woodpecker heard, possible yellow rumped

Warbler heard, Bear foraging, Pileated Woodpecker foraging,

Western tanager call, chickadee, woodpecker bark scaling,

probable nutcracker foraging, hermit thrush, Gline mallow, northern flicker

foraging, tad poles

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe: E. Fork Rattle Snake Creek - meandering

Small channel currently flowing, likely intermittent, one foot or

more wide 7" deep, No riparian hardwoods, blue cornus, sumac

Down trees in creek, Shooting Star, California Riparian Plants

Riparian buffers? Adjacent steep slopes?

50' buffer on each side

Unusual plants?

Plant community types: Pine grove, Eld Sedge, Snowberry

Soil type, quality, compaction

level(s): mostly clay possibly some loam

Typical plants: Thin leaf lupine, yellow hawk weed, gray rabbit brush, elder

mauve blue lion, brown arbutus, fireweed, arnica, currant

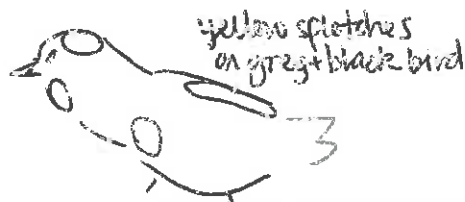
2. Ben 47" PP Steepness of slope/aspect of slope (direction it faces): Mostly flat variable aspect
up to 14° N-NE
Hannah Landslide risk, describe: NA
on log Density of roads (per sq. mi):
16 Floy Effects of livestock grazing: Cow pies, cow trails, overgrazed
Ben Evidence of Animal Damage Control
activities: None seen
Evidence of bait stations for hunting, hunters' camps: None seen

Mining _____ Herbicide spraying _____ Gopher trappings/poison _____ Other: _____
Exotic weeds seen: Orchard Grass
Recreational use: Beer can
Describe sale unit overall: Combined CTSO & LOS Sec 31 & further in + into sections
N of RD 480 Southern end SW Rattlesnake Creek NE end
Rattlesnake Creek is in middle
Surrounding area: ☒ contiguous forest ☒ high-graded forest _____ never logged area _____ canyon
_____ roadless area(s) _____ wildlife corridor _____ meadow _____ grassland _____ rocky upland
_____ high desert _____ seedlings _____ pine plantation _____ clear cut _____ other cut: _____
☒ public land, agency FS _____ private land, ownership
☒ riparian (specify): E Fork Rattlesnake Creek runs NE of sale unit + middle
_____ area of human habitation _____

Species seen adjacent to sale unit: _____
Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest
holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn
if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy
mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different
areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic
weed locations. Identify camera used.

Photo #s & descriptions: Canon 4x 2 unidentified plant downward tilt

1. Underwood
2. um wood
3. Both
4. oak formation
5. creek
5. Hannah
25" DF
6. OG PP
7. many w/ pilated
8. grazing 37. sh. Suppling
9. sold. 38. Hannah
10. OG PP Shag
11. OG PP Sing
12. OG PP Smoky
13. OG PP
14. OG PP loop
15. on count
16. area.
17. Hannah
18. Floy in count
19. flower
20. 3. Ben on stump
21. 34.4" PP Ben measuring
22. 23" GF 6 Hannah Pilated pillaging 7. large
23. burrow under log w/ clip board 8 Hannah. DF 25.7
24. 28.7" GF Ben Hannah measuring
25. 10 Shag PP 11 seedling
26. Suppling GF → PP → DF Dominance
27. 12. OG GF Shag w/ Ben
28. 13. over story PP w/ mixed under story
29. 14 Down stream creek
30. 15 up stream creek
31. 16 Meadow adjacent to creek
32. 17 Creek bottom
33. 18 woodpecker bark scaling
34. 19/20 43" PP
35. Ben measuring
36. 21 Hannah OG PP stump
37. 22/23 under cut bank on
38. meandering of bank
39. 24 shooting star
40. 25 large wood placement on
41. stream
42. 26 coyote pool w/ pen
43. 27 small pools in water fall
44. 28 Rock formation w/ Hannah
45. 29 lichen
46. 30 fresh Pilated pillaging machine
47. 31 Ben w/ MT measuring & DF



Recommendations
for sale unit: ~~Really~~ I think
this should be left to grow -
NO NCT, NO CT.

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE June 9 2019
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT section 5-SW 480 (CT 40), NW 490
SURVEYOR'S NAME Hannah NE of sp
road + str

Subjective evaluation of area: This area has been hit really hard by logging but is recovering. There's an amazing amount of woodpecker and bear foraging. Dense areas are self thinning and well... just beginning to grow up.

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: many PP GF living; many many OG stumps.

Average tree size in "dbh": 14-16 inches dbh; mean density = 6-8 inch dbh

Examples of large tree diameter: 25 in PP, 30 in PP, 20 in juniper, 24 in GF

of old growth trees per acre: 12 live PP, 5 live GF; 1 PP snag; 1 PP log, 3 GF logs.

☒ Previously logged approx. age of trees NCT and OG (very few mature stumps)

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

previous NCT - high grade, serious skid trails + compacted soil

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine ①

☒ Juniper ④ ☒ Doug Fir ③ ☐ Western Larch ☒ Grand Fir ② ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ⑤ ☐ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): PP dominant in openings; some GF + juniper.

Quality and type of canopy closure, %: 45-50% under OG mixed conifers; 35-40% under maturing mixed conifers, 35-40% under even-aged young PP.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: OG PP + GF stumps and logs - most likely PP dominant judging by large amounts PP seedlings, but firs have always been here (at least hundreds of years).

% of defoliation - species and age of trees affected: some self thinning in maturing even-aged mixed conifer (PP, GF); some young snags in dense areas; 10-40% lower limb loss at worst.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): bear forage on OG PP stump, pileated woodpecker forage on m PP snag, bark scaling on m PP snag, elk tracks, hairy woodpecker heard, deer beds, deer scat, hermit thrush heard, chipmunk sighting, deer or elk bones, dark eyed junco sighting, chickadee heard, medium to small bluebirds, yellow-rumped warbler sighting, Cassin's finch sighting.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Allegedly a stream parallels the eastern decommissioned road, but unless the road is the channel and it's currently dry, I wasn't able to find it.

Riparian buffers? Adjacent steep slopes?

none

Unusual plants? none seen (except chocolate lily)

Plant community types: pine grass, snowberry, elk sedge

Soil type, quality, compaction

level(s): dark brown and loamy; compact and rocky in some areas

Typical plants: phlox, hawkweed, sticky cinquefoil, bitterbrush, currant, buckwheat, yarrow, winter lent, thin leafed lupine, Oregon grape, snowberry, Oregon checker mallow, root.

Steepness of slope/aspect of slope (direction it faces): generally mild; 10-18° NE facing
slope down to road 480.

Landslide risk, describe: none seen

Density of roads (per sq. mi):

Effects of livestock grazing: campfires, compacted trails, barbed wire fencing, bare soil in overgrazed areas

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: possible hunt camp w/ fire ring

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen: orchard grass

Recreational use: campsite with fire ring, recent wood cutting, bear cans

Describe sale unit overall: Generally even aged mixed conifers with high level of soil compaction and bare soil. Great woodpecker habitat. Lots of game + livestock trails throughout, very dry, held huge stumps.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership none

☒ riparian (specify): east fork Rattlesnake Creek to the north and east of unit

☐ area of human habitation none

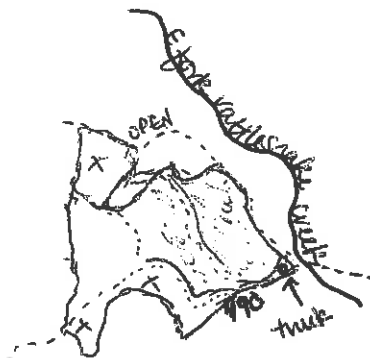
Species seen adjacent to sale unit:

*Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

- ① header
- ② bear forage OG PP snag
- ③ defol MT mahog, open conifers
- ④ OG DF log
- ⑤ pileated forage on m PP snag
- ⑥ bark scaling on m PP snag
- ⑦ OG orange bark PP (live) + PP snag + 4 OG PP stumps
- ⑧ typical view - m PP, seedlings in open
- ⑨ pileated forage (fresh!!) on m DF snag
- ⑩ GF stand w/ some self thinning + OG GF stumps (2)
- ⑪ 36 in live PP
- ⑫ more pileated forage on m GF snag!
- ⑬ lack of regen, bare soil, juniper dom seedlings
- x2 ⑭ 26 in juniper; nest hole, sapsucker forage on juniper
- ⑮ 24 in GF in OG count
- ⑯ OG PP stumps
- ⑰ typical view, some self thinning
- ⑱ some big animals jawbones - elk or cow?
- ⑲ more pileated forage on m PP snag
- ⑳ very compacted, bare soil
- ㉑ campsite w/ fire ring



Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6/9/2019
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT Sec 5 CT 40 NW of 4905 w of Spaw
SURVEYOR'S NAME Ben #Stream 5 of 480

Subjective evaluation of area: good elk security cover w/ lots of elk w/ SW of 480
of evidence of historic mixed conifer. This stand is primarily white fir &
meanin variable density Don't log Northern half as better OG habitat

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh": ☐

Examples of large tree diameter: 22.3" PP 23.5" PP 27.1" DF 34.5 GF 32.8

of old growth trees per acre: 46 PP 35.8 PP 39.2 PP 28.6

Live: 9 PP 36 GF 1 DF Snags: 4 PP 2 GF 1 DF Logs: 8 GF 1 PP

Previously logged approx. age of trees ☐

Describe marking to cut: ☐

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

GF Stumps OG DF Stumps

Mixed conifer, specify species and number in descending order of prevalence: X Ponderosa Pine

Juniper ☐ Doug Fir ☐ Western Larch X Grand Fir ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew X Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other: ☐

Tree seedlings (species, quantity): ☐

Quality and type of canopy closure, %: 15% young mature PP GF DF

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: ☐

% of defoliation - species and age of trees affected: brown headed mortality young GF

Dutchman pattern young - mature PP defoliation on 4 mortality

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): Elk tracks, hems + thunks, jacks, elk scat

deer foraging, pileated foraging, medium size burrows, deer scat

ruby crowned kinglet heard, western tanager chipping sparrow

superciliosus foraging, red breasted nuthatch, pileated heard, small woodpecker

foraging, adjacent to sale unit northern flicker

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe: ☐

☐

☐

☐

☐

☐

Riparian buffers? Adjacent steep slopes? ☐

☐

Unusual plants? ☐

Plant community types: Strawberry, pine grass, Elk sedge

☐

Soil type, quality, compaction ☐

level(s): brown mostly clay

Typical plants: Thin leaf lupine, Oregon Gray, water leaf currant, L. l. rd. w.

brodiaea, choke cherry, puff ball mushrooms, larch spore, many blue lup

Steepness of slope/aspect of slope (direction it faces): 19° SE/S

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: cow pies

Evidence of Animal Damage Control

activities: _____

Evidence of bait stations for hunting, hunters' camps: _____

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: North higher elevation more OG more evidence of OG DF/GF

Surrounding area: ☐ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland
☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____
☐ public land, agency ☐ private land, ownership _____
☐ riparian (specify): _____
☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: Karen's Cannon - 1. Survey heading 2. Ben measuring

PP 3. Chocolate Lilly. 4. Fresh pileated forage 5. Bear foraging DF snag
5. GF stump 6. Ben measuring DF 27.5 7. Ben OG GF log
8 22" tall yellow blooming umbel w/ long simple basal leaf
Red stems top leaves wavy margins and are more narrow
9 2 OG GF Snags w/ multiple smaller GF Snags 10 Ben @ Base of OG
DF snag 11. pileated foraging 12 OG 34.5 Ben 13. 32" PP Ben
14 gnarly GF snag 15. 4 mature GF Stumps 16 Ben OG DF Stump
17 Ben OG PP 46" 18 Sap sucker foraging, 19 OG PP snag 21 Top
OG PP 22. Ben OG PP 23. 5 OG PP 1 OG GF Variable density w opening
of seedlings 24 Ben OG PP 39.2 25 Ben 28.5 GF 26 Ben foraging
in GF snag 27. 7 OG PP 28, 29. Small woodpecker foraging

