Roseburg Secretarial Pilot Project - EA Summary

Public Meeting **April 12, 2012**

Special points of interest:

- Full staff engagement with Drs. Franklin and Johnson.
- Full engagement with interested publics.
- Front-end design work with US Fish and Wildlife Service.
- Incorporation of Northwest Forest Plan Standards and Guides.
- Application of Survey & Manage Standards & Guides.

Key Facts:*

- Treatment Area - 285 acres
- Retention - 41%
- Road Renovation - 7.43 miles
- New Road Construction - 1.2 miles
- Road Decommissioned - 1.98 miles
- Estimated Harvest Volume - 10.5 mmbf
- Avg Diameter Range 10 to 20 inches
- Age Range 42 to 108 yrs old

*Alternative 2A

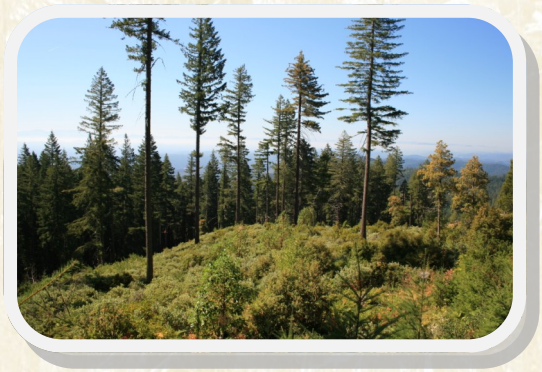
Roseburg Pilot Information

The Roseburg Pilot Project was intended to fulfill the Secretary of the Interior's direction to apply the principles of ecological restoration, as developed by Drs. Norm Johnson and Jerry Franklin, on BLM lands within the Roseburg District.

The project included the elements of active management proposed by the US Fish and Wildlife Service for the recovery of the northern spotted owl.

The following pages detail some of the information gathered through the Environmental Assessment process. Detailed information is provided on Alternatives developed and criteria analyzed.

Purpose and Need - Early Seral Habitat Development



As requested by the Secretary of Interior Drs. Norm Johnson and Jerry Franklin chose a Moist Forest type on the Roseburg District to demonstrate their management principles. They provide the following rationale for the demonstration:

Following stand replacement fires, "Moist Forest sites typically experienced an extended, open, pre-forest stage," which "exhibits high biodiversity." The harvest in the proposed pilot "attempts to create that stage as the initial step in a management regime that will include mixed-age, mixed species stands managed for multiple economic…and ecological values."

The specific purposes of the project are to:

Conduct variable retention harvest designed to create complex, early-successional habitat that will function for up to 30 years.

Design the sale with participation of the U.S. Fish and Wildlife for the purpose of applying Recovery Actions from the Northern Spotted Owl Recovery Plan.

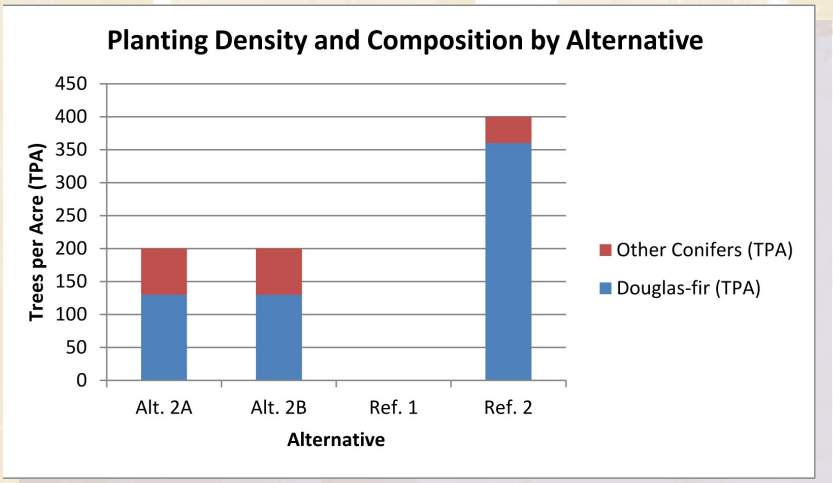
Conduct forest management activities to produce a sustained yield of timber for manufacturing to support local and regional economic activity.

Striking a Balance Between Two Divergent Goals

The planting densities represent a compromise between two divergent goals:

- To ensure that we meet the minimum reforestation requirements of our Resource Management Plan,
- To allow high quality early seral vegetation to persist for 20 to 30 years.

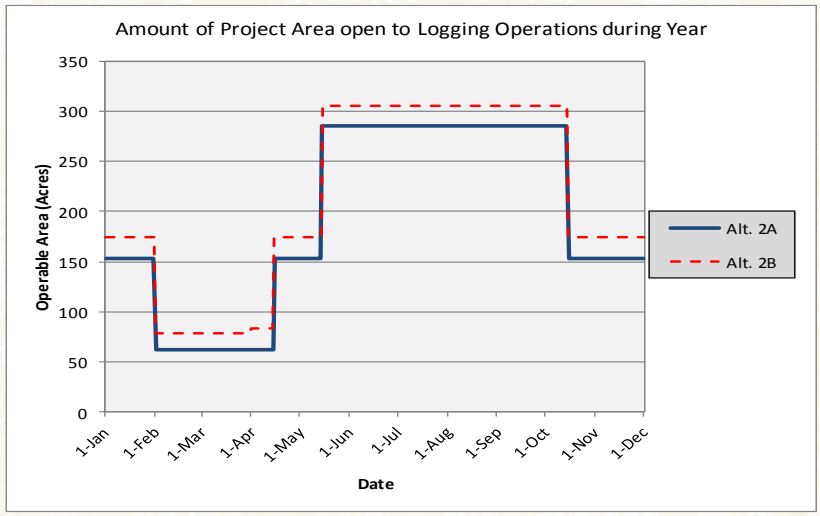
If natural regeneration is high, thinning may be necessary to prevent the canopy from closing and shading out the desired early seral species before the 20 to 30 year target period.

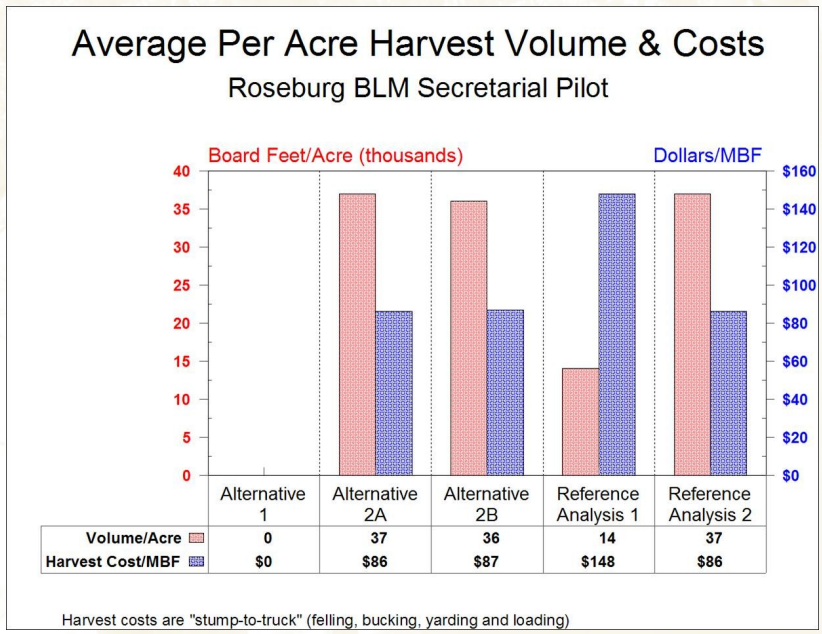


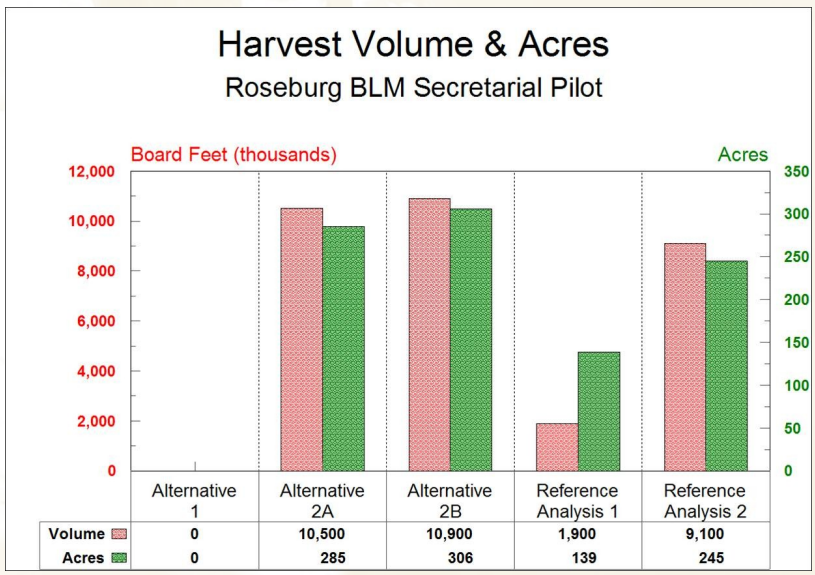
Economic Considerations

Throughout the EA process the Roseburg District was asked to provide information on the economic viability and efficiency of the proposed alternatives in the Pilot Project.

The following tables provide data on the amount of the proposed project area available for winter logging, a comparison of harvest volume and acres between alternatives and the average per-acre harvest volume and cost.







Roseburg BLM Secretarial Pilot Project

Comparison of the Key Project Features and Effects of the Alternatives

Key Finding/Effect		Alternative 1	Alternative 2A	Alternative 2B	Reference Analysis 1	Reference Analysis 2
Description of the Alternatives	**Guiding Principles for Harvesting**	No Action	Franklin & Johnson Variable-retention Regeneration Harvest	Franklin & Johnson Variable-retention Regeneration Harvest + Riparian Thinning	Northwest Forest Plan Thinning (Upland & Riparian)	Northwest Forest Plan Variable-retention Regeneration Harvest
Harvest & Retention Trees	**Project Size** (acres analyzed)	438 acres	438 acres	438 acres	181 acres	330 acres
	Harvested Areas	0 acres	285 acres	306 acres	139 acres	245 acres
	Reserve Areas (no harvest)	438 acres	153 acres	132 acres	42 acres	85 acres
	Volume Harvested	None	10,500 MBF	10,900 MBF	1,900 MBF	9,100 MBF
	Logging Cost (Stump to Truck)	No harvest	$86/MBF	$87/MBF	$148/MBF	$86/MBF
	Regeneration Harvest — % of Project Acres Reserved from Harvest (Unconstrained Accounting)[1]	100%	*Retention Type* Aggregates — 35% Dispersed — 6%	*Retention Type* Aggregates — 30% Dispersed — 6%	N/A	*Retention Type* Aggregates — 26% Dispersed — 8%
	Regeneration Harvest — % of Project Acres Reserved from Harvest (Constrained Accounting)[2]	100%	*Retention Type* Aggregates — 23% Dispersed — 6%	*Retention Type* Aggregates — 22% Dispersed — 6%	N/A	*Retention Type* Aggregates — 9% Dispersed — 8%
	Thinning Harvest	N/A	N/A	Moderate Thin (21 acres)	No Thin (42 acres) Light Thin (117 acres) Moderate Thin (21 acres)	N/A
	Ground-based Yarding	0 acres	80 acres	80 acres	9 acres	80 acres
	Cable Yarding	0 acres	205 acres	226 acres	130 acres	165 acres
	Winter Logging Opportunities	0 acres	153 acres	173 acres	acres	101 acres
Access Roads	**Road Maintenance or Renovation**	0 miles	7.44 miles	7.44 miles	3.41 miles	6.71 miles
	Road Improvement	0 miles	0.16 miles	0.16 miles	0.12 miles	0.12 miles
	Road Construction	0 miles	1.20 miles	1.20 miles	0.38 miles	1.14 miles
	Road Decommissioning	0 miles	1.97 miles	1.97 miles	0.50 miles	1.97 miles
	Road Right-of-way Clearing	0 acres	9.9 acres	9.9 acres	2.5 acres	8.9 acres

Post- Harvest Treatments	**Fuels Treatments within Harvested Areas & Selected Riparian Reserves**	None	Prescribed Burning (Upland & (Riparian) Whole-tree yarding Hand & Excavator	Prescribed Burning (Upland & (Riparian) Whole-tree yarding Hand & Excavator	Prescribed Burning (landings & hand piles only)	Prescribed Burning (Upland Only) Hand & Excavator Pile
	Fuels Treatments – Air Quality Ef-	None	Short-term localized effects, but no cumulative or long-term effects on local air quality			
	Reforestation	None	Plant ≈ 200 trees/ acre 65% Douglas-fir 35% minor conifers	Plant ≈ 200 trees/ acre 65% Douglas-fir 35% minor conifers	No Reforestation Required	Plant ≈ 400 trees/acre 90% Douglas-fir 10% minor conifers Natural Regeneration
Effects on Selected Forest Vegetation Processes	**Duration of Early-successional Forest** (estimated years until tree canopy closure)	N/A	≈ 30 years or more	≈ 30 years or more	N/A	≈ 20-30 years or more
	Development of Structurally Complex Stands within 50 to 100 years	Low-Moderate	Moderate-High	Moderate-High	Low	Moderate-High Potential
	Snags & Downed Wood Recruitment (Coarse Woody Debris)	Would produce greatest amount of snags and downed wood over a 100 year period	Relative to *No Action*: 40-75% of snags 45-60% down wood in 100 year period	Relative to *No Action*: 35-75% of snags 45-60% down wood in 100 year period	Relative to *No Action*: 50-80% of snags 55-80% down wood in 100 year period	Relative to *No Action*: 30-50% of snags 25-50% down wood in 100 year period
		Passive recruitment of snags or downed wood	No active recruitment (creation) of snags or downed wood except as necessary to meet Northwest Forest Plan minimum re-	No active recruitment (creation) of snags or downed wood except as necessary to meet Northwest Forest Plan minimum re-	No active recruitment (creation) of snags or downed wood	No active recruitment (creation) of snags or downed wood except as necessary to meet Northwest Forest Plan minimum requirements
	Post-Harvest Canopy Cover	No harvest 80-95%	25-45%	25-45%	70-75%	15-35%
Northern Spotted Owls	**Harvest within Nest Patch**	0 acres	0 acres	0 acres	0 acres	0 acres
	Harvest within Core Area	0 acres	58 acres	59 acres	13 acres	3 acres
	Harvest within Home Range	0 acres	285 acres	306 acres	138 acres	242 acres
	Suitable Habitat Removed/Modified	0 acres	155 acres	155 acres	0 acres	171 acres
	Dispersal Habitat Removed/	0 acres	130 acres	151 acres	138 acres	74 acres
	Critical Habitat Modified	0 acres	0 acres	0 acres	0 acres	0 acres

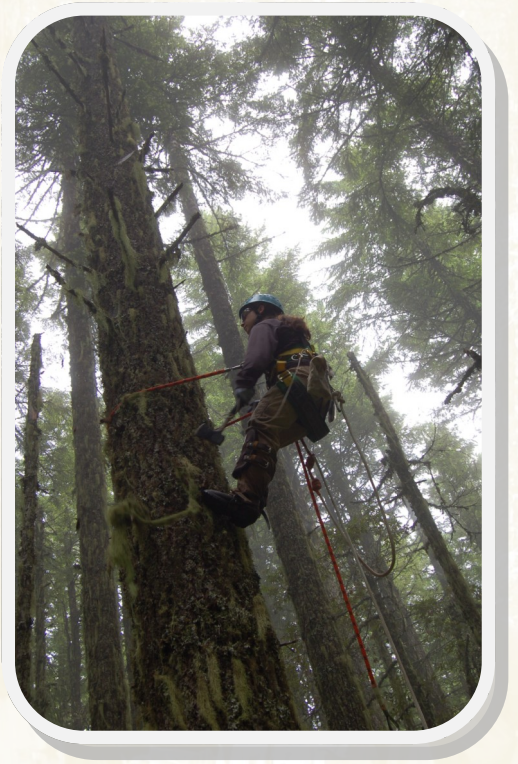
Roseburg BLM Secretarial Pilot Project

Comparison of the Key Project Features and Effects of the Alternatives (Cont.)