* orange flagging and contour signs on N end of unit possible in sec 40/5

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-10-19
NTL FOREST Malheur
DISTRICT ~~Malheur~~ Emigrant
PROJECT ~~CP/Ro/Ro Snake~~
UNIT CT30 proposed ROGSE 980
SURVEYOR'S NAME Ben/Kara E71

UCT 8-9 only
or ~~OR~~ DRO
"Sign. A. Cent. and Skid
or Commercial value
none ~~271"~~ 321"

Subjective evaluation of area: Great Smoky habitat heavily used by wood pecker
unfortunately past logging has diminished quality of OG habitat
further commercial logging further degrades OG Non commercial mining E28
DRO Roadless area Never logged Plantation X Many old growth logs and snags

X Old growth/mature forest:
Average tree size in "dbh":
Examples of large tree diameter: 27.6" GF 24.1" GF
of old growth trees per acre: Live: 23 PP 1 GF log: 3 PP Snag 24 PP

X Previously logged approx. age of trees mature OG PP
Describe marking to cut: None
Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:
skid trails

Mixed conifer, specify species and number in descending order of prevalence: X Ponderosa Pine
Juniper X Doug Fir Western Larch X Grand Fir Lodgepole Pine Engelman
Spruce Subalpine Fir Yew V Mt. Mahogany Aspen V Willow Alder
Shasta Red Fir Sugar Pine White Pine Incense Cedar other:
Tree seedlings (species, quantity):
Quality and type of canopy closure, %: mostly young some mature PP 33%

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe: Historically PP dominant but had a few
OG GF

% of defoliation - species and age of trees affected: In S area there is wide spread
defoliation of young to mature PP

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): Black Sculpin, Western tanager, Bear forager, Bee Scat
old northern flicker nest hole, white breasted nuthatch, chickadee
Red Scat, hairy wood pecker, Pigmy nutcracker, heard, Tanager, blue
night hawk, Redtail hawk, Cassin's vireo, chipping sparrow, common yellow
throat near Cow Creek

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: Cow creek adjacent to South on private land
hard wood cover & shrubs & broad wet meadow on N side &
surrounded by willows good flow big meadow adjacent w/ corn

Riparian buffers? Adjacent steep slopes?
Private land including meadow looks like reasonable buffer
Unusual plants? Some ~~Bolete~~ Bolete
Plant community types: Elder Sedge, Sagebrush near south border

Soil type, quality, compaction
level(s): Dark brown & loamy moist
Typical plants: Thin leaf lupine, sage seris, service berry, arrow leaf ~~and~~ balsam poplar

Steepness of slope/aspect of slope (direction it faces): Mostly flat mild slope

Landslide risk, describe:

Density of roads (per sq. mi): N 3.25 including 1/2 mile of closed RD

Effects of livestock grazing: Cattle bones

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: hunter camp near dry creek
RD 71

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen: NA

Recreational use: camp

Describe sale unit overall: much more OG in N half than S half a lot young
more defoliation of young to mature PP very dense w/ young
PP. N end has high quality OG habitat despite logging of OG

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon
☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland
☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☒ private land, ownership to the south

☒ riparian (specify): Cow Creek adjacent to Santa but buffer by private land
area of human habitation

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

BSS Survey sheet 8:59 Bank Sealing 9:03 Smaller wood pecker foraging. 9:06-2 big OG PP Snags 9:08 Top of 3 OG PP Snags 9:09 GFOG 9:11 OG PP Snags 9:12 Top of OG PP 9:20 Ben on all Log Ben foraging 9:21 old G PP Old Northern flicker nest hole 9:24 37.1 OG PP 9:26 PP Snag foraging N. flicker foraging possible roost hole 9:34 Smaller woodpecker foraging 9:35 Ben OG PP Snag 9:36 : Smaller woodpecker foraging 9:54 Small grove OG PP 10:00 Ben OG GF 24.1 10:02 Ben on 306 PP Stumps 10:03 Ben 2 OG PP 10:04 OG PP Snag Ben on Log 10:06 4 PP No understory 10:08 306 PP Snags Live OG PP 10:10 5 OG PP Ben measuring 10:10 35.6 OG PP Ben measuring 10:15 Top OG PP Snags 10:25 OG Snag 10:30 Ben w/ fine scan 10:41 OG PP Log Ben 10:52 hard wood over creek. 10:57 hard wood creek big meadow on N side of. Neighboring slope coming down on S. side 10:59 Bank Sealing 11:01 Cow creek meadow 11:06 Row of Cow creek @ Culvert @ RD 71

Recommendations
for sale unit:

STOPACT

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-10-19
NTL FOREST Malheur
DISTRICT Emmigrant
PROJECT Battle Lake
UNIT Sec 30 S of
SURVEYOR'S NAME Ben/Hannah

Subjective evaluation of area: Heavy partial logging with rocky soil & low density
~~no~~ Cervera no need for more NCT

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest:

Average tree size in "dbh": 10-12", mean density 5-6"

Examples of large tree diameter: 23" GF 21" GF 13" PP 24-8 PP

of old growth trees per acre: N1 No snags

X Previously logged approx. age of trees very young & very old

Describe marking to cut: patch of maturing GF marked to cut

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Stumps, NCT, soil compaction

X Mixed conifer, specify species and number in descending order of prevalence: X Ponderosa Pine 3

___ Juniper X Doug Fir 1 Western Larch X Grand Fir 1 Lodgepole Pine ___ Engelman

Spruce ___ Subalpine Fir ___ Yew X Mt. Mahogany 2 Aspen ___ Willow ___ Alder

___ Shasta Red Fir ___ Sugar Pine ___ White Pine ___ Incense Cedar ___ other: ___

Tree seedlings (species, quantity): GF PP even distribution

Quality and type of canopy closure, %: 20-30% mixed conifer maturing 50-55

young dense GF

X Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: old growth stumps GF & PP mixed seedling

light N. slope

% of defoliation - species and age of trees affected: ~~some loss of maturing dense GF but most have healthy green crown~~

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): capy scat, chipmunk sighting, deer scat, deer bed

on scat, white breasted nut hatch seen, male yellow winged

warbler, pileated forage, Douglas squirrel call, chickadee call

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: ~~none~~ Cow creek 1/3 mile North

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: Elk sedge, snowberry, fescue

Soil type, quality, compaction

level(s): Dark loam light brown ash rocky

Typical plants: Oregon grape, arnica, thin leaf lupine, hawk weed, many blue lips

phlox, yarrow, buckwheat, Dandelion, common

Steepness of slope/aspect of slope (direction it faces): Slightly North facing

Landslide risk, describe: NA

Density of roads (per sq. mi): 3 miles per sq mile

Effects of livestock grazing: cow pie

Evidence of Animal Damage Control activities:

Evidence of bait stations for hunting, hunters' camps: Deer stand ~~fire pit~~ in unit
fire pit adjacent to unit

Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: ☐

Exotic weeds seen: Orchard Grass

Recreational use: Beer bottle, fire pit adjacent to unit, deer stand

Describe sale unit overall: even aged uniform mixed conifers, maturing, some approaching old growth w/ a lot of openings heavy forest logging, low plant diversity

Surrounding area: ☐ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: ☐

☐ public land, agency ☐ private land, ownership ☐

☐ riparian (specify): ☐

☐ area of human habitation ☐

Species seen adjacent to sale unit: ☐

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage; cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

350 Survey sheet 652 Snapped PP 654 Nest hole 654 Ben 066F Stump 659 Burrow possible badger. 705 23" GF orange paint + 708 8GF Snags 7R pileated forage on 066F snag 7:18 Mt Mahogany open gray soil 7:23R unidentified shrub wedged @ N 18" alternate leaves & reddish stem. 7:25 intense previous NCT wood left. 7:28 GF w/ possible Sapsucker 7:32 plentiful stumps lack of regeneration 734 Ben 21.2" GF w/ blue mark to cut. 737 Ben 066F shredded by bears. 742 Ben 23" PP 800 fire pit & Ben con adjacent to unit

Recommendations

for sale unit: *NCT by hand*

up to 8-9" dbh only. Lots of cumulative impacts concerns re: soils, persistence of mature & large trees, plant diversity, etc.

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE *June 10th, 2019*

NTL FOREST *Malheur*

DISTRICT *Emigrant*

PROJECT *Rattlesnake*

UNIT *CT 40, Sec. 25+36, S of 2820, SE*

SURVEYOR'S NAME *Jaren P. of 244*

off 2820 242

Subjective evaluation of area: *Very low plant diversity, few mature & large trees left, already hacked nearly to death by past logging. This only needs NCTing - anything more is overkill & may threaten regeneration on this very rocky site.*

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: *Mostly young trees w/ not many fully mature & few OG large.*

Average tree size in "dbh": *NCT size - about 6" dbh* *est. 20" GF*

Examples of large tree diameter: *25.5" DF, 27.9" PP, 26.5" DF, 28.5" PP, est. 23" DF, est. 21" GF*

of old growth trees per acre: *Not enough OG structure to do a representative OG count* *est 22" G*

☒ Previously logged approx. age of trees *already severely highgraded w/ OG PP & GF stumps*

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Many Y.M. + OG fir stumps plus areas of m & OG PP stumps - already heavily logged.

☒ Mixed conifer, specify species and number in descending order of prevalence: *2* Ponderosa Pine

3 Juniper *3* Doug Fir *1* Western Larch *1* Grand Fir *1* Lodgepole Pine *1* Engelman

Spruce *1* Subalpine Fir *1* Yew *1* Mt. Mahogany *1* Aspen *1* Willow *1* Alder

1 Shasta Red Fir *1* Sugar Pine *1* White Pine *1* Incense Cedar *1* other: *1*

Tree seedlings (species, quantity): *w/ saplings: GF, PP, DF*

Quality and type of canopy closure, %: *Highly variable due to dense thickets interspersed among unregenerated skid trails*

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: *large OG Douglas firs, OG GF stumps.*

% of defoliation - species and age of trees affected: *Mostly green & limited m & GF topkill*

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): *Chipping sparrow & snowshoe hare seen - 13:18 - 13:22 photos*

a Cooper's hawk seen flying, Western Tanager heard, bear foraging, elk scat, sapsucker foraging, fresh & recent Pileated woodpecker foraging, an elk tracks, Redbreasted nuthatch heard, Golden-mantled ground squirrel seen, bird call: "Do-whit!"

a hairy woodpecker heard,
Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: *N/A*

Riparian buffers? Adjacent steep slopes?

N/A

Unusual plants? *None seen*

Plant community types: *Elk sedge,*

Soil type, quality, compaction

level(s): *Very high compaction - high clay content, light reddish brown*

Typical plants: *Silky lupine, Hawkweed, Pinedrops*

Steepness of slope/aspect of slope (direction it faces): mostly flat w/ mild North aspect slope

Landslide risk, describe: N/A

Density of roads (per sq. mi):

Effects of livestock grazing: Extremely low plant diversity - simplified plant community

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: a campfire ring in sale unit

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen: None seen

Recreational use: a user-created campsite w/ campfire ring & cut round

Describe sale unit overall: The classic outcome of over-topping the overstory & mature

trees in a higher elevation mixed conifer site w/ difficult regeneration thickets of young Grandfir surrounded by unregenerated skid trails w/ only OG PP+DF near the

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon road

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland ☐ for visuals.

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership None

riparian (specify): None seen

area of human habitation None

Species seen adjacent to sale unit: Bird songs

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Karan's Canon

Photo #s & descriptions: 13:07 - survey heading 13:13 - OG GF stump w/ clipboard

13:14 large OG PP stump w/ clipboard (13:18-13:22) snowshoe hare - last 2 show white hind foot

13:25 & 13:26 - a large burrow (active) w/ clipboard for scale under an OG DF's roots

13:31 - Sapsucker foraging on an OG PP (13:45 & 13:46) Typical views w/ very rocky ground

13:37 - me hugging a 26.5" dbh OG DF w/ full green crown & denser young GF thickets

13:48 - an unregenerated skid trail on very rocky ground (13:50) Bear foraging in a fir log

13:51 - continued unregenerated skid trails on very rocky ground (14:06) a large OG GF stump

13:55 - an OG fir stump w/ 13" long clipboard - likely a GF. w/ bear foraging

14:09 - me sitting on a large OG GF log (14:14) OG large DF stump w/ clipboard & clipboard for scale

14:15 - more extreme rockiness preventing regeneration associated OG DF log

14:19 - fresh & recent Pileated woodpecker foraging on a younger-mature GF snag

14:24 - a 21" dbh GF w/ full green crown (14:35) an elk track w/ pen for scale

(estimated) 14:24 - another big elk track w/ pen for scale

14:39

Recommendations
for sale unit:

*NCT up to 8 inches dbh
in dense areas.*

Leave maturing trees.
Leave snags for birds.