Key Finding/Effect		Alternative 1	Alternative 2A	Alternative 2B	Reference Analysis 1	Reference Analysis 2
Hydrology, Aquatic Habitat & Fisheries	**No-harvest Stream Buffer Widths**	N/A	160'-180' - non-fish bearing 320'-360' - fish-bearing	Same as 2A except for units 17A, B, C: 35' intermittent 60'perennial/fish-	35' intermittent 60' perennial/fish-bearing	160'-180' - non-fish bearing 320'-360' - fish-bearing
	Equivalent Clearcut Area	1.3-17.7%	1.5-18.0%	1.5-18.0%	1.3-17.7%	1.5-16.5%
	Net Roaded Area within Project Area (peak flow response detectable when > 12%)	3.43%	3.43%	3.43%	3.43%	3.43%
	Stream Temperature	Stream temperature regimes would remain unchanged under all alternatives and reference analyses				
	Sediment Regime	Sediment contributions directly entering Stacey Gulch would continue unchecked	Chronic sediment contributions would be eliminated from within the scope of the project and the sediment regime would be measurably reduced by road renovation.			Sediment contributions directly entering Stacey Gulch would continue unchecked
	Fish Populations	Direct impacts to fish populations and habitat would continue as a result of chronic sediment contributions entering into Buck Fork and Stacy Gulch	Chronic direct impacts to fish populations and habitat would be reduced or eliminated over the long term, due to reductions in sediment and turbidity resulting from road renovations.			Direct impacts to fish populations and habitat would continue as a result of chronic sediment contributions entering into Buck Fork and Stacy Gulch
Carbon (tonnes)	**Change at Harvest Time**	No harvest	-4,756	-4,870	-652	-4,714
	Storage in 50 years from present	142,986	93,292	91,250	131,521	108,131

Footnotes:
[1] average logging cost is weighted by proportion of the two yarding systems.
[2] *Unconstrained accounting* — all acres within a proposed unit reserved from harvest are considered creditable toward achievement of the alternative's retention goals, regardless of land use allocation designation.
[3] *Constrained Accounting* — acres within a proposed unit reserved from harvest are considered creditable toward achievement of the alternative's retention goals, based on the rules of the alternative. Alternatives 2A and 2B place a limit on the proportion of acres that are creditable reserve acres located within the Riparian Reserves land use allocation. Reference Analysis 2 recognizes only those reserve acres located outside the Riparian Reserves land use allocation.

Red Tree Vole - Non-High Priority Site Designation



- Unit 28-3-25A met habitat criteria for red tree vole (RTV) surveys under Survey and Manage.
- Transect surveys followed by intensive ground surveys identified 66 potential nest trees.
- An interested citizen group, the Northwest Ecosystem Survey Team, also climbed trees in the unit, reporting 22 additional potential nest trees.
- The BLM has pursued the non-high priority site designation for portions of the unit, proposing retained areas of the unit to protect 59 of 88 potential nest trees and maintain connectivity to adjoining potential habitat.
- The non-high priority site designation analysis has been reviewed by the U.S. Fish and Wildlife Service, Forest Service, and BLM, and these agencies have concurred with the findings and designation.
- A complete analysis is located in Appendix C to the project Environmental Analysis.

Northern Spotted Owl Recovery Plan Consistency

- Applies principles of ecological forestry
- Emulates natural disturbance processes
- Promotes forest variability within patches on localized scale
- Restores lost species and structural diversity, particularly early seral ecosystems
- Preserves complex habitats and valuable habitat features
- Balances conservation of northern spotted owl sites with restoration of high quality early seral habitat, both of which are recommended by the Recovery plan.

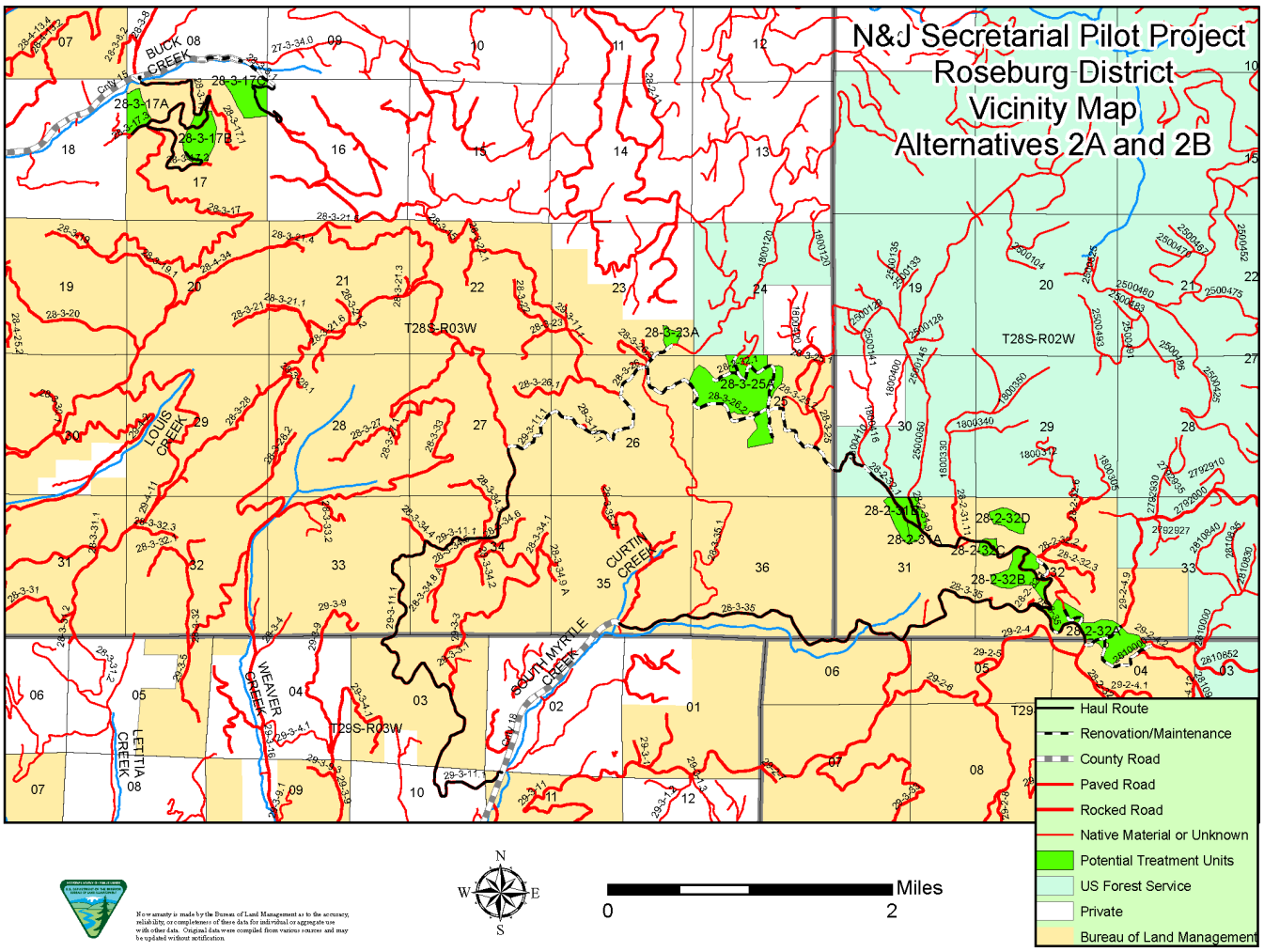
Alternative 2A

Franklin & Johnson Variable-retention Regeneration Harvest

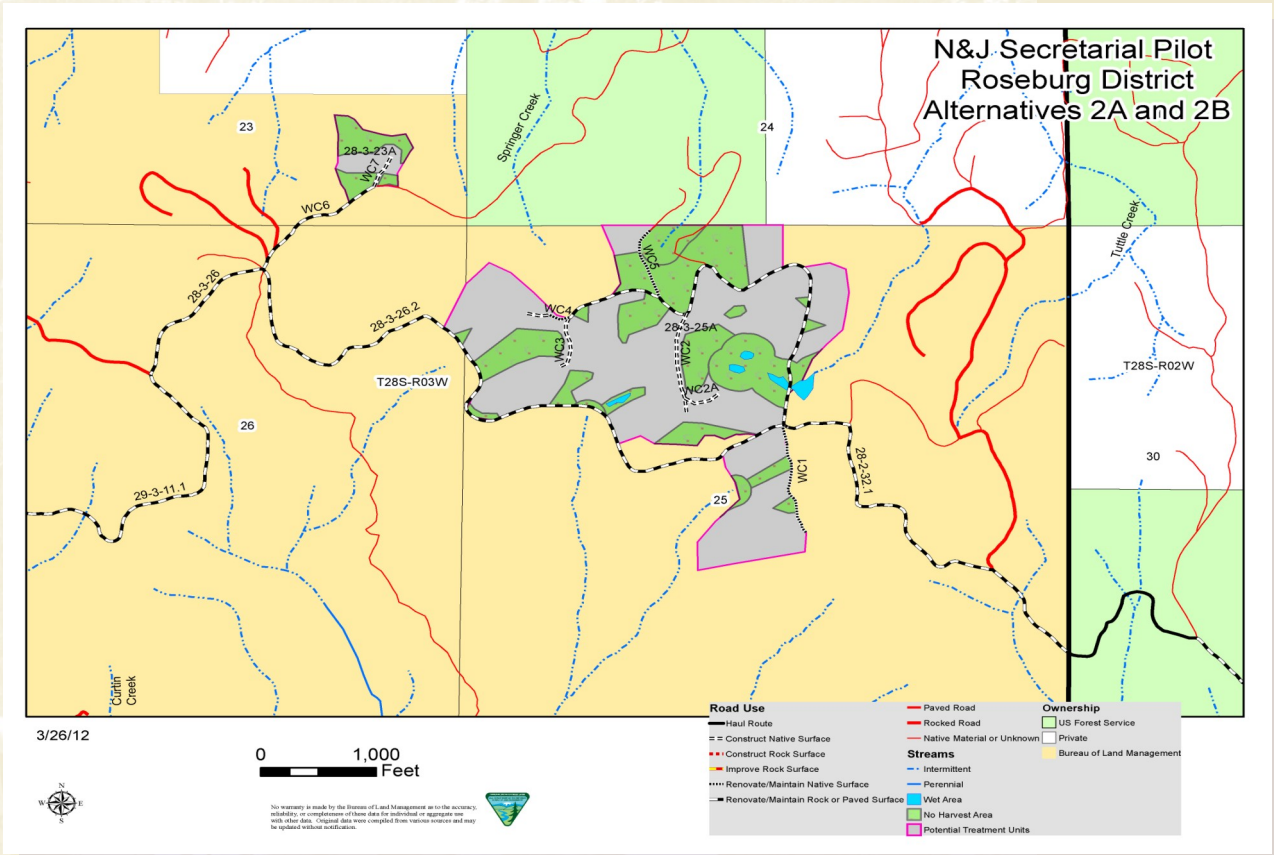
Alternative 2B

Franklin & Johnson Variable-retention Regeneration Harvest + Riparian Thinning

The maps found on page 8-11 provide information about Alternatives 2A and 2B. Information about the proposed riparian treatments is located on page 10 on the Alternative 2B map. Riparian treatments are only proposed in Section 17.