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE June 11, 2019

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT 4 corners of sections 26, 25, 35, 36

SURVEYOR'S NAME Hannah

South of 282
East of 2810

Subjective evaluation of area: Forest is riddled with old logging roads and skid trails and most of the big trees are gone. The next generation is catching up, but I imagine these are the trees intended to be cut. Low plant diversity, but woodpeckers love it here! Beware the canopy!

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: on the cusp (beauty strips by roads)

Average tree size in "dbh": 12 inches dbh; mean density = 6-8 inch dbh

Examples of large tree diameter: 25 in DF, 35 in PP, 24 in GF

of old growth trees per acre: 4 live PP + 2 live DF, 0 snags, 3 DF + 2 GF logs

☒ Previously logged approx. age of trees NCT + high grade; some mature stumps

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

intense skid trails/old log roads w/o seedlings; OG stumps bigger than living trees.

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine ①

☐ Juniper ☒ Doug Fir ① ☐ Western Larch ☒ Grand Fir ① ☐ Lodgepole Pine ☐ Engelman

☐ Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): some in openings; all PP/DF/GF present.

Quality and type of canopy closure, %: 35% under healthy young, even spaced GF; 20-25% under unhealthy Y DF; 25% under open growing OG PP.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: OG PP/DF/GF present, slope facing generally north, ~ 1/3 mile south of Con Creek, mixed conifer seedlings interspersed.

% of defoliation - species and age of trees affected: frequent defoliation in young PP/DF/GF - 30-100% loss of lower limbs. Sign of pine beetle frass and intensive self-thinning, mistletoe.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): deer scat, redbreasted nuthatch calls, pileated woodpecker forage, elk tracks, douglas squirrel sighting, chickadee calls, possible hermit thrush calls, chipmunk sighting, sapsucker forage, Raige nest hole, small and large ground burrows, deer tracks, bark scaling, possible northern flicker forage, bear forage, western tanager sighting (female).

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: None within unit - Con Creek ~ 1/3 mile to north.

There is a slight drainage paralleling the south side of road 2820, with culverts under the road but it's mostly just a ditch.

One willow seen in drainage ditch along road 2810, hedged at ~ 24 inches.

Riparian buffers? Adjacent steep slopes?

none

Unusual plants? morel mushroom

Plant community types: elk sedge, pinegrass

Soil type, quality, compaction

level(s): dark brown loam w/ duff layer.

Typical plants: heartleaf amica, thimbleleaf lupine, fireweed, yarrow, hawkweed, many blue lilies, oregon lilies, oregon grape, ceanothus, green rabbitbrush, strawberry, bedstraw, mistletoe

Steepness of slope/aspect of slope (direction it faces): mild (~4-6°), generally NE facing.

Landslide risk, describe: none

Density of roads (per sq. mi): ~4 1/4 mi/sq mi.

Effects of livestock grazing: scrambled up barbed wire, coupies, overgrazing to bare soil in some places, trails along skid trails, cow bones.

Evidence of Animal Damage Control

activities: none seen.

Evidence of bait stations for hunting, hunters' camps: none seen; empty bullet casing seen.

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: orchard grass

Recreational use: beer cans; chainsaw within earshot.

Describe sale unit overall: Equally mixed conifers on north slope, have been high graded and now there are dense thickets of defoliating young trees - remaining old growth being choked out. High bird forage area and good deer + elk sign observed.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership none

☒ riparian (specify): Cow Creek ~ 1/3 mile to north

area of human habitation none

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

① header

② 25 inch DF

③ 2 OG DF snags, 1 OG DF live

(2) ④ 35 inch PP w/ fire scar, crown

(2) ⑤ pileated forage on OG PP snag

(2) ⑥ spindly fir thicket w/ down large trees

(2) ⑦ morel mushroom

⑧ skid trail + lack of regen

⑨ bear forage on OG DF log

⑩ typical young tree defoliation

⑪ skid trail + lack of regen

⑫ frass on mature, dying PP

(2) ⑬ nest hole in M GF snag & pileated forage

⑭ healthy DF/GF stand Y-M

(2) ⑮ sapsucker forage on Y DF log

⑯ B&B nest hole in OG GF ~ 6" tall x 4" wide

⑰ deer (?) ribcage

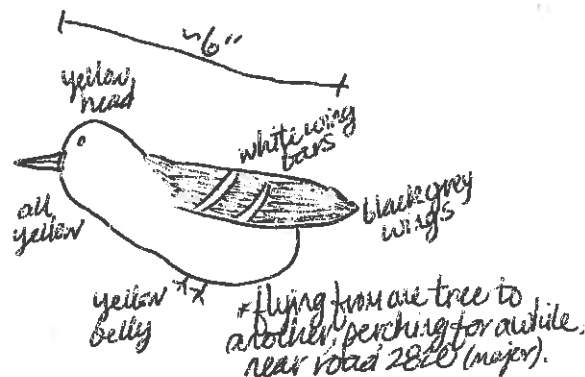
⑱ one willow on side of road 2810

⑲ (loops) adjacent plantation vbe west of 2810

⑳ smaller woodpecker forage + bark scaling on Y PP snag

㉑ pileated and bear forage on OG GF snag

㉒ sapsucker forage on Y DF log



⑳ cow bone + bare soil overgrazing
㉑ orange bark PP beauty strip by rd

So CT Small stand next to this unit & to east goes into Riparian area in Cow Creek
in unit 445

Boundary Marked Sale unit 309

Recommendations for sale unit: all OGLOS in w/in **DEFENDERS**
NCT up to 8"-9" COO of creek go **BLUE MOUNTAINS**
DROP! Don't fly in RFLA **BIODIVERSITY PROJECT**
27803 Williams Lane
Fossil, OR 97830

DATE 6-11-19
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT CT30 small 508 Aspen south of
SURVEYOR'S NAME Ban Karen Cow Creek

W. Tanager, Hermit, Western Gnatcatcher, White breasted nuthatch, Blue winged teal, 15% canopy under 200 ft, mature 80

Subjective evaluation of area: Need to allow for mortality into the future to
achieve OG status & residual mature PP are already widely
spaced. This has already been logged heavily & has lots of variable
density in wide open areas. Nothing anomalously dense w/ LOS
Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags 06
Old growth/mature forest: North 282
Average tree size in "dbh": East 28204
Examples of large tree diameter: North 28204
of old growth trees per acre: 445 live PP19 DF 2 Log: 112
and 781
sec 26
stand 25
DROP!

☒ Previously logged approx. age of trees Y/M GF stumps M PP stumps
Describe marking to cut:
Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:
Dense spindly thicket
Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine
Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engelman
Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder
Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:
Tree seedlings (species, quantity):
Quality and type of canopy closure, %: very low

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist
area, high elevation, describe:
% of defoliation - species and age of trees affected: young GF

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,
dens, burrows, beds, hives, etc.): Golden mantled ground squirrel, Elk goat, chipping
sparrow, pilated foraging, Red breasted nut hatch, Douglas Squirrel heads,
yellow pine chipmunk, M+ Chickadee, Red tail hawk, Junco

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,
creeks, rivers, lakes, ponds) describe: Adjacent to North by extensive wet meadow
w/ blue anis, tall buttercup, riparian sedge cow creek, standing
water & cow pies elk track by meadow, graceful sink pool, 2' feet deep
in poorly Oregon Swallowtail butterfly
Riparian buffers? Adjacent steep slopes?

Unusual plants? Grape Fern
Plant community types: Elk sedge, ~~Grass~~

Soil type, quality, compaction
level(s): Dark brown loamy
Typical plants: Arnica, pine drops, cumin, ~~leaf~~ leafy, hie weed, Oregon grape
Hawk weed, Thin leaf lupine, phlox, Many blue lily, Indian paint brush

1017 OG PP fused w/ rock 1133 orange lichen on rock formation 1133 Ben in
at 1134 orange lichen 1135 Boundary sign N 79 OG PP live & long 1139 1017
in unit 1140 Sale unit next to meadow 1141 Sale unit w/ log # 1143 Ben next to 1133
Steepness of slope/aspect of slope (direction it faces):

201
6 PP
my 101
an
02
2 PP
04
06 PP line
101
105
an
08 71.6
09
13 1/2 PP
101
105
115
121
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

Surrounding area: ☐ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland
☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:
☐ public land, agency ☐ private land, ownership
☐ riparian (specify):
☐ area of human habitation
Species seen adjacent to sale unit:
Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest
holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn
fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy
mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different
areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic
weed locations. Identify camera used.

Photo #s & descriptions:
W - NW - N (left)
845 Header 856 (panorama from left to right) Ben standing in PP
Stump. 857 middle 857 Right already open spacing of 11 PP
9:00 Ben standing in hollowed out OG PP (left side of panorama) 9:00 R+ side of
opening possibly outside of unit 9:05 OG Stump probable DF
9:06 Ben on OG GF log 9:10 OG GF snag Ben 9:11 Ben GF root holes + hollow
9:13 Bare ground low plant diversity from forest logging. 9:15 Ben 24.7" OG GF
full green crown shows OG characteristics 9:19 3 slash piles w/ Ben adjacent to unit
9:19 Ben in front of one slash pile 9:25 OG PP 25.7 Ben 9:37 26.7 Ben
9:39 Typical view of endless small trees 9:45 Meadow adjacent to unit to North
(left)
9:45 R+ Side of meadow 9:50 Water in creek 9:53 Two views of cow creek
Strong flow meandering tied up channels large flood plain. 9:55 pool 2' deep
9:56 pool 9:57 4th trail by meadow 9:58 meander of creek 10:00 middle of
Sale unit next to stream w/in 50' w/in R+ CA 10:01 To East 10:01 To West 10:05 Identical
plant flower 10:05 leaves over map 10:06 over meadow 10:07 creek pool 10:08
identical plant short stem berry basal leaf in meadow 10:10 OG PP in rock
10:12 a tall grape fern fuzzy stem smooth simple basal leaf serrated at tip 10:13 Grape fern
10:14 small redal pink thorned stem grape fern. 10:17 comit flower 10:18

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-11-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattle snake

UNIT New creek small LOS unit

SURVEYOR'S NAME B. Karon w/ in RHC of Cow Creek

Subjective evaluation of area:

Sec 26 N 28 20 NE 28 20 - 497 N of Aspen
NE 28 20 - 499

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☐ Old growth/mature forest:

Average tree size in "dbh":

Examples of large tree diameter: 39.2 OG PP 25" PP 23.1" DF

of old growth trees per acre: Live: PP 20 DF 2 Snags PP 111 Logs PP 24
Narrow band

☐ Previously logged approx. age of trees

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Modern - OG PP stumps

☐ Mixed conifer, specify species and number in descending order of prevalence: ☐ Ponderosa Pine

☐ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engleman

☐ Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %:

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected:

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Chipping Sparrow, Hermit Wren, House Wren, Douglas Squirrel
chipmunk, Elk tracks, Pileated woodpecker heard, Woodrat nest, porcupine
Colombia spotted frog in cow creek

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Plantation above area

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types:

Soil type, quality, compaction

level(s):

Typical plants: Elk redup, wild rose, choke cherry, Oregon checkerbloss, wild rose
currant, Hebe, Oregon checkerbloss, wild strawberry, wild rose

Steepness of slope/aspect of slope (direction it faces): _____

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: but was fence cow pen

Evidence of Animal Damage Control

activities: _____

Evidence of bait stations for hunting, hunters' camps: _____

Mining _____ Herbicide spraying _____ Gopher trappings/poison _____ Other: _____

Exotic weeds seen: Canada thistle

Recreational use: _____

Describe sale unit overall: _____

Surrounding area: _____ contiguous forest _____ high-graded forest _____ never logged area _____ canyon

_____ roadless area(s) _____ wildlife corridor _____ meadow _____ grassland _____ rocky upland

_____ high desert _____ seedlings _____ pine plantation _____ clear cut _____ other cut: _____

_____ public land, agency _____ private land, ownership _____

_____ riparian (specify): _____

_____ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: 10:22 Mature DF coming out of Rock formation 1026 31.6" OGPP

526 meadow 1028 OG PP log in stand 1029 Mikalus sp. hot pink 1030 fuzzy leaves leaves two sets of leaves

1033 OG PP live w/ live green both stream in unit both stream 1035 34.9" OGPP 1037 OG PP log in count 1038

1040 photos ~~to go~~ w/ live green both stream in unit both stream 1045 12.2" OG PP log

1048 Northern flicker foraging 1032 Ben next to OGPP 1039 Ben measuring OG PP 39.2

1050 OGPP live w/ root hole 1051 OG PP live branches looks like snag 1059

11:00 Scenic view from within LOS sale unit w/ meadow & leaning "snag" w/ live branches

11:03 B measuring a 23.1" dbh DF ~~LOS~~ 105 wood rat nest 11 OG trap & snag in

OG count area 11:15 OGPP in count area w/ clip board 11:27 panorama of LOS unit

from across meadow

Recommendations
for sale unit:

Drop leaves over heads
time to ~~regenerate~~
regenerate

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-12-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNITS 32 & 5 E & 28 along Riparian

SURVEYOR'S NAME Hannah Bon

Subjective evaluation of area: This area shows poor land management. Heavy accumulation of snags indicate for good browsing habitat

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh": 12"

Examples of large tree diameter: 29" PP 27.6" PP 21.5" GF

of old growth trees per acre: Live 1 PP 1 GF 5 young 1 PP 2 GF

☒ Previously logged approx. age of trees all ages of trees

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Skid trail stumps lack of regen.