Examples of Proposed Treatment


N&J Secretarial Pilot
Roseburg District
Alternatives 2A and 2B
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Springer Creek
Tuttle Creek
Curtin Creek
T28S-R03W
T28S-R02W
28-3-23A
WC7
WC6
28-3-26
28-3-26.2
WC4
WC3
WC5
28-3-25A
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Road Use
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Streams
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Perennial
Wet Area
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Potential Treatment Units
Ownership
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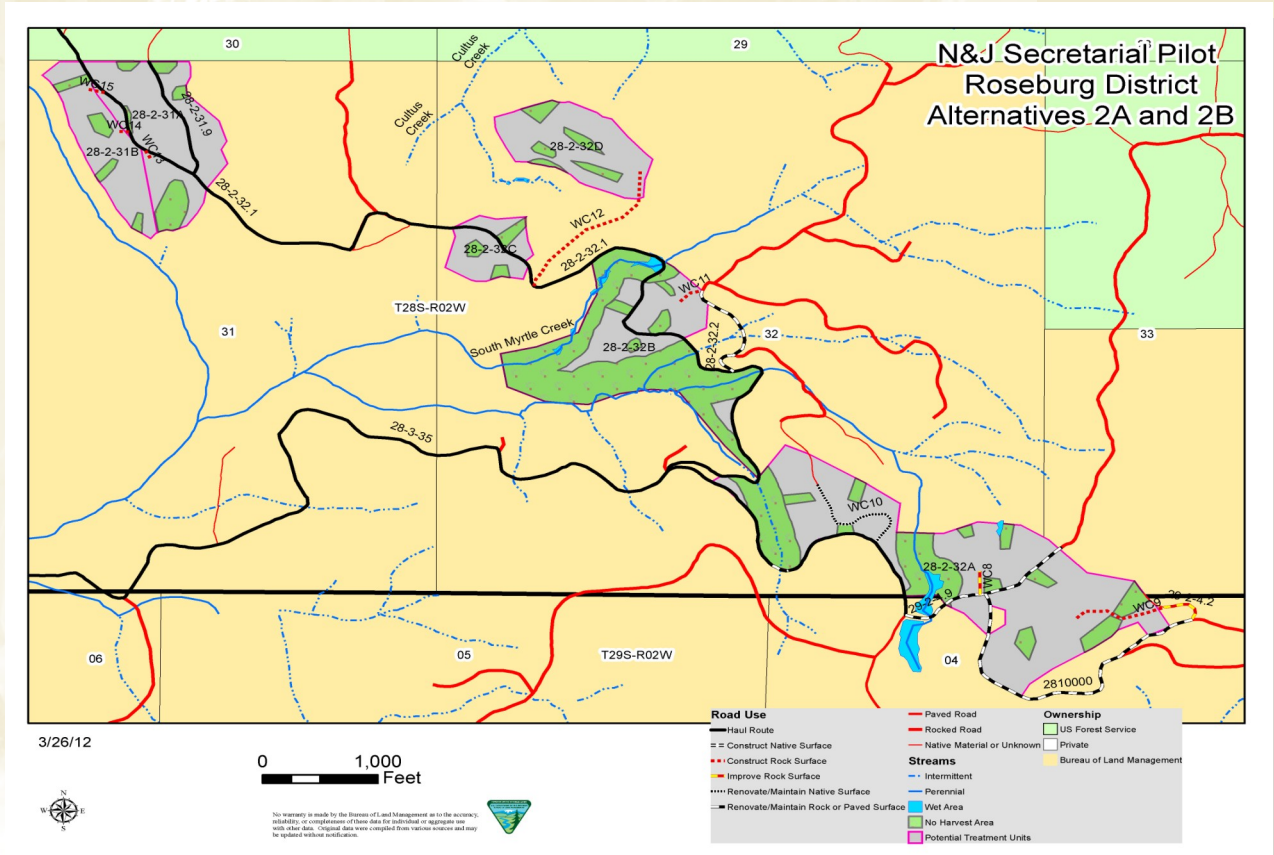
N&J Secretarial Pilot
Roseburg District
Alternatives 2A and 2B
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Cultus Creek
South Myrtle Creek
T28S-R02W
T29S-R02W
WC15
28-2-31.1
28-2-31.9
WC14
28-2-31B
WC13
28-2-32.1
28-2-32D
WC12
28-2-32C
28-2-32.1
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Potential Treatment Units
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US Forest Service
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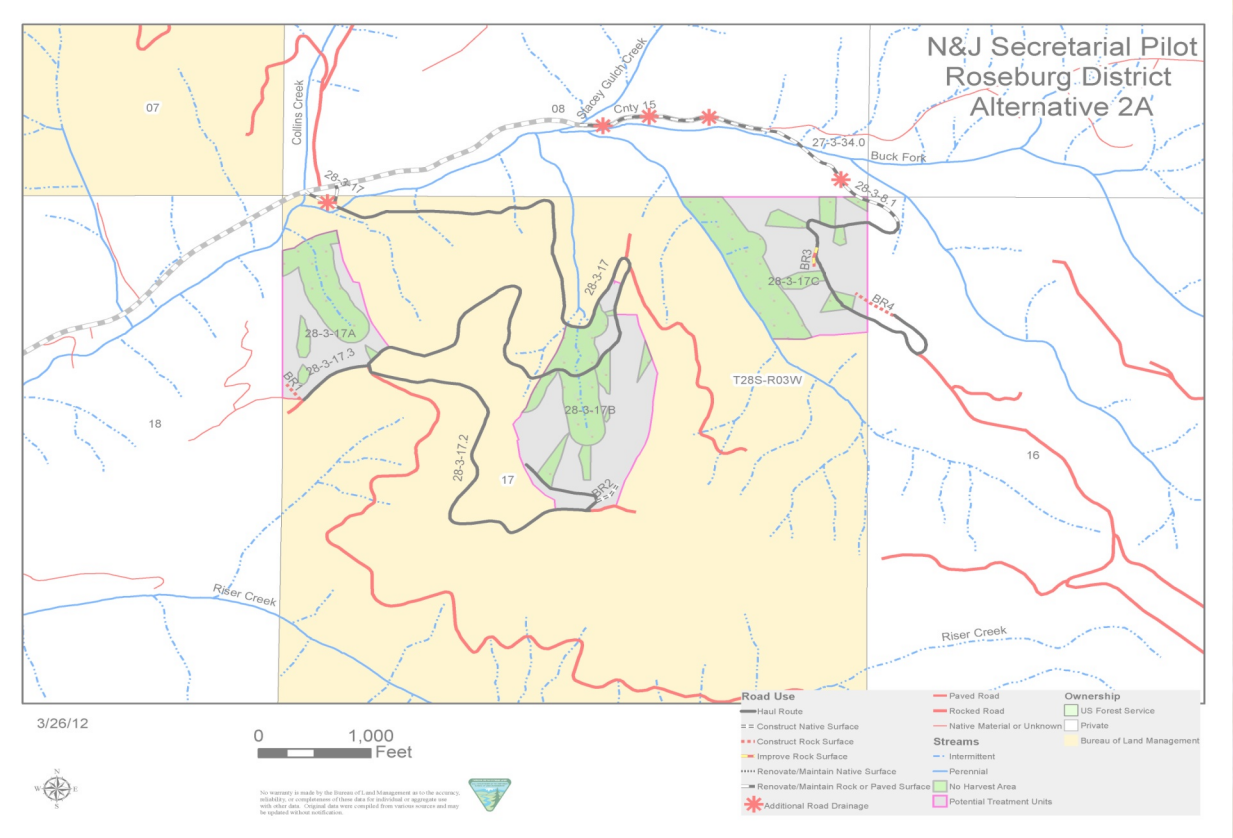
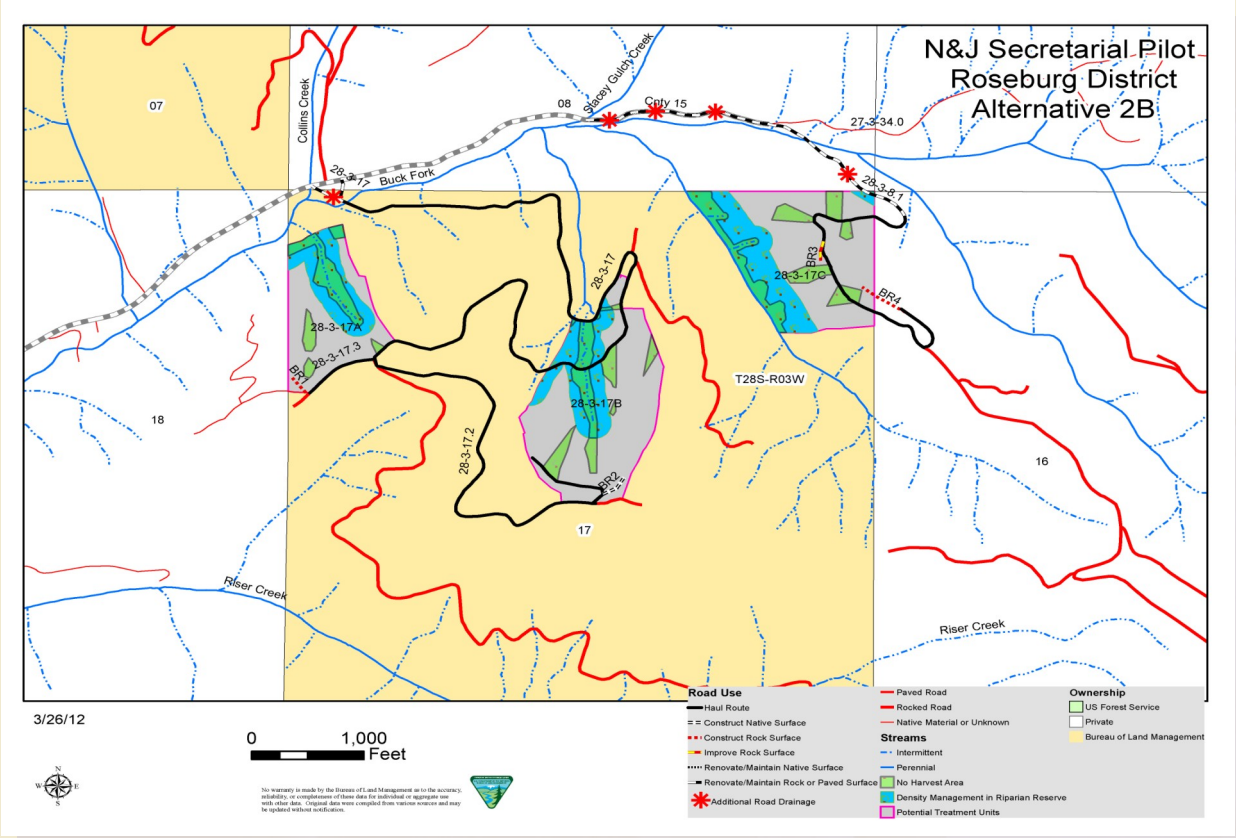
Alternatives 2A and 2B (Cont)





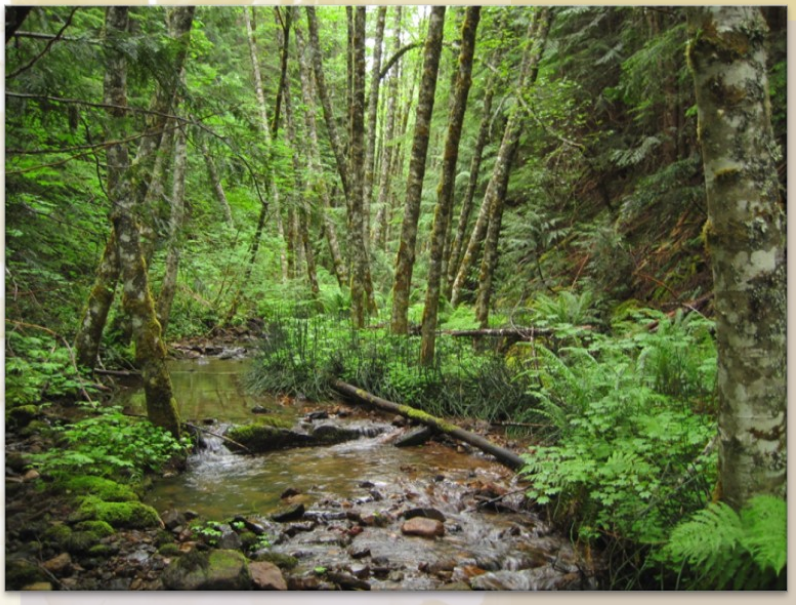
Riparian and Aquatic Treatment Information

Proposed Treatment Area within Riparian Reserves

- Overstocked, homogenous species composition
- Negative trending riparian vegetation community due to stand stagnation
- Minimal stream productivity
- Moderate stream incision
- Reduced macro invertebrate biomass

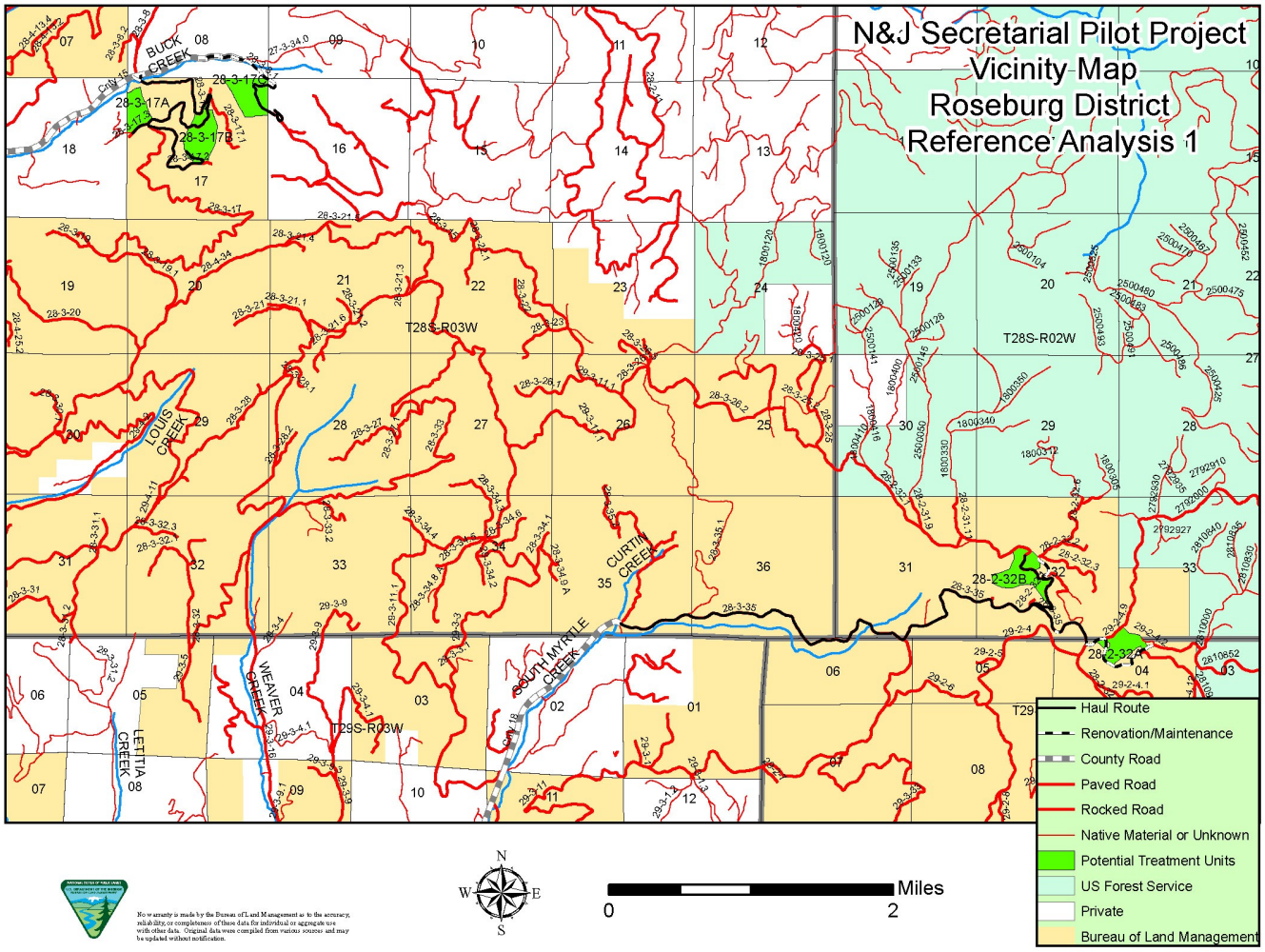
Characteristics of Areas Reserved from Treatment

- Diverse species composition
- Flourishing hardwood community
- Floodplain connectivity
- Little fine sediment
- Adequate shade and cool stream temperatures
- Connectivity between aquatic and terrestrial ecosystems



Reference Analysis 1

Northwest Forest Plan Thinning (Upland & Riparian)