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 10-15% Maturing Mixed Conifers

35% dense maturing GF

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: Choked limbs on ground, many stumps

% of defoliation - species and age of trees affected: Young PP 20% - 100% defoliation

Snags of all species are frequent

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Chickadee chipmunk, deer scat, elk tracks, red breasted nut hatch, burrow, Douglas squirrel

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: currently dry, has a defined meandering channel receiving partial conifer shading, channel becomes less defined further south. No colobus, no riparian hardwoods, wood in channel, small tributary flowing into Cor creek to North.

Riparian buffers? Adjacent steep slopes?

Add buffer to stream bed

Unusual plants?

Plant community types: Elk Sedge

Soil type, quality, compaction

level(s): Duff, ash, dark loam

Typical plants: ~~giant~~ quinceful pink foil, wild Strawberry, currant, Huckleberry, sticky pink leaf violet, narrow, green clustered yellow aloe, fire weed

Steepness of slope/aspect of slope (direction it faces): mild N. face

~~DA~~ Landslide risk, describe: _____

Density of roads (per sq. mi): 4.5

Effects of livestock grazing: Cow pies, cow paths

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen in unit

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: Ben con, horse shoe tracks

Describe sale unit overall: heavy cumulative impacts from logging & fire, wood cutting, trees are even aged, creek bed is dry, soil is compacted, lots of defoliation, trees are even aged, minimal diversity & game paths

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership _____

☒ riparian (specify): E. fork Rattlesnake creek to the W.

☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

551 Header 551 Bear forage on PP Stump 555 Rd adjacent to creek
556 Cow pie in flood plain 557 creek bed (dry) 559. Snags next to stream channel
559 Bark scaling on young PP Snags 559 N. Flicker forage on PP Snags 600/601 pilanted woolpecker
forage 605 Wood cutting 607 Small Stump next to stream & wood in bed 610 y/p PP
60 Bark scaling 614 Ben w/ wood cuttings on unnumbered road 618 Ben in giant skull
+ tail that is barren. 622 "Good" looking area. 626. Hannah 29" PP 634 burrow
636 Ben measuring 21.5" 66

* Big Mt Mahogany does not appear to be suffering from conifer encroachment
So don't thin all trees

Recommendations

for sale unit:

Buffer Big Red formation, already CT
DROP & NCT already
Variable density no
Random log

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-13-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattle Snake

UNIT N 2830 NSW of 334 Sec 24 S of 309

SURVEYOR'S NAME Karen Ben

Subjective evaluation of area: Nice open stand w/ a variety of tree sizes mostly
realities. Thin in what F.S. says they are trying to attain & then they come back
in 06 log & snags

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh":

Examples of large tree diameter: 27.0 DP 20.6 F 37.6 PP 22.1 GF 25.3 GF 22.2 OF

of old growth trees per acre: Live 16 DP 2 GF 1 DF log 1 PP snag 1 PP

Previously logged approx. age of trees

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Y MGF stumps, previously CT NCT prescribed not too long ago

Mixed conifer, specify species and number in descending order of prevalence: X Ponderosa Pine

X Juniper X Doug Fir Western Larch X Grand Fir Lodgepole Pine Engelman

Spruce Subalpine Fir Yew X Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 40% Mature GF 1 DF 10% M-OG GF

1 M PP opening

X Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: 25,600 some OG GF at least 1 OG GF

% of defoliation - species and age of trees affected: Thinning crown on DF GF saplings & seedlings

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Cuckoo's Nest, Hermit Thrush, probable ~~song~~ warblers, Stellers Jay, Hairy Woodpecker, house wren, western tanager, Elk Sca, Chipping Sparrow, Junco, Red breasted nuthatch, gray Jay, etc.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Interim Tent Stream Channel crossing

RD 334

Riparian buffers? Adjacent steep slopes?

50' Riparian buffer needed for stream

Unusual plants?

Plant community types: Pine grass, Snowberry, Elk sedge, Prince's Pine

Soil type, quality, compaction

level(s): High Clay

Typical plants: Snowberry, Fair Solomons seal, Oregon grape, Ceanothus

Indian Paintbrush, Willow, currant, thin leaf larch, Elk sedge, Arrowweed

Arrowweed, currant, thin leaf larch

Stretchy vine-like tree

Steepness of slope/aspect of slope (direction it faces): mid slope S/SW

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: Cow pie

Evidence of Animal Damage Control

activities: _____

Evidence of bait stations for hunting, hunters' camps: _____

 Mining Herbicide spraying Gopher trappings/poison Other: _____

Exotic weeds seen: Canada Thistle

Recreational use: _____

Describe sale unit overall: _____

Surrounding area: contiguous forest high-graded forest never logged area canyon

 roadless area(s) wildlife corridor meadow grassland rocky upland

 high desert seedlings pine plantation clear cut other cut: _____

 public land, agency private land, ownership _____

 riparian (specify): _____

 area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: Karen's camera

932 just outside sale unit + 931 Heading 930 Rock formation 938 Big Rock formation
buffer 50' 939 Lichen on Rock 941 06 PP Bark 942 Ben 32.9 944 25.8' 06 GF
947 26.70-66F 948 06 GF Log Ben 954 06 GF stump 955 06 GF Ben 31.5"
957 intermittent creek bed 959 06 GF Ben 36.5' full green crown cross GF Pl Mature + 66
10:06 06 PP Ben 42.9" 10:13 2.5' tall unshaped individual composite flowers slightly
hairy long stem elongated oval red base simple leaves underside pretty smooth. 10:16 Deeply lobed
long leaves & speckled on stem minutely hairy on underside & smooth on top
10:37 06 GF Ben Road top 10:43 Typical view w/ open M PP 10:49 Ben walking toward
06 Pl scenic view 37.6" 11:01 fresh pileated foraging in a live M GF 11:11
variable density mostly GF some PP typical view 11:14 Fresh + old pileated foraging on
old fir snag 11:17 roost hole in hollow of snag 11:21/22 M + Peony flower 11:33 Indian paint
Brush

Recommendations
for sale unit:

*Drop beaver if you
say it may not regenerate*

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-13-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Butte Snake

UNIT Sec 25 N of 2830-993 E of 2830

SURVEYOR'S NAME Jim Faren 329

Subjective evaluation of area: *cumulative impact concern already severely logged N. of Cow
cumulative soil loss of large tree structure on an*
W. of 2830-37

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☐ Old growth/mature forest:

Average tree size in "dbh":

Examples of large tree diameter: 25.3" GF 27.1" GF

of old growth trees per acre:

☐ Previously logged approx. age of trees

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☐ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

☐ Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☒ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 75% 9-m GF

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation – species and age of trees affected:

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): *Elk scat, Bark scaling, bear foraging, yellow pine chipmunk, pileated foraging & heard, Mt chickadee, Redtail, Northern Flicker*

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe:

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types:

Soil type, quality, compaction

level(s):

Typical plants: *Oregon Grape, yarrow, thin leaf lupine, Many Blue lupin, Hawk weed*

Steepness of slope/aspect of slope (direction it faces): _____

____ Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: _____

Evidence of Animal Damage Control

activities: _____

Evidence of bait stations for hunting, hunters' camps: _____

____ Mining ____ Herbicide spraying ____ Gopher trappings/poison Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: _____

Surrounding area: ____ contiguous forest ____ high-graded forest ____ never logged area ____ canyon

____ roadless area(s) ____ wildlife corridor ____ meadow ____ grassland ____ rocky upland

____ high desert ____ seedlings ____ pine plantation ____ clear cut ____ other cut: _____

____ public land, agency ____ private land, ownership _____

____ riparian (specify): _____

____ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: CT40

1441 Guroy Hurdling 1445 Bark Scaling 1500 00 GF Log 152 Ben w/ 00 GF

Key 1455 Ben 06 00 Snay 1456 Fresh Pileated foraging 1457

Fresh Pileated foraging 1458 Ben 6F Log CT30

502 Recent & fresh Pileated foraging in PP Snay 1505 Ben 25.3' GF 1507 27.1' GF
1514 - 1515 M. Flicker @ nest on 06 PP Snay 1516 PP Snay

Recommendations

for sale unit:

UCT up to 9" only

Close S-End of 729 & intersect
So it is no longer hydrologically
connected

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-17-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT 25 LOS CORRAL

SURVEYOR'S NAME

Subjective evaluation of area: Really nice & pretty, pink like doesn't need

CT possibly come UCT 8-9"

U of low
crack
7/28/30 993
mostly E of
2830329

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh":

Examples of large tree diameter: 33.6" OGP 22.2" DF 26.9" GF 27.6" GF 31.6" PP

of old growth trees per acre: 39 OGP 26 GF 1 DF 9 OGP 2 OGF

Snags 10 PP

☒ Previously logged approx. age of trees 06 PP MPP

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 25% young mixed conifer

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected:

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Elk tracks, W. Tanager, Elk scat, pileated foraging, wood ant nest, pileated call, smaller woodpecker foraging, golden mantel, Grand Squirrel

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Mod size channels, good meadows & pools,

fall buttercup, Riparian sedge 2x species, water shippers, 10' fairy, wide flood plain, couples at edge of creek, lots of honey wood

Riparian buffers? Adjacent steep slopes?

Needs full Riparian buffer except UCT by road

Unusual plants?

Plant community types: Elk sedge

Soil type, quality, compaction

level(s):

Typical plants: Arnia, Currant, Thin leaf lupine, Many blue lupine, Yarrow

Fireweed, pumkin, Oregon Grape vine drop, Black violets, Silver cholla, wild strawberry

Steepness of slope/aspect of slope (direction it faces): 20% S. facing

Landslide risk, describe: _____

Density of roads (per sq. mi): 329 become hydrologically connected, channeling sediment into

Effects of livestock grazing: cow creek

Evidence of Animal Damage Control

activities: _____

Evidence of bait stations for hunting, hunters' camps: _____

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: Orchard Grass

Recreational use: Beaver

Describe sale unit overall: lot of OG PP some OG DF & GF pinkish w/ young PP

Surrounding area: ☐ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency ☐ private land, ownership _____

☐ riparian (specify): _____

☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

1300 Under 1308 Elk tracks multiple Elk & Calves (2 photos) 1310 Grove OG PP
1311 Ben OG PP 33.6" 1314 Ben OG PP Snag 1316 OG PP Snag 1317 Canopy OG PP over story
1320 Pileated foraging 1327 Ben 26.9" GF 1330 3 OG PP Snags 106 PP 1331 Ben OG PP log
1332 30c PP Stumps 1M PP stump 1335 Top OG PP Snag 1337 Wood rat nest in Rock
1343 Ben OG GF 27.6" 1353 Sediment Channel on 329 1355 Ben in hydrology ally
connected road 329 (2 photos) 1357/1358 Viola adunca 1400 40.6 PP Ben 1401
stream w/ pools 1401 downstream 1405 large wood creating pool in creek
(2 photos) 1408 Steep fast flow 1410 Standing waves 1413 Sale unit on RT
1414 Sale unit on left 1415 50' buffer around rock formation 1416 Rock formation
1418 35.5" Ben DF 1421/1422 4.8 DF Ben 1423 pretty rock & lichen 1425 Antler
1429 Top of 2 OG PP Snags

Recommendations

for sale unit: Buffer Creek by '50'
because it is perennial creek

LEAGUE OF WILDERNESS
 DEFENDERS
 BLUE MOUNTAINS
 BIODIVERSITY PROJECT

27803 Williams Lane
 Fossil, OR 97830

DATE 6-19-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT LaHezner

UNIT 10CT Sec 26 & 23 SW of Lower Creek

SURVEYOR'S NAME Karen/Ben NE 9499

Subjective evaluation of area: Un economical to log much of unit w/ slope & young trees
Below buffer of creek

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☐ Old growth/mature forest:

Average tree size in "dbh":

Examples of large tree diameter: 26.7 GF 26.5 OG DF 36.5 PP 26.3 OG DF

of old growth trees per acre:

☒ Previously logged approx. age of trees NOTED

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

M/O GPP OG PP Stump Heavy high graded native DF Stump YMGF Stump

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☐ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☐ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 70% Y-M GF 14 PP 5% Y-M OG PP

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: Most of Oak unit is NE/E facing slope that would have more for than DF GF PP now a 6000' elevation, a few OG GF live by creek bed OG GF
 % of defoliation - species and age of trees affected: Mostly green a little YGF self thinning on S and limited DF mistletoe

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Carion V1-12, Pileated forage OG GF Spr, Elk Deer path, Elk tracks, Pileated nest hole, deer tracks, W. Townsend, Bear foraging dead breasted with hatch, r fisher, Steller's jay

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: No hardwoods but good flow

Riparian buffers? Adjacent steep slopes?

Creek needs 150' buffer of No logging in this sale unit

Unusual plants?

Plant community types: Old sedge, snowberry

Soil type, quality, compaction

level(s): Med brown lots of clay

Typical plants: Guthrie, Starflower, wild strawberry, many blue hys, OCM 2, canna, curraw, yellow, thin leaf lupen, phlox, clover, possible one or another

Steepness of slope/aspect of slope (direction it faces): NE/E facing
18° NE/E. 20° slope NE a little to E
Landslide risk, describe: Not likely
Density of roads (per sq. mi): _____
Effects of livestock grazing: _____

Evidence of Animal Damage Control
activities: _____

Evidence of bait stations for hunting, hunters' camps: _____

____ Mining ____ Herbicide spraying ____ Gopher trappings/poison ____ Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: variable density, mostly mature GF some Y M DF&P
w/ high graded, mostly green full crown, adjacent to low creek w/ no RACA diff
on map, natural for site

Surrounding area: ____ contiguous forest ____ high-graded forest ____ never logged area ____ canyon
____ roadless area(s) ____ wildlife corridor ____ meadow ____ grassland ____ rocky upland
____ high desert ____ seedlings ____ pine plantation ____ clear cut ____ other cut: _____
____ public land, agency ____ private land, ownership _____
____ riparian (specify): _____
____ area of human habitation _____

Species seen adjacent to sale unit: _____
Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest
holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn
if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy
mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different
areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic
weed locations. Identify camera used.

Photo #s & descriptions:

- 1 Ben w/ 26.7ab F 2 OG GF log OG PP log 3. Survey heading 4. Creek w/ water full
5 Ben 26.5 OG DF 6 Typical view variable density the sizes w/ rock for notation
6 24.7" OG GF Ben 7. Fresh Pileated forage 8 Younger M. to Mature canopy
9. 24.4" OG GF 10. Pileated nest hole in OG PP 11 18° NE/E slope 12 20° slope
12 36.5" PP Ben 13. Ben OG DF 26.3

W of 310 Thin only upto 6" DBH or drop bc it is thinning itself.

Recommendations

for sale unit:

meadow needs at least 100' buffer

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6-14-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Path 6 snake

UNIT 371

SURVEYOR'S NAME Kellan/John

sale unit goes up to edge of meadow

formation drop all scale unit 50' SW

of RD 300 on upper Cow Creek meadow

variable density patches likely

Subjective evaluation of area: Self thinning has already happened on upper slope creating variable density patches likely. Pine Bark Beetle on only 11 are affected

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth/mature forest: ☐

Average tree size in "dbh": >10"

Examples of large tree diameter: 30.9" GF, 28.6" GF, 24.5" DF, 28.7" GF, 23.2" GF

of old growth trees per acre: 31.7 GF No great concentration but there are

lots of snags w/ scattering of 0.5 live trees

Previously logged approx. age of trees: 06 & M. PP 06 GF

Describe marking to cut: None

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

1st stump Post high grading of 06 PP Patches of Y-M PP defoliation & mortality

Mixed conifer, specify species and number in descending order of prevalence: X Ponderosa Pine

X Juniper X Doug Fir Western Larch X Grand Fir Lodgepole Pine Engelman

Spruce Subalpine Fir Yew X Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): about GF & PP less DF

Quality and type of canopy closure, %: 65% in maturing GF & Y M PP

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: Higher up slope more evidence 06 GF than 06 DF

already high graded 06 PP likely PP/GF dominance historically 06 & stumps

% of defoliation - species and age of trees affected: young PP Defoliation & thinning on upper slope & some top kill in 06

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): U. Tanager, Cowbird, probable yellow rumped warbler, Elk Scent, Red wing Blackbird, Junco, Elk tracks, Sap Sucker foraging, Forked-billed Flycatcher, Hermit Wren, N. Flicker foraging, yellow pine sapsucker, hairy woodpecker, probable coyote

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe:

SW end of unit is adjacent Meadow of Cow Creek & needs at least 100' meadow & 150' for orchard. Cowpie next to creek.

Cow Creek @ R1 good flow in meandering channel SW to NE. Collected looking riparian plants except blue corn & creosote only

Riparian buffers? Adjacent steep slopes?

Sale unit goes up to edge of R1 HCP of Cow Creek & meadow needs 100' Buffer 150' buffer to creek

Unusual plants? picture 34. yellow butterfly tree flower, Corn B

Plant community types: Sagebrush next to meadow, Elk sedge, Snowberry

Pinus & e. Pine scrub

Soil type, quality, compaction

level(s): Clay med brown

Typical plants: Thin leaf lupine, graceful pink foil, Yarrow, Phacelia, Oregon grape, Wild rose, Frank meadow, Sticks pink foil, Lamin weed, Hawkweed, purple toad, Dog berry

sale unit goes up to edge of meadow
unit boundary is marked

Steepness of slope/aspect of slope (direction it faces): 15° SW

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: Cow pies

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: SOG RD 300 good variable density, by fairly open pretty healthy mostly PP mature forest adjacent to meadow. N of RD 300 up to elevation more as more GF & some DF. 066F line logged stream

Surrounding area: ☐ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency ☐ private land, ownership _____

☐ riparian (specify): _____

☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: Ben Gomora

1. Heading Unit 37
2. Looking into stand from SW boundary a lot of trees are approaching large tree status good diversity shrubs 3. Opening abt 40% density.
4. Ben 06 PP log
5. Green canopy
6. Proximity to meadow after snag & snag log
7. 06 PP stump
8. 06 M GF
9. Ben measuring 30.9" 06 GF
10. 06 PP snag
11. 06 DF stump w/ Ben
12. Ben 25.8" 06 DF
13. Ben w/ 06 PP snag
14. Ben 28.6" 06 GF
15. 29.1 06 GF Ben
16. Ben about to measure 28.7" 06 GF
17. Ben on log
18. Snag w/ flicker foraging
19. Top 06 PP snag
20. Ben on 06 PP log
21. Typical view of NE end of Sale Unit
22. Camp 06 GF log
23. Ben 06 GF stump
24. 06 GF
25. Ben w/ 06 PP log
26. Ben 06 PP log typical view second typical small trees
27. 06 PP snag smaller live trees.
28. Rock formation w/ chokecherry
29. Boundary of Sale unit @ edge of meadow.
30. Minulus 31. Ben w/ 06 PP log / snag
32. Boundary w/ meadow (2 photos)
34. Flower niple basal leaves & yellow buds 4 stems as (yellow) flowers 1"-1.5" tall
35. Proximity to creek w/ ~~Ben~~ flagging
36. Sale unit to meadow.
37. Scenic view of meadow
38. Cow creek crossing road in culvert

* Cattle should be excluded from the spring & creek
buffered out of unit - they're causing bank instability,
potholing, & pooping in the water... explains why no grasses growing on banks just so much annua.

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

DATE June 14, 2019
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT Sections 22+27-W of 499 S of 421
SURVEYOR'S NAME Hannah

* DROP THIS! *

DO NOT CUT LARGE TREES!
DO NOT THIN! DROP GRAZING TOO!

27803 Williams Lane
Fossil, OR 97830

Subjective evaluation of area: This unit is gorgeous and so alive! I saw fresh bear scat up the slope towards King Mountain Lookout, and though it is riddled with old logging roads, I was surprised to see remaining old growth amongst the stumps. This place is special.

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: OG PP/6F/DF

Average tree size in "dbh": 16-18 inches dbh

Examples of large tree diameter: 23 in 6F, 32 in PP, 35 in PP, 39 in PP, 39 in 6F

of old growth trees per acre: 5 live PP, 2 live DF, 1 live 6F, 1 PP snag, 1 6F snag, 2 PP logs, 1 6F log. (Spaced OG consistent throughout)

☒ Previously logged approx. age of trees NCT + OG

Describe marking to cut: rare seen, boundaries flagged.

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Log roads scattered throughout and more OG stumps than living OG.

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine 1

☒ Juniper 1 ☒ Doug Fir 2 ☐ Western Larch ☒ Grand Fir 1 ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany 3 ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): many in openings - PP dominant w/ 6F/DF.

Quality and type of canopy closure, %: 35-40% under OG PP/DF; 65-75% under dense young 6F.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: OG PP/6F/DF + seedlings on NE-facing slope w/ fire scars.

Elevation up to 6,200 feet. Cow Creek ~ 1/5 mile to east.

% of defoliation - species and age of trees affected: In dense young 6F self thinning occurs, some denser PP losing 10-30% of lower limbs. Minor defoliation - mostly green crowns.

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): golden mantle ground squirrel sighting, red breasted nuthatch calls, chickadee calls, chipmunk sighting, pileated woodpecker forage, hermit thrush calls, fresh bear scat, elk tracks & scat, pileated woodpecker calls, possible cat scat, deer scat, northern flicker calls, small & medium burrows, douglas squirrel sighting, sapsucker foraging

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Entire slope is scattered with undefined seasonal drainages that flow down into Cow Creek ~ 1/5 mile to the east. No major streambeds or running water seen, but Cow Creek is at risk of sediments from any erosion caused by logging on some very steep slopes.

Riparian buffers? Adjacent steep slopes?

Unusual plants? rare seen.

Plant community types: elk sedge, pinegrass, snowberry

Soil type, quality, compaction

level(s): dark brown loam w/ duff layer; rocky & boulder outcropping (excluded from unit)

Typical plants: heartleaf arnica, many blue lilies, currant yellow, fireweed, thinleaf lupine, Oregon grape, hawkweed, green rabbitbrush, osen mistletoes, penstemon

rock outcropping is currently flowing and buffered out of the sale.
Defined channel, medium cobble, partial conifer shading, no riparian
hardwoods, very clear water. Saw a little green frog, rushes, mint, sweet cicely.

Steepness of slope/aspect of slope (direction it faces): 16-20° NE facing slope (w/OG)

25° MAX

✓ Landslide risk, describe: erosion likely if OG root structure is lost.

Density of roads (per sq. mi): ~1 3/4 mi/sq mi. (+ 1 mile decommissioned)

Effects of livestock grazing: compiers all over, tracks on trails up the slope. I'm surprised they go up there. Minimal barren soils & no cows yet this summer.

Evidence of Animal Damage Control

activities: none seen.

Evidence of bait stations for hunting, hunters' camps: none seen.

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: orchard grass

Recreational use: King Mountain Lookout adjacent to west; beer cans.

Describe sale unit overall: Patchwork of open growing OG MC, dense thickets of firs with heavy deer, elk, bear signs, and rocky outcroppings excluded from the sale. It's along the east facing slope of a mountain & along road 499. Solid canopy closure available.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS NO private land, ownership _____

☒ riparian (specify): Cow Creek - 1/2 mile to east

NO area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

- ① heading
- ② 32 in PP gone tree; crown (x2)
- ③ typical view - open even aged w/ seedlings (in flats near road)
- ④ 35 in PP in OG count
- ⑤ fire scarred PP snag
- ⑥ pileated woodpecker forage on M GF snag
- ⑦ OG PP in unit
- ⑧ typical view - dense GF (on slope)
- ⑨ fresh bear scat!
- ⑩ undefined riparian drainage up slope
- ⑪ possible cat scat
- ⑫ another undefined drainage up slope
- ⑬ folded GF snag beauty shot w/ downed wood
- ⑭ OG PP + slashpile (26 in PP)
- ⑮ old log road thru unit
- ⑯ pileated forage (fresh!) on M GF
- ⑰ OG fir log w/ fire scar, full of pinecone pieces (x2)
- ⑱ open from heavy logging w/ 6 OG stumps
- ⑲ another old log road
- ⑳ interesting burrow under a OG log.
- ㉑ OG PP + OG logs
- ㉒ 39 in PP
- ㉓ ~25° slope in unit - landslide danger
- ㉔ OG PP snag beauty shot
- ㉕ 39 in GF near road 499
- ㉖ little green frog in buffered creek
- ㉗ buffered creek
- ㉘ view of creek, compies + mushrooms
- ㉙ creek seeps out from under outcroppi. rock
- ㉚ postholing and compies
- ㉛ only amica grows near creek from cattle overgrazing
- ㉜ bare soil/overgrazing by stream
- ㉝ sapsucker forage on M live GF

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS

BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE 6-14-19

NTL FOREST Malheur

DISTRICT Emigrant

PROJECT Bull Lake

UNIT 420

SURVEYOR'S NAME Ben Hannah

Drop for soil compaction

No young trees to replace

copying

Subjective evaluation of area:

Area has been heavily thinned/logged

___ Roadless area ___ Never logged ___ Plantation ___ Many old growth logs and snags

___ Old growth/mature forest: ___

Average tree size in "dbh": ___

Examples of large tree diameter: 19" Juniper 33" DF

of old growth trees per acre: 2 DT 12 PP 5muy 1 DF 1 PP

___ Previously logged approx. age of trees 4 M O G

Describe marking to cut: ___

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe: ___

___ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☒ Doug Fir ___ Western Larch ☒ Grand Fir ___ Lodgepole Pine ___ Engelman

Spruce ___ Subalpine Fir ___ Yew ☒ Mt. Mahogany ___ Aspen ___ Willow ___ Alder

___ Shasta Red Fir ___ Sugar Pine ___ White Pine ___ Incense Cedar ___ other: ___

Tree seedlings (species, quantity): ___

Quality and type of canopy closure, %: wide open

___ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: ___

% of defoliation - species and age of trees affected: ___

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): Pileated Woodpecker foraging, Sapsucker foraging, deer, Sand red breasted nut hawk, possible downy woodpecker, Cassin's finch, western tanager, chickadee

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: drainage into cow creek

Riparian buffers? Adjacent steep slopes?

Unusual plants? ___

Plant community types: Shrubby pinegrass

Soil type, quality, compaction

level(s): Ash layer on top, dark loam

Typical plants: Phlox, Hawk weed, duck wheat, smoke plant, three leaf lupine, Oregon grape, many blue lupine, bitter brush, pine drops

Steepness of slope/aspect of slope (direction it faces): minimal

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: many cow pies & barb wire

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: fire pits, deer stands, chittens

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: Arundo donax, Yellow dock

Recreational use: Many fire pits, deer stands

Describe sale unit overall: Area has been heavily logged & thinned.

Surrounding area: ☐ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☒ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency ☐ private land, ownership _____

☐ riparian (specify): _____

☐ area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions: Ben & Carmen

Back DP & M + Malwong 1. Acacia 2. Open growing orange
canopy 3. Pileated foraging 4. Red back jumping 5. Boulder pile
6. spind trail / drainage 7. soil disturbed by heavy machinery 8. channel of
intermittent drainage & culvert under Rd 2820 9. camp site surrounded
by 061P

Recommendations

for sale unit: drop, no need

to enhance logs

characteristics, natural

mortality & marginal soils

are enough to manage competition

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Fossil, OR 97830

DATE 6/17/19

NTL FOREST Ma/Hevr

DISTRICT Emigrant

PROJECT Rattlesnake

UNIT LOS enhance T205 R32.55

SURVEYOR'S NAME Adam / 31

Subjective evaluation of area: feels more like an intact forest Cooper (section than other sales in the area. rocky outcroppings w/ creek in the middle make this area feel protected from wind. varied & interesting.

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

☒ Old growth/mature forest: many mature trees, few over 22".

Average tree size in "dbh": 10-12" many young trees

Examples of large tree diameter: 11" GF, 18" PP, 21" PF, 24" PF, 23" PP, 24" PP, 29" PP

of old growth trees per acre: 7 PP, 5 PF, 1 fir snag, 3 logs

☒ Previously logged approx. age of trees 50-200 years high grading

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

possibly high graded stumps

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engelman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): some PP saplings, fir saplings as well

Quality and type of canopy closure, %: Varied canopy closure height. 40-50% in denser areas, some areas in north pocket w/ very low cover

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: some fire scars on OG fir, riparian area, 5,500' elevation.

% of defoliation - species and age of trees affected: witches broom in mature PF, natural mortality of young firs in dense stands

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): forage on OG stump squirrel midden & burrows, pillerated forage on fir snag, witches broom, good habitat, elk scat, rabbit scat, woodpecker heard, monarch butterfly, deer scat, sap sucker forage on juniper, chipmunk, turkey vulture, bear forage on OG PP stump, bald eagle, crow

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: flowing water somewhat meandering, Shady, no riparian shrubs evident, less silty, mainly turbid, some marshy areas & an artificial, stagnant cow pond. Rattlesnake creek 3'-5' wide, 6" deep & under. some aquatic plants.

Riparian buffers? Adjacent steep slopes?

no buffer. riparian area requires 100' buffer

Unusual plants? n/a

Plant community types: snowberry, elk sedge

Soil type, quality, compaction

level(s): ash, loose soil in north pocket, loamy near creek

Typical plants: yarrow, shooting star, oregon grape, lupine, cinque foil, silverweeds, many blue lips, paintbrush, pine drop, strawberry, clover

UC north
Carnus

Steepness of slope/aspect of slope (direction it faces): 0-10°, some rocky cliffs.
primarily East-facing.

Landslide risk, describe: _____

Density of roads (per sq. mi): 1 mile of usable/active road 2+ of overgrown/closed

Effects of livestock grazing: trampling in marshy area, artificial ponds, absence
of riparian shrubs possibly due to the stock

Evidence of Animal Damage Control

activities: n/a

Evidence of bait stations for hunting, hunters' camps: n/a

___ Mining ___ Herbicide spraying ___ Gopher trappings/poison Other: _____

Exotic weeds seen: _____

Recreational use: _____

Describe sale unit overall: both southern pocket & northern have many mature
firs northern pocket has many large OG PP, both have many fir
snags adequate forage logs fewer snags

Surrounding area: ☒ contiguous forest ☒ high-graded forest ___ never logged area ___ canyon

___ roadless area(s) ___ wildlife corridor ☒ meadow ___ grassland ☒ rocky upland

___ high desert ___ seedlings ☒ pine plantation ___ clear cut ___ other cut: _____

___ public land, agency ___ private land, ownership _____

riparian (specify): _____

___ area of human habitation _____

Species seen adjacent to sale unit: bald eagle

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

463-4- Jacked downed wood

465/6-Canopy quality

467-forage on log

468 - marshy area on rattlesnake

469-open area w/ young PP, showing

change from more dense forest to made

up of mostly firs

470-cooper measures on OG PP

471-cooper measures another

472-sap sucker forage on juniper

473-most mahogany

474-typical view of dry, open clearing

in northern pocket

475-root wad

476-large fir log

477-adam w/ rocky area

478-wood in creek

479-pond on creek (man made)

480-adam w/ OG PP snag

447-header & map

18-OG PP w/ complex structure

49-rattlesnake creek w/ shade

50-close up of creek w/ medium

& small bobbie

51-wood in creek

52-mixed conifer, good cover

53-4-unknown plants for id

155-adam w/ OG fir stump

56-forage on OG stump

57-squirrel midden & burrows

158-rocky outcropping

159-pillared forage on fir snag

60-wilds broom in PP

61-stumps by rocky outcropping

62-Slime mold

Recommendations

for sale unit:

LEAGUE OF WILDERNESS

DEFENDERS

BLUE MOUNTAINS

BIODIVERSITY PROJECT

27803 Williams Lane

Essil, OR 97830

DATE 6-17-2019

NTL FOREST MALHEUR

DISTRICT EMIGRANT

PROJECT RATTLESNAKE

UNIT T20S R32E S2E5, LOS enhance

SURVEYOR'S NAME Cooper +

Subjective evaluation of area:

uninspiring, park-like, nice cliffs, interesting geology, no unhealthy ~~chaos~~ competition

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags

Old growth nature forest:

Average tree size in "dbh": 25" GF, 25" PP, 26" GF, 31" PP, 33" PP, 48" PP

Examples of large tree diameter: non-seedling average 14"

of old growth trees per acre: Live PP = 5 Tag = 13 GF = 1

☒ Previously logged approx. age of trees 200

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

even age + size

☒ Mixed conifer, specify species and number in descending order of prevalence: 1 Ponderosa Pine

4 Juniper 2 Doug Fir Western Larch 3 Grand Fir Lodgepole Pine Engelman

Spruce Subalpine Fir Yew Mt. Mahogany Aspen Willow Alder

Shasta Red Fir Sugar Pine White Pine Incense Cedar other:

Tree seedlings (species, quantity): many PP seedlings

Quality and type of canopy closure, %: 10-50, even age + size, poor

structural complexity except a few OG PP's

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist

area, high elevation, describe: elev. 5500 ft. mixed con.

% of defoliation - species and age of trees affected: —

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts,

dens, burrows, beds, hives, etc.): woodpecker forage on downed log, Bear forage on log,

squirrel midden, deer scat, roost/nest holes, burrows

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs,

creeks, rivers, lakes, ponds) describe: want meandering creek w/ small-medium

cobble to north edge,

Riparian buffers? Adjacent steep slopes?

- rocky outcrop slopes to west

Unusual plants?

Plant community types: elk sedge, snowberry

Soil type, quality, compaction

level(s): rocky to ashy, moderately compacted

Typical plants: Oregon grape, coral mushroom, Indian plum, pine drops, gooseberry, fireweed

white yarrow, wild green, Salix, strawberry, cinquefoil, Rabbitbrush, false Solomon's seal

Steepness of slope/aspect of slope (direction it faces): flat / gentle E facing slope

✓ Landslide risk, describe: Logging near rocky outcrop could cause instability
Density of roads (per sq. mi): 2.5 active, open roads
Effects of livestock grazing: com/p's

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: thistle

Recreational use: none seen

Describe sale unit overall: mostly mature but not OG - P in some mature firs, baldery in places, barely adequate downed woodsnags for habitat + forage, OK diversity in groundcover many seedlings, high but simple

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon canopy
☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland lack of wildlife

☐ high desert ☒ seedlings ☒ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership _____

☒ riparian (specify): east fork rattlesnake creek
area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

~~1502~~
1502 - arrival
1501 - Cooper in OG PP
1500 - " "
1499 - Cooper on OG fir stump
1498 - " "
1497 - typical new or northern part
1496 - saved in burn
1495 - " "
1494 - rocky outcropping
1493 - squirrel in
1492 - rocky hill
1491 - edge on log
1490 - survey heading
- 107

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT

27803 Williams Lane
Fossil, OR 97830

DATE June 18 2019

NTL FOREST Mallamur

DISTRICT Enigrauct

PROJECT Rattlesnake

UNIT LOS - Sections 10+11, N of 232, along Coffee Creek

SURVEYOR'S NAME Hamm + Adam

*** DROP THIS! ***

steep slopes down to heavily impacted creek.

Subjective evaluation of area: Feels very wild! Lovely views from the crest and fun to travel through! One of the more intact pockets in this forest.

☐ Roadless area ☐ Never logged ☐ Plantation ☒ Many old growth logs and snags

☒ Old growth/mature forest: GF/DF/PP/JU

Average tree size in "dbh": 14-16 in dbh

Examples of large tree diameter: 44 in PP, 30 in GF, 35 in GF, 30 in PP, 37 in GF, 23 in JU, 33 in PP

of old growth trees per acre: 1 live PP, 4 live GF, 4 live DF, 2 PP snags, 5 GF snags, 4 DF snags, 2 PP logs, 8 GF logs, 4 DF logs.

☒ Previously logged approx. age of trees NCT + OG

Describe marking to cut: none seen

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

mostly fir stumps, some clear areas, some compaction on skid trails

☒ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine ☒

☒ Juniper ☒ Doug Fir ☒ Western Larch ☒ Grand Fir ☒ Lodgepole Pine ☐ Engelman

☒ Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☒ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): GF/DF dominant on N facing slope, MC PP/DF/PP/JU/MM on S slope.

Quality and type of canopy closure, %: 40-45% under OG PP/GF/DF overgrowing; 50% under young-mature dense GF.

☒ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: OG DF/GF/PP is intact + interspersed seedlings (FIR DOM N SLOPE!), previously burned, ~ 5,600 feet elevation.

% of defoliation - species and age of trees affected: Minor - some self thinning in dense young areas; natural snags; OG unroaded w/ full green crowns

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): piliated woodpecker forage, bark scaling on snags, elk scat, cassin's finch sighting, nest hole in snags, chipmunk sighting, turkey vulture sighting, small woodpecker forage on snags, chickadee calls, bear forage, elk tracks, unidentified hawk sighting.

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Coffee Creek flows through unit - defined, meandering channel w/ small + medium rubble, mid sediment level, algae, bank is vulnerable to erosion, small wood, some pools, intermittent conifer (GF) shading, no riparian hardwoods, aspen, alder, willow upstream. Large trees previously logged along banks. 20° slope both sides.

Riparian buffers? Adjacent steep slopes? + seep in unit

*** Needs buffer along Coffee Creek! ***

Unusual plants? none seen

Plant community types: elk sedge

Soil type, quality, compaction

level(s): dark brown loam w/ thick duff layer (on N side of hill), ashy w/ boulders on S side of hill)

Typical plants: slime mold, heartleaf arnica, sweet cicely, groundsel, oregon grape, many blue lips, bruckabrick, doobane, silicleurine, chloex

Steepness of slope/aspect of slope (direction it faces): 20-22° Northfacing slope down to creek; extremely steep (~30°) southfacing w/ boulders down to currently dry drainage.

✓ Landslide risk, describe: loosened trunks, ashy soils (S slope)

Density of roads (per sq. mi): ~ 1/2 mi/sq. mi. (+ 2 mi/sq. mi. decommissioned)

Effects of livestock grazing: comps, trails, some overgrazing but unit is generally geographically inaccessible.

Evidence of Animal Damage Control

activities: none seen

Evidence of bait stations for hunting, hunters' camps: none seen

NO Mining NO Herbicide spraying NO Gopher trappings/poison Other: _____

Exotic weeds seen: bull thistle

Recreational use: none seen

Describe sale unit overall: GF dominant with many mature trees + some OG. Located on ridge with steep slopes on either side, sloped down to riparian areas. Logs + snags create diverse understory structure, but fairly low canopy cover.

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS NO private land, ownership _____

☒ riparian (specify): Coffeepot Creek north

☒ NO area of human habitation

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

Canon 4x:

- ① heading
- ② 44 in P + Hannah
- ③ 50 in GF leaning from slope erosion
- ④ large weed in stream + sediments
- ⑤ Hannah on OG GF stump next to stream
- ⑥ open area w/ young fir stumps
- ⑦ nest hole in mature GF snag
- ⑧ pilated forage on OG GF snag
- ⑨ utility burrow under OG rootwad
- ⑩ unidentified short purple flowers
- ⑪ sapsucker forage on O. mature DF
- ⑫ bear forage on OG PP log
- ⑬ juniper growing out of rockface
- ⑭ Hannah w/ 23 inch juniper
- ⑮ OG PP log w/ Hannah

Recommendations
for sale unit:

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6/21/19
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattlesnake
UNIT 900
SURVEYOR'S NAME Ben

only Act up to 8"

Subjective evaluation of area: This is a beautiful unit that hasn't been heavily logged.
If left alone unit can develop OG mature forest characteristics. Lots of diversity &
excellent wildlife habitat.

Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags
Old growth/mature forest: ☐

Average tree size in "dbh": 15"

Examples of large tree diameter: 39.8" OG PD 40.8" OG PD 44.3" OG PD 38.7" OG PD 35.5" OG PD

of old growth trees per acre: 17 OG PD 1 OG PD log

☒ Previously logged approx. age of trees OG some thinning

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine
☒ Juniper ☒ Doug Fir ☐ Western Larch ☒ Grand Fir ☐ Lodgepole Pine ☐ Engelman
Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder
Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): PD many downy per some ~~DP~~ DP GF few

Quality and type of canopy closure, %: 15% mature PD 60% maturing PD

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: Some parts have 40-100% lower

timber loss but mostly the forest is healthy

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Pileated forage nest holes in M PD snag, Bark
scaling, robin sightings, chickadee heard, hairy woodpecker sightings,
white breasted nuthatch sightings, elk scat, hares, & brush land
black backed wood pecker, red breasted nut hatched seen,

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe:

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: Pine grass, snow berry

Soil type, quality, compaction

level(s): Duff brown for some some dry clay

Typical plants: Arrow leaf Balsamorhiza root Thimble leaf lupine Heart shaped arnica
green rabbit ears, white leaf yarrow, lemon balm, Ribwort, rabbit brush, blackberry weed

Steepness of slope/aspect of slope (direction it faces): 20° NE

Landslide risk, describe: _____

Density of roads (per sq. mi): _____

Effects of livestock grazing: Cow pies

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: Orchard grass

Recreational use: _____

Describe sale unit overall: W of 2815 702 large OG PP Grove w/ lots of junipers & no Mahogany a couple DF, isolated patches of dense mature PP. E of 2808 702 many OG PP & juniper no Mahogany more areas are subject to defoliation

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut: _____

☒ public land, agency FS ☐ private land, ownership None

riparian (specify): _____

area of human habitation None

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. 495 Acadia 796 Boundary marker 797 typewheel

Photo #s & descriptions: 496 Bin, camera view 498 Base of 39.8" OG PP

499 Crown of 39.8 OG PP 500 OG PP Stump 501 view of OG Count area
502 OG PP grove adjacent to OG Count area 503 OG PP w/ lost top 504 dense young trees under drip zone @ 6 PP 40.8" 505 Un ID'd shrub w/ close up of leaf 506 fresh tilted tower in live 44.8" OG PP 507 Base of some PP 508 Crown of 510 OG PP snag 511 patch of heavy defoliation in Y-M PP stand. 512 Bark Scaling (515) 4.7" OG PP snag 517 OG PP log 203 PP in background 518 cent ID'd plant (516) 519 OG stump w/ dense spindly thickets in background E of 2802 520 nest hole in Y PP snag 521 un ID'd flower 522 scenic shot 523 4 38.5" OG PP 525 Un ID'd

Recommendations
for sale unit: *Drop!*

*not a good candidate for
LOS.*

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE *6/21/19*
NTL FOREST *Malheur*
DISTRICT *Emigrant*
PROJECT *Rat-Hesnak*
UNIT *LOS in Quad H crest of road 5079*
SURVEYOR'S NAME *Adam*

Subjective evaluation of area: *Confused as to why this is an LOS unit as there are few OG PP. it more closely resembles a pine plantation.*

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags
☐ Old growth/mature forest:

Average tree size in "dbh": *12"*

Examples of large tree diameter: *27" PP, 20" S, 24" S, 24" PP, 34" PP, 37" PP.*

of old growth trees per acre: *7 PP, 1 PP log, 0 snags. 2nd count: 8" PP, no logs, 1 snag*

☒ Previously logged approx. age of trees *300-400 yrs old, some 100m*

Describe marking to cut: *none*

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

Some mature, young OG PP stumps, skid trail

Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engleman

Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☒ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity): *Some PP, S, & MM*

Quality and type of canopy closure, %: *30% uniform height, young & mature PP w/ the odd OG PP*

Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe: *no evidence of ever having been mixed conifer*

% of defoliation - species and age of trees affected: *none seen*

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): *turkey vulture seen, elk scat, moose, jay heard, bear forage on PP stump, deer scat, crow heard, chipmunk seen*

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: *none*

Riparian buffers? Adjacent steep slopes?

none

Unusual plants? *none*

Plant community types: *elk sedge, snowberry, bitterbrush, big sagebrush*

Soil type, quality, compaction

level(s): *rock, dry, ashy soils ranging from highly compacted to loose*

Typical plants: *rabbit brush, gooseberry, cinquefoil, buckwheat, wood groundsel, dogbane, arrowweed, balsam root, chockcherry, wild onion, phlox, cleavers, yarrow.*

Steepness of slope/aspect of slope (direction it faces): 15°-5° west facing slope
mid unit, flat in northern sector

Landslide risk, describe: none

Density of roads (per sq. mi): 4 miles

Effects of livestock grazing: cow trails, some bare spots from overgrazing,
and compacted soils

Evidence of Animal Damage Control
activities: none

Evidence of bait stations for hunting, hunters' camps: none

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other: _____

Exotic weeds seen: none

Recreational use: beer cans

Describe sale unit overall: PP dominant w/ many saplings, varying & mature trees
A few OG. Little ~~ground~~ downed wood & even fewer snags.
Parts resemble a plantation w/ 45% B.A. Little evidence of wildlife.

Surrounding area: ☒ contiguous forest ☒ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☒ rocky upland

☐ high desert ☐ seedlings ☒ pine plantation ☐ clear cut ☐ other cut: _____

☐ public land, agency _____ ☐ private land, ownership _____

riparian (specify): _____

area of human habitation _____

Species seen adjacent to sale unit: _____

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used.

Photo #s & descriptions:

16. Header
17. quarry adjacent to road
18. Un id'd mushrooms
19. typical view of Juniper & bare ground
from overgrazing
20. Closeup of overgrazing
1. 2 OG PP stumps w/ bear forage
2. adam w/ 2 OG
3. overgrazed open area in unit w/ canopies
4. looking down off route/overcropping at young,
widely spaced PP snags in unit, approx. 50 B.A.
5. OG PP stump
6. adam w/ OG PP fire scarred stump
7. 34" PP (largest tree in the unit)
8. old snail trail
9. OG Juniper snag
0. one of very few OG PP logs
- 1-2. large puffball mushroom

some large OG
stumps.

4 14 25

Recommendations
for allotment location:

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE 6/20/19
NTL FOREST Malheur
DISTRICT Emigrant
Grazing Allotment Aspen
Pasture Aspen
Location Coordinates 1215/R325/Q22
Surveyors Names Adam

Subjective evaluation of area: breeding pair of woodpeckers tries to draw me away from their fledglings. a pretty area but it does seem aspen are being shaded too much not great plant diversity.

Type of Allotment Site:
Stream ☐ Spring ☒ Aspen Stand ☐ Other: ☐

Stream Conditions:

Overall Description: intermittent stream w/ barely defined banks & a road/culvert upstream. runs down a gulch quite shady.

Channel:

Fine sediment level: n/a
Width vs. depth ratio: 1.5' wide
Bank stability: OK
Meander or straight: straight
Size of cobble: small to medium to none
Large wood: some

Signs of Livestock damage: some tracks & soil compaction, cow trails around, & cow pies

Riparian hardwoods: Aspen ☒ Alder ☐ Red Osier dogwood ☐ Willow ☐ Rocky Mt. Maple ☐
Cottonwood ☐ Other: ☐

Riparian Plants:

Exotic invasive plants: bull thistle

Impoundments/livestock ponds/weirs: ☐

Spring Conditions:

Overall Description: ☐

Trough ☐ Springbox ☐ Source Fenced off to cattle? ☐
Riparian hardwoods: Aspen ☐ Alder ☐ Red Osier dogwood ☐ Willow ☐ Rocky Mt. Maple ☐
Cottonwood ☐ Other: ☐

Riparian Plants:

Exotic invasive plants: ☐

Signs of Livestock damage: ☐

Spring flow/Amount of flow: ☐

Trough: Animal escapement device: ☐ Pipe into ground for overflow? ☐

Distance from Spring headwaters: ☐

Extent of fencing around spring: ☐

Aspen Stand Conditions:

of live Aspen: 15 # of Aspen snags 5 # of Aspen Logs 22

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)? ☐

Describe: Yes, shading from the SW, W, N, & E. very shady area

Old growth/Large trees near Aspen? (>= 21" dbh) How many? Distance from Aspen? From what direction (N/S/E/W)? ☐

Describe: Some very large OG (40' is the largest) around aspen

from most directions. aspens are concentrated in 2 patches, one at the bottom

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks? of the gulch & the other on an east facing hillside.

Describe: no fencing

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe: Severely hedged at

2 ft, about 7 or 8 sprouts

Typical plants: arnica, choke cherry, wild rose, dock, pine drop, gooseberry, yarrow, oregon grape, gooseberry, cleavers, chucker mulberry, cinquefoil, buckwheat, hawkweed

1 tree, 11' aspen, 10' aspen

Aspen stand - breeding pair of fledglings in old woodpecker's yellow bird

Aspen stand - breeding pair of fledglings in old woodpecker's yellow bird

Other signs of cattle around the area? Cattle trails, Cattle tracks, Cattle Scat, Cattle present? Describe:

Some signs of cattle, including hedging on sprouts.

Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe:

no signs of overgrazing, but aspen sprouts hedged at 1.5 - 2

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

- 2. Header
- 5-90. breeding pair of un id'd woodpeckers
- 11-2. un identified yellow bird
- 14-7. more woodpeckers
- 98. hedging on sprout
- 99. same
- 01. intermittent creek & mature aspens

Recommendations
for sale unit:

Drop Mt Mahogany
in doing line

LEAGUE OF WILDERNESS
DEFENDERS
BLUE MOUNTAINS
BIODIVERSITY PROJECT
27803 Williams Lane
Fossil, OR 97830

DATE 6-19-19
NTL FOREST Malheur
DISTRICT Emigrant
PROJECT Rattle Snake
UNIT 389 CT4 Sec 7
SURVEYOR'S NAME Ben

Subjective evaluation of area: Area is naturally thinning itself & doesn't need further logging. Area would have better regeneration of logged because of its dry ashy soil

☐ Roadless area ☐ Never logged ☐ Plantation ☐ Many old growth logs and snags
☐ Old growth/mature forest:

Average tree size in "dbh":

Examples of large tree diameter: 26" PP 34-3 PP 26.4" PP 26" PP 24" PP

of old growth trees per acre: live: 7 PP Corp 2 PP Group 1

☐ Previously logged approx. age of trees Y-M none OG stumps

Describe marking to cut:

Former logging sign (skid trails, stumps, lack of regen., dense overstocked spindly thickets), describe:

☐ Mixed conifer, specify species and number in descending order of prevalence: ☒ Ponderosa Pine

☒ Juniper ☐ Doug Fir ☐ Western Larch ☐ Grand Fir ☐ Lodgepole Pine ☐ Engleman Spruce ☐ Subalpine Fir ☐ Yew ☒ Mt. Mahogany ☐ Aspen ☐ Willow ☐ Alder

☐ Shasta Red Fir ☐ Sugar Pine ☐ White Pine ☐ Incense Cedar ☐ other:

Tree seedlings (species, quantity):

Quality and type of canopy closure, %: 45% Mature PP 1Y PP 10-15% Y-M PP

☐ Historically natural mixed-conifer site: old growth mixed-conifer, fire scars, north slope, moist area, high elevation, describe:

% of defoliation - species and age of trees affected: 40-100% lower limb loss

Species evident using area for habitat/forage (scat, tracks, sightings, calls, foraging/nesting, roosts, dens, burrows, beds, hives, etc.): Elk scat, bark scaling, chickadee heard

nest in PP snag

Riparian area in or adjacent to area/unit(s) (springs, seeps, drainage headwaters, seasonal runoffs, creeks, rivers, lakes, ponds) describe: Prater creek to the south of unit intermittent stream that feeds into Prater creek borders the South West edge of unit

Riparian buffers? Adjacent steep slopes?

Unusual plants?

Plant community types: Sagebrush, snowberry

Soil type, quality, compaction

level(s): compacted dry light brown ashy

Typical plants: Oregon grape, Hawthorn, yellow water leaf, rabbit brush

Thin leaf yucca, little bush, common paintbrush, lemon weed, Oregon checkerboard, rubber root

Steepness of slope/aspect of slope (direction it faces): flat - incl 5 slope

Landslide risk, describe: None

Density of roads (per sq. mi): 1 (3 closed roads)

Effects of livestock grazing: Cow pies, barbs wire shown about

Evidence of Animal Damage Control

activities: None seen

Evidence of bait stations for hunting, hunters' camps: None seen

☐ Mining ☐ Herbicide spraying ☐ Gopher trappings/poison ☐ Other:

Exotic weeds seen:

Recreational use: 0.8 Bear can

Describe sale unit overall: Very dry, compacted arid soil, many shrubs
& a lot of defoliation, ~~some trees~~

Surrounding area: ☒ contiguous forest ☐ high-graded forest ☐ never logged area ☐ canyon

☐ roadless area(s) ☐ wildlife corridor ☐ meadow ☐ grassland ☐ rocky upland

☐ high desert ☐ seedlings ☐ pine plantation ☐ clear cut ☐ other cut:

☒ public land, agency FS ☐ private land, ownership None

☐ riparian (specify): Prater Creek South of unit

☐ area of human habitation None

Species seen adjacent to sale unit:

Photo guidelines: unusual plants/animals, wildlife, old growth canopy-dependent species evidence, nest holes, foraging, burrows, canopy in green sales, riparian areas without buffers, relative severity of burn if fire salvage sale, old growth grove, cattle damage, cumulative impacts of former logging, healthy mixed-conifer, etc.. Minimize number of photos. Draw map of unit & show differences in different areas e.g. Location of old growth, riparian areas, significant wildlife sightings, sensitive plant & exotic weed locations. Identify camera used. Bear's Corner 410 heading 44 Typical view

Photo #s & descriptions: native PP w/ Mt McHoyang 412 - 413 maturing PP defoliation
413 06PP 31.6 adjacent to unit 419 Bird in nest in PP spray 420: foraging in tree
422 34.3 06PP

Community grass: elk sedge, snowberry

Recommendations
for allotment location:

the enclosure fencing usually needed, few aspens are shaded out & logging/thinning is unnecessary.

Blue Mountains Biodiversity Project
27803 Williams Lane
Fossil, OR 97830
(541) 385-9167

DATE ~~6/18/19~~ 6/18/19
NTL FOREST ~~Marion~~ Malheur
DISTRICT ~~Emigrant~~ Emigrant
Grazing Allotment ~~Project~~ Project
Pasture ~~Rattlesnake~~ Rattlesnake
Location Coordinates _____

Subjective evaluation of area: area has suffered from long term grazing & recreation (trush in area), normally this would be an important spot for wild life but not much sign was seen. some beautiful big trees though.

Surveyors Names: Hannah & Adam
Aspen Unit 3/10 off
Coffee pot creek

Type of Allotment Site:

Stream ☒ Spring ☒ Aspen Stand ☒ Other: _____

Stream Conditions:

Overall Description: fairly milky w/ sediment, algae, variably defined, surrounded by wet meadow, low to variable shade

Channel:

Fine sediment level: high
Width vs. depth ratio: 2 ft / 4 inches
Bank stability: low, vulnerable, narrow
Meander or straight: mostly straight
Size of cobble: mostly none
Large wood: low

Signs of Livestock damage: Overgrazing
Coups in stream, low
vegetation, no riparian sages
a low trough, hillside adjacent
to creek has low vegetation

Riparian hardwoods: Aspen ☒ Alder ☒ Red Osier dogwood _____ Willow ☒ Rocky Mt. Maple _____

Cottonwood _____ Other: _____

Riparian Plants:

Exotic invasive plants: bull thistle & yellow dock

Impoundments/livestock ponds/weirs: _____

Spring Conditions:

Overall Description: _____

Trough _____ Springbox _____ Source Fenced off to cattle? _____

Riparian hardwoods: Aspen ☒ Alder _____ Red Osier dogwood _____ Willow _____ Rocky Mt. Maple _____

Cottonwood _____ Other: _____

Riparian Plants:

Exotic invasive plants: _____

Signs of Livestock damage: _____

Spring flow/Amount of flow: _____

Trough: Animal escapement device: _____

Pipe into ground for overflow? _____

Distance from Spring headwaters: _____

Extent of fencing around spring: _____

Aspen Stand Conditions:

of live Aspen: 10 # of Aspen snags 10 # of Aspen Logs 12

Young conifer encroachment/shading out of Aspen? From which direction (N/S/E/W)?

Describe: some in eastern end, from all directions by mature fir seedlings

Old growth/Large trees near Aspen? (>1=21" dbh) How many? Distance from Aspen? From what direction (N/S/E/W)?

Describe: yes, 6" PP, 6" GF, 2" DF, many, variably distanced, some less than twenty feet, from all directions

Fenced? Condition of fencing, type of fencing? area size fenced, any breaks?

Describe: none

Aspen sprout condition: Hedged? Height? Estimate # of sprouts. Describe: few sprouts, almost all

hedged between 12"-36" & few bearing young trees

plants: sweet sycly, tall bittercup, yarrow, service berry, gooseberry
wood groundsel, lupine, bull thistle, strawberry, thimbleberry, lemon balm

wild life: breeding pair of song sparrows in 0.6 aspen stand
Pacific tree frog, possible mtn. bluebird,
hermit thrush heard

Other signs of cattle around the area: Cattle trails, Cattle tracks, Cattle scat, Cattle present? Describe:

minor trails, past rotting near pond, scat in creek
Overgrazing in the area? What plants or shrubs or tree species? Height of hedging? Height of grass or sedge (stubble) in inches? Any stunted shrubs or trees? Areas of bare ground? Describe: heavily overgrazed
compacted soil, absence of native grasses, hedging 12"-36" on
aspen & alder, frequent areas of bare ground right next
to creek, few riparian shrubs

Photo guidelines: Identify camera used, include photo number/time stamp, include at least a dozen photos per survey, and provide brief description of photo. Have photos highlight the conditions described in the survey form (stubble height, stream channel, trough, fencing, Aspen stand, etc.)

Photo # and description:

1. Header
2. 45" PP w/ sign w/ bullet holes
3. bug trap hanging from PP
4. adam w/ enclosure around spring adjacent to unit
5. barren soil from overgrazing & trough from spring
6. algae on cattle trough
7. coffee pot creek
8. nest hole in young fir snag w/ huge service berry
9. trash at campsite
10. fire pit
1. OG & Adam
2. woman of OG & GF
3. Williamson or red nose sapsucker on OG aspen snag
- 4-7. Sapsucker fledgling
8. Hannah w/ OG & GF
9. 3 mature aspens for a snag
10. adam w aspen, alders, & OG fir log
11. adam w/ mature aspen
12. sapsucker forage on aspen
13. 31" aspen & adam
24. 36" hedging of alders from cattle
25. adam w/ DF & PP
26. cow pie in water

27. pacific tree frog
28. picture of open & sunny stand
29. cattle overgrazing
30. fir snag w/ complex structure
31. sapsucker forage on fir snag
32. lack of grass due to overgrazing in aspen stand
33. aspen stand
34. hedging of aspen sprouts at 36"
35. hedging at 22"
36. mature aspen logs
37. adam w/ aspen snag & snag
38. dense conifers to the south of aspen stand
39. pillented forage on fir stump
40. hedged alder by stream (hedged at 24")
41. possible ~~fungus~~ fungus on fresh mature aspen log. fungus is orange.
42. recent non commercial thinned logs & a willow
43. aspen snag shaded out by mature conifers
44. soil compaction from overgrazing
45. creek bank