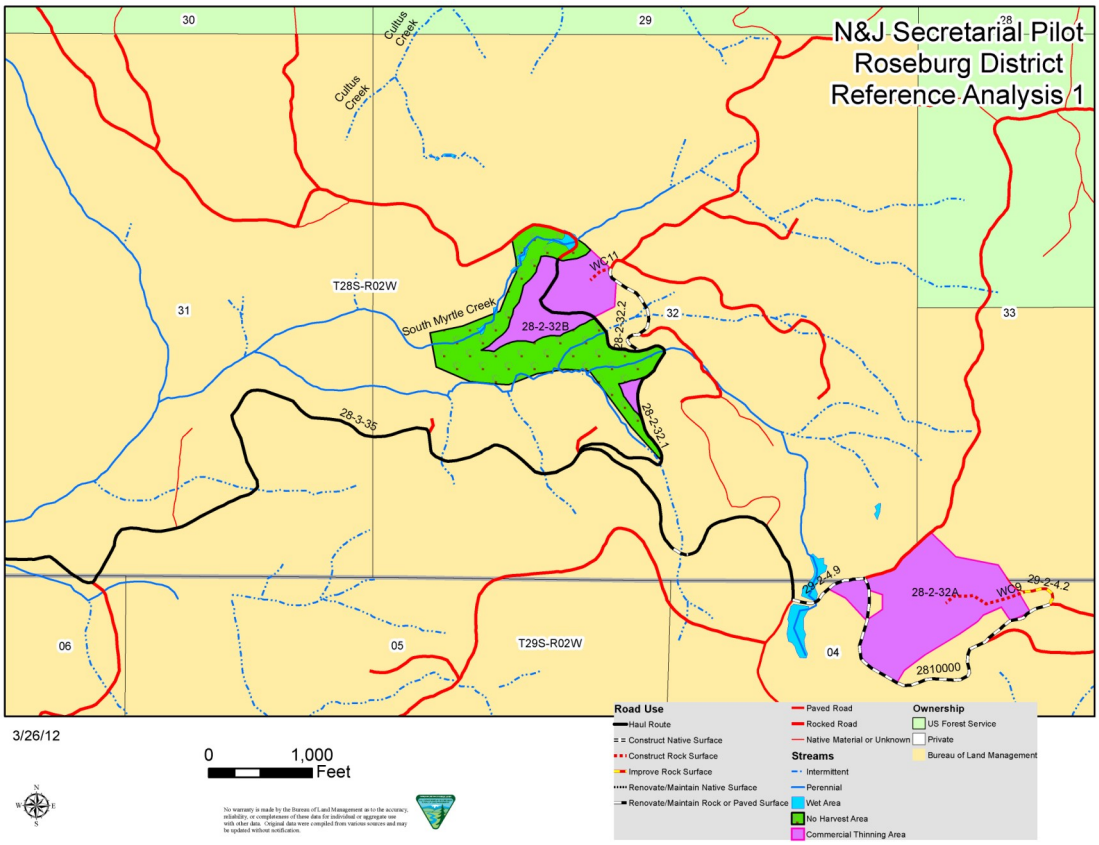


Northwest Forest Plan Thinning Examples

Un-thinned

Light Thinning

Moderate Thinning


N&J Secretarial Pilot
Roseburg District
Reference Analysis 1
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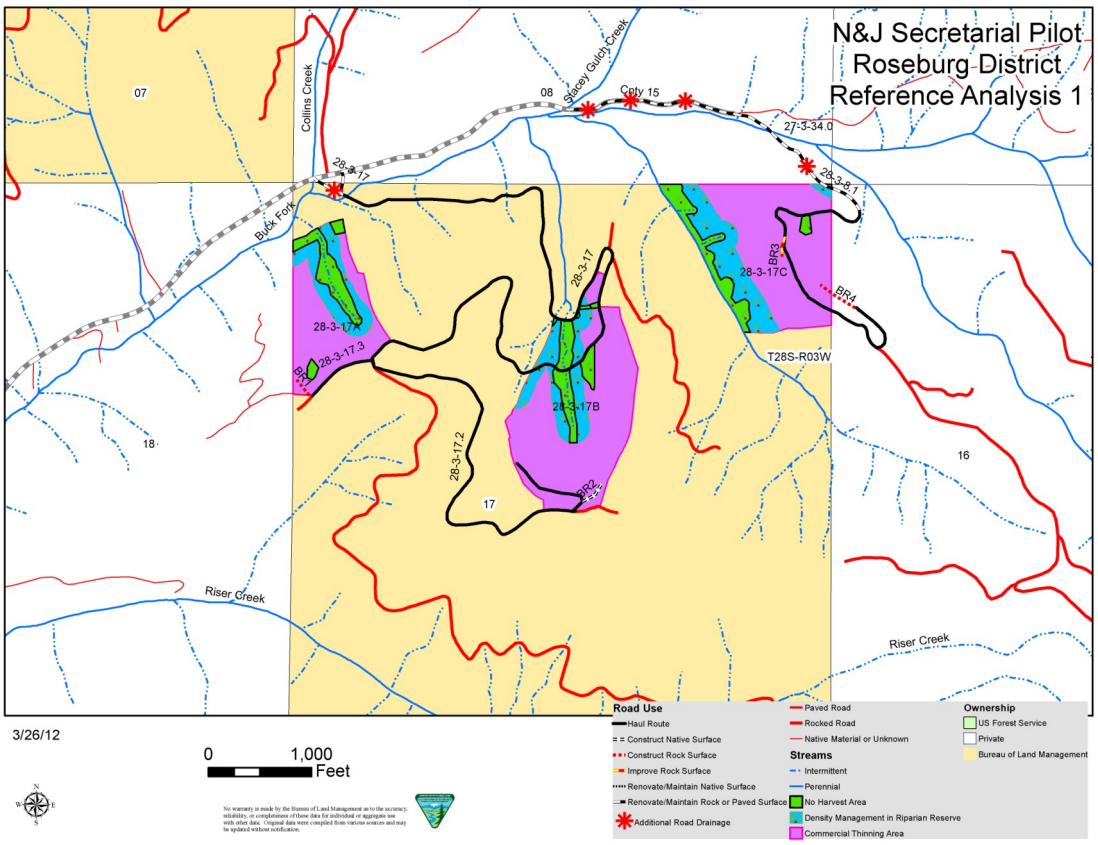
N&J Secretarial Pilot
Roseburg District
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Density Management in Riparian Reserve
Commercial Thinning Area
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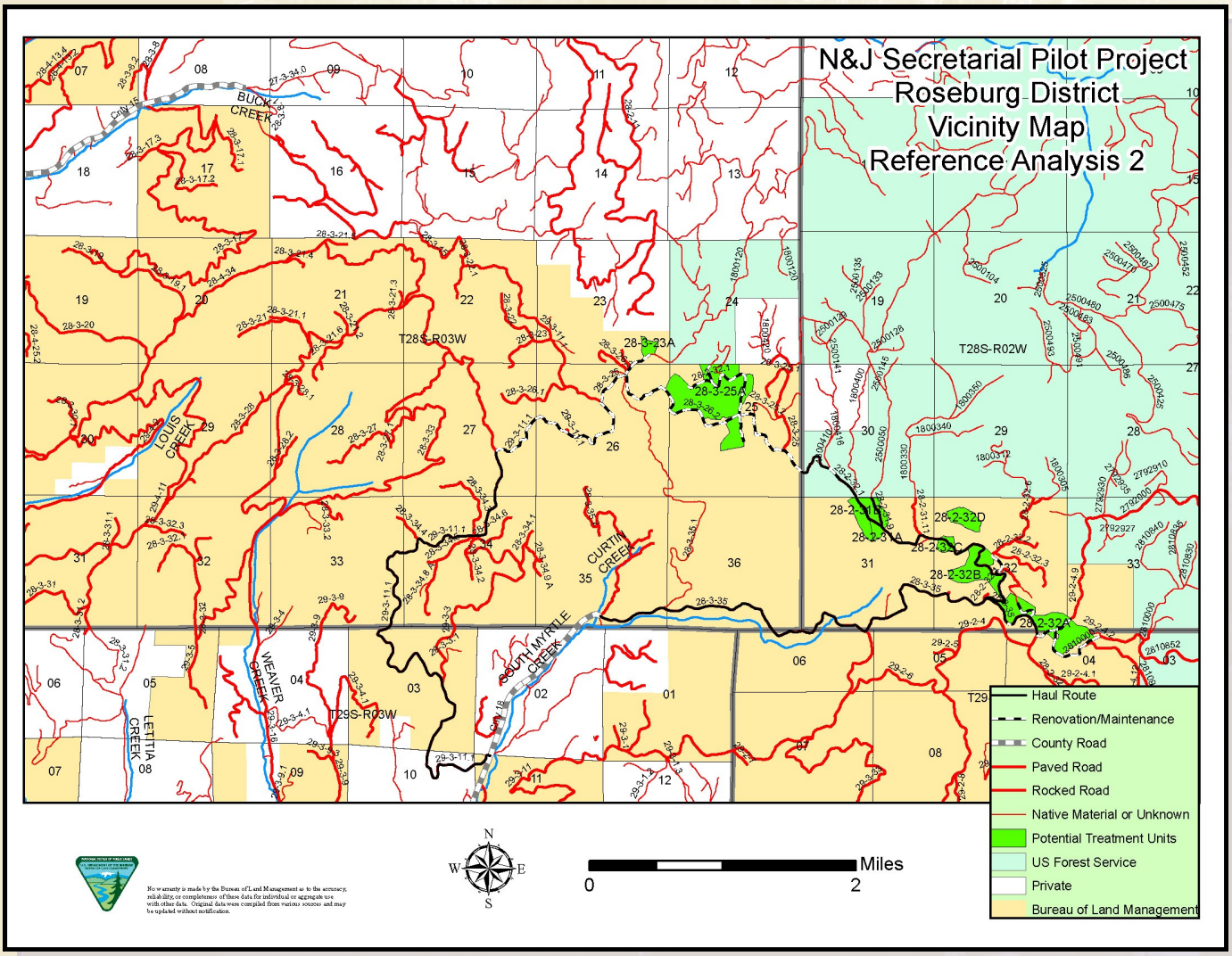
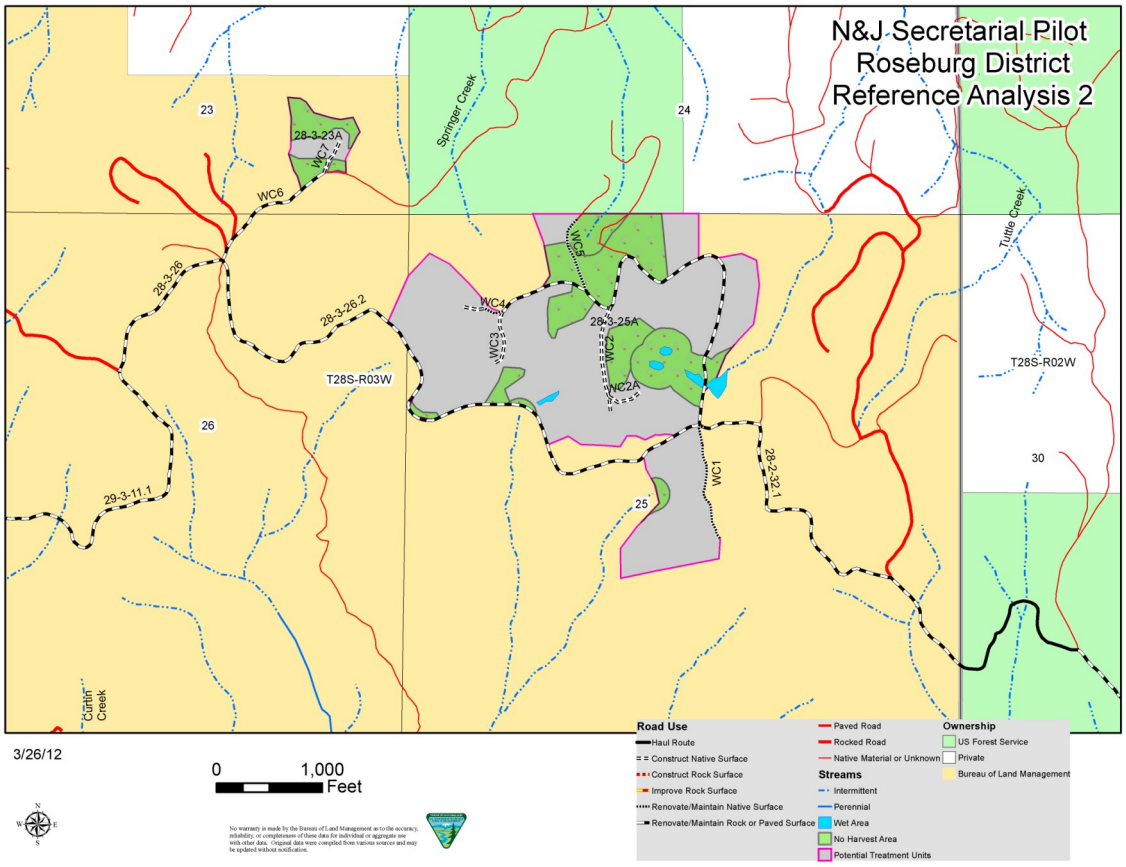
Reference Analysis 2
Northwest Forest Plan Variable-retention Regeneration Harvest



NWFP Variable-retention Regeneration Harvest Examples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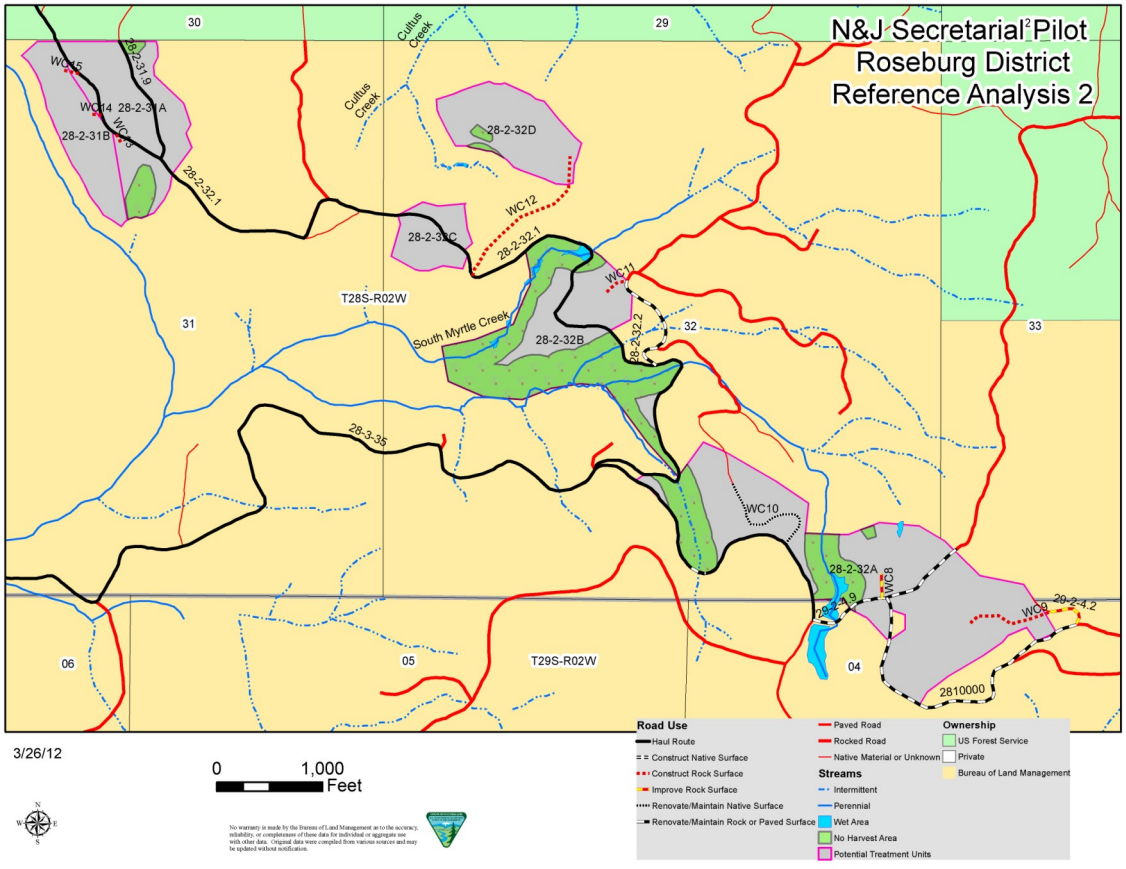
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Rocked Road
Native Material or Unknown
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Potential Treatment Units
Ownership
US Forest Service
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Bureau of Land Management

Public Engagement

The Roseburg District BLM provided a 30-day formal scoping period for public comment on the proposal between June 15 and July 15, 2011.

Scoping comments were received from the Cow Creek Band of Umpqua Indians, Association of O&C Counties, Rocky Mountain Elk Foundation, American Forest Resources Council, Oregon Society of American Foresters, Association of Oregon Loggers, Douglas Forest Protective Association, Umpqua National Forest, Pacific Rivers Council, Cascadia Wildlands and Klamath Siskiyou Wildlands Center, Oregon Wild, Myrtle Creek Rural Community Partnership, and other individual members of the public. Informal Discussions were also held with the Oregon Department of Fish and Wildlife.

The comments received ranged in their applicability to this analysis and fell into the following general categories:

- Comments that influenced the analysis. In particular, the topics of reforestation, timber sale economics, and riparian treatments received attention.
- Comments that are routinely addressed in environmental assessments for timber management activities.
- Comments that are broad and outside the purpose and need of this project. For example, many comments asked that ecological and economic issues be addressed at a broad landscape scale. This project is too small to lend itself to this sort of analysis, which is best addressed in a broad land management planning effort.
- Comments that challenge the concepts put forth by Johnson and Franklin. While debate about these principles is on-going, Franklin and Johnson are recognized experts in this field and, as is stated in Chapter 1, Section 1 of this document, were asked by the Secretary of Interior to demonstrate their concepts.

Responses to the comments are contained in **Appendix G - Scoping Summary** of the Environmental Assessment.

NATIONAL SYSTEM OF PUBLIC LANDS
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT