USDA. FOREST SERVICE
COLUMBIA RIVER GORGE NATIONAL SCENIC AREA
902 WASCO AVENUE, SUITE 200
HOOD RIVER, OR 97031
Telephone: 541-308-1700
Fax: 541-386-1916

FOREST PRACTICE REVIEW APPLICATION

DATE OF APPLICATION:

APPLICANT(S)	**PROPERTY OWNERS**
Mike Messier	Michael Smith
Trout Mountain Forestry	
MAILING ADDRESS	MAILING ADDRESS
1800 NW Upshur St., Suite 201	5527 S. 20th Way
Portland, OR 97209	Ridgefield, WA 98642
APPLICANT'S SIGNATURE AND DATE	PROPERTY OWNER'S SIGNATURE AND DATE
PHONE: (503) 233-2131	PHONE: (360) 907-2160
E-MAIL: mike@troutmountain.com	E-MAIL:

LOCATION OF PROPERTY			**PROPERTY ADDRESS** (IF APPLICABLE)
TOWNSHIP: 2N	RANGE: 6E	SECTION: 21	N/A
QUARTER SECTION: SE ¼ of NW ¼		TAX LOT: 02062100020000	
PARCEL SIZE (ACRES): 40			COUNTY: Skamania
EXISTING LAND USE: Timber			STATE: Washington

PROJECT DESCRIPTION: Describe your proposed forest practice including:

1. **Details on the purpose for the forest practice, the existing stand conditions (approximate percent canopy closure, trees per acre, tree sizes, and species composition), and the desired <u>future</u> vegetation structure and reforestation plan (species, spacing).**

   The proposed harvest will occur on 21.5 acres (Stand 3), located east of the perennial stream bisecting the property. The purpose will be to transition the 70 year old, even-aged Douglas-fir stand to a more diverse, uneven-aged stand of Douglas-fir, western hemlock, and western red cedar that may sustain more frequent, lower-intensity harvest entries that would maintain greater canopy cover over the long term.

   Stand 3 presently is dominated by 70 year old Douglas-fir with an understory of vine maple, hazel, red huckleberry, oceanspray, elderberry, Oregon grape, salal, sword fern, bracken fern, and wild rose. Canopy cover is approximately 60 to 70 percent. Trees per acre is estimated at 75 TPA. Dominant tree heights range 120-130 feet. Diameters (DBH) ranges 18-30". Partial cutting occurred approximately 20 years ago, concentrated around skid trails, thus resulting in widely varying tree densities from acre to acre.

   The desired future condition is an uneven aged, mixed conifer stand that will utilize natural regeneration of hemlock and cedar and small openings (1 to 5 acres) to periodically regenerate Douglas-fir, as it is shade-intolerant. Reforestation for this harvest will occur at 10x10 spacing (436 trees per acre) and will include a mix of Douglas-fir, western hemlock, and western redcedar. Cedar will be protected from browse with vexar tubes.

2. **The silvicultural prescription, (regeneration mosaic, overstory removal, shelterwood, small group selection, uneven-age partial cut, even-age thinning, thinning from above to release understory, thinning from below to thin understory layer, or salvage of standing dead).**

   There are two silvicultural prescriptions for the proposed forest practice.

   15 acre opening: The prescription for the 15 acre opening will be to regenerate the stand while retaining 15% canopy cover through dispersed leave trees, similar to a shelterwood. 3 of the largest trees per acre will be marked for permanent retention to provide habitat as green trees, and eventually as snags. Trees with heart rot or major structural defect will be included in the retention, as they are more likely to become snags in the short term than a perfectly-formed, healthy tree.

   6.5 acre thinning from below: This area is located adjacent to the perennial stream to provide a large area of intact canopy to protect stream shade and temperatures. The thinning will remove the more suppressed trees with small crowns to improve forest health. A portion of this area will fall within the outer 95 feet of the 200 foot perennial stream buffer for the Scenic Area. See the No-Practicable Alternative Test and mitigation plan for justification and protection measures.

   General operational notes: Trees removed as part of the thinning project will be felled, de-limbed, and bucked with a chainsaw, then pre-bunched to designated skid trails by a small log loader and transported to the landing with a tracked or rubber-tired skidder. Where possible, logs will be moved to the landing directly with the loader (i.e. "shovel-logged"), which is a lower-impact method.

Skid trail locations will be chosen to minimize impacts to the soil, water resources, understory vegetation, and retained trees. In particular, skid trails will be located away from streams or any areas with poor drainage. Exact skid trail locations will be chosen prior to the commencement of the project in consultation with the operator.

Logs will be loaded onto log trucks at designated landings and sent to the appropriate mill or log yard via Mars Landing Road, Woodard Creek Road, and WA State Highway 14.

3. **The volume and species to be removed and the approximate percent canopy closure and trees per acre after treatment.**

   Douglas-fir is the primary species to be removed. In the opening, 15% canopy closure will be retained with approximately 10-15 TPA. The stand likely averages 25-30 MBF per acre, and approximately 20 MBF per acre will be removed. In the thinning from below, a minimum of 50% canopy closure will be retained (currently 60-70%) with at least 50 TPA.

4. **The size and shape of the treatment units and associated natural features such as streams, talus slopes, rock outcrops located on a color aerial photo or copy of a color aerial photo and the location of roads, culverts, skid trails or other ground disturbing activities (see site plan, p.3),**

   Please see the site plan map

5. **Slash treatment (no treatment, lop and scatter, chip and scatter, hand pile and burn, grapple pile and burn, jackpot burn.) Use additional Sheets as necessary.**

   Opening: Slash will be piled with an excavator and burned. Any existing and new large woody debris will be retained and kept away from burn piles.

   Thin from below: Slash will be lopped and scattered where possible. Small wildlife piles may be made (not burned) where there are large accumulations of slash.

Application Checklist: the following is required to complete your application:

[x] Application form completed and signed
[x] Site Plan
[x] Key viewing areas checklist (attached)
[x] Names and addresses of adjacent property owners within 200 feet of parcel
[] Any additional information as required:

KEY VIEWING AREAS: Key viewing areas are important public viewpoints and areas that afford opportunities to view the Gorge scenery. Key viewing areas are listed below. Please check those sites which can be seen from your property.

X [] Historic Columbia River Highway
[] Sandy River
[] Portland Women's Forum State Park
[] Crown Point
[] Rooster Rock State Park
[] Multnomah Falls
[] Larch Mountain
X [] Highway I-84, including rest stops
[] Bonneville Dam Visitor Centers
X [] Sherrard Point on Larch Mountain
[] Rowena Plateau/Nature Conservancy Viewpoint
X [] Larch Mountain Road
[] Wyeth Bench Road
[] County Road 1230 (Old WA St. Route 14)
[] Washington State Route 14
[] Washington State Route 142
[] Washington State Route 141
[] Cook-Underwood Road
[] Dog Mountain Trail
[] Beacon Rock
[] Cape Horn
X [] Columbia River
[] Pacific Crest Trail
[] Oregon Highway 35

Forest Practice SITE PLAN: A plan drawn in black ink at a scale of 1 inch equal to 200 feet (1:2400) or at a scale providing greater detail must be included with the application.

If the parcel is very large, you may show the forest practice on the portion of the parcel affected by the proposed use. Be sure, however, to show enough of the parcel or some adjacent features, such as roads, so that the reviewers can orient themselves on your map. A small vicinity map showing the subject parcel and surrounding parcels may help.
Use a copy of an aerial photo to show units, rock sources, natural features, roads, skid trails, landings, etc.

At a minimum, you must show the following features:

[] Applicant(s) name

[] Location and width of existing and proposed roads, driveways, and trails

[] Scale and north arrow

[] Location and size of existing and proposed structures

[] Boundaries of parcel with dimensions and size

[] Location of existing and proposed services including wells or other water supplies, structures, power and telephone poles and lines and outdoor lighting.

[] Significant terrain features or landforms

[] Location and depth of all proposed grading and ditching

[] Groupings and species of trees or other vegetation on the parcel

[] Location and species of vegetation that would be removed or planted

[] Water courses and bodies of water

ADJACENT PROPERTY OWNERS AND EXISTING LAND USE ON ADJACENT PARCELS WITHIN 200 FEET OF PROJECT PROPERTY:

TOWNSHIP, RANGE, SECTION, TAX LOT	NAME AND ADDRESS	EXISTING LAND USE
02062100010000	GOOD, VIRGINIA A. TRUSTEE c/o VINCE W GOOD 4476 ASCOT CIRCLE N SARASOTA, FL 34235	GMA- Forest
02060000230000	COMBELIC, KATHLEEN B 912 SCOTT ROAD SKAMANIA, WA 98648	GMA- Single family residential
02062100060000	UNITED STATES OF AMERICA COL RIVER GORGE NAT'L SCENIC AREA 902 WASCO AVE SUITE 200 HOOD RIVER, OR 97031	SMA- Forest
02062100050000	REEVE RESOURCES, L.L.C. 2844 SAINT DIZIER DR HENDERSON, NV 89044	SMA- Forest

For Your Information:

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County offices:

Clark County
Department of Community Department
1408 Franklin Street
P.O. Box 9810
Vancouver, WA 98666-9810
360-699-2375

Assessor's Office
1013 Franklin Street
P.O. Box 5000
Vancouver, WA 98668
360-699-2375

Wasco County
Planning and Economic Development Office
2705 East Second Street
The Dalles, OR 97058
541-298-5169

Assessor's Office
Court House
The Dalles, OR 97058
541-296-5477

Skamania County
Department of Planning and Community Development
P.O. Box 790
Stevenson, WA 98648
509-427-9458

Assessor's Office
Courthouse
P.O. Box 790
Stevenson, WA 98648
509-427-9400

Hood River County
Planning and Community Development
Courthouse
309 State Street, Room 101
Hood River, OR 97031-2093
541-387-6840

Assessor's Office
Courthouse
309 State Street
Hood River, OR 97031-2093
541-386-4522

Klickitat County
Planning Department
Courthouse Annex
228 SW Main, Rm. 150
Goldendale, WA 98620
509-773-5703

Assessor's Office
Courthouse
205 S. Columbus
Goldendale, WA 98620
509-773-3715

Multnomah County
Department of Environmental Services
1600 SE 190TH Avenue
Portland, OR 97233-5910
503-248-3043

Assessor's Office
610 SW Alder
Portland, OR 97204
503-248-3326

Forest Stewardship Plan

Smith Tract

Located in Skamania County, Washington

Prepared for

Michael Smith

Prepared by

Mike Messier
Trout Mountain Forestry
1800 NW Upshur Street, Suite 201
Portland, OR 97209
503-222-9772

June 2016

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Data Summary Page

Landowner name:
Michael Smith

Landowner address:
Michael Smith
5527 S. 20th Way, Ridgefield, WA 98642

Landowner phone:
360-907-2160 (cell)

Tract name:
Smith Tract

Total acreage:
40 acres

Tract legal descriptions:
T2N R6E, SE 1/4 of NW 1/4, Sec 21 W.M.
Parcel# 02062100020000

Latitude and longitude:
45.6453N, 122.0767W

Fire Protection District:
Skamania RFPD

Douglas-fir Seed zone:
6- Lower Columbia

Elevation:
1250-1500'

Mean annual precipitation:
75 inches

Property tax classification:
Designated Forest Land

Columbia River Gorge National Scenic Area Zoning:
Special Management Area (SMA)

Executive Summary

The Smith Tract is located in rural Skamania County, near the town of Skamania, WA. It falls within the regulatory environment of the Columbia River Gorge National Scenic Area, "Special Management Area," (SMA) administered by the United State Forest Service in Hood River, OR. This management plan was developed for the Smith family to formalize a vision for future management of the property that is compatible with the Scenic Area Management Plan.

The 40 acre property is split into east and west sections by a southward flowing perennial stream. The majority of the timber volume is located on the east side of the stream in a 70-year old Douglas-fir stand that had some partial cutting approximately 20 years ago. The west side is dominated by red alder with pockets of mature Douglas-fir, western redcedar, and western hemlock. Topography is relatively gentle and accessible by ground-based logging equipment, with the exception of the NW quadrant, which has steeper, more rugged terrain and is cut off from the rest of the property by stream draws.

Included here are recommendations for transitioning the forest from a predominately even-aged forest to an uneven-aged forest that would sustain more regular forest thinning entries and maintain more consistent canopy cover over time.

Landowner Goals and Objectives

The landowner's primary goals are as follows:

1) Maintain forest health
2) Utilize periodic selective logging operations to meet forest health objectives and to generate income.
3) Transition even-aged forest to un-even-aged forest of mixed conifer species to increase the financial sustainability of the forest over time.

Forest Resources

The following sections briefly describe some of the resources known to occur on the property, and set the stage for some of the stand-specific management recommendations found later in this plan. Forest management maps are located in the Stand Analysis and Recommendations.

Soils and Site

A single soil type dominates the property, known as Steever stony clay loam. It is found on mountain slopes from 2-65 percent and is a very deep, well-drained soil that formed in old landslide material of basalt, andesite, and conglomerate. Detailed soil information from the USDA Web Soil Survey, including maps and related information are found in **Appendix A**.

Tree site index is a measure of site productivity, presented here as the average height, in feet, that dominant and co-dominant trees (Douglas-fir) attain in 50 years. The site index applies to fully stocked, even-aged, unmanaged stands. The site value of Steever stony clay loam is 100 (Site III), considered moderately productive.

Vegetation

The property is dominated by typical forest vegetation of the western Cascades, with Douglas-fir, red alder, bigleaf maple, and western hemlock being the most commonly found species. Common understory vegetation on the site includes vine maple, salmonberry, hazel, oceanspray, red huckleberry, elderberry, Oregon grape, salal, sword fern, bracken fern, and wild rose.

Water Resources

There are two headwater, non-fish bearing streams that converge to a single stream which then becomes fish-bearing for approximately half the length of the property. The west side of the property is more topographically complex, with a number of small seeps and springs.

The Scenic Area Management Plan requires a 200-foot no-cut buffer on perennial streams, unless some benefit may be demonstrated to operate within the outer portion of that buffer. A No-Practicable Alternative Test and mitigation plan would be required to do so. In order to maintain forest health and eventually recruit larger down wood into the stream and onto the forest floor, it is recommended that a 105-foot no-cut buffer be implemented (as per DNR requirements), with periodic, light thinning to be conducted in the outer 95 feet of the 200-foot buffer. Trees would be directionally felled away from the stream to prevent damage to buffer trees or disturbance of the understory.

Fish and Wildlife Habitat

Fish habitat is present on the lower stretch of the southward-flowing stream that bisects the property. It likely contains resident cutthroat trout.

There is a well-establish, native shrub understory throughout the property that provides nesting, foraging, and cover habitat for birds and small mammals. The west side of the property is more rugged and contains abundant hardwoods and thickets of brush.

Scattered snags (standing dead trees) are found throughout the property, which provide necessary nesting, caching, roosting, and hiding sites for a variety of birds, mammals, and amphibians. Presence of snags is correlated with biological diversity, as more than 50 species of birds and mammals use snags for nesting, feeding, and shelter (Logan 2002). In general, larger snags have greater opportunities for use by a variety of wildlife species. Additional snags will be recruited over time by retaining the largest 3 trees per acre, uncut in perpetuity, to eventually become snags. These trees will be specially marked with tree marking paint and monitored over time. When the trees eventually

die, they will provide different habitat functions over the decades that it takes for the snag to decompose. Where snag abundance is lacking, one large snag may be created per acre to sustain snag-dependent species until natural snag recruitment occurs.

Down logs are also important habitat elements for a range of species and they will be retained during timber harvesting. Creation of additional large woody debris will occur during timber harvests in moderate amounts to avoid the risk of bark beetle outbreaks and to gradually increase down wood in different stages of decay over time. Large, cull logs and any pulp logs are good candidates for retention as they typically do not pay their way out of the woods and are best left on the ground. Care will be taken to keep large woody debris out of slash burn piles.

Threatened and Endangered Species

There are no known occurrences of threatened or endangered (T&E) species on the property. Suitable habitat for the northern spotted owl is generally lacking due to the young, even-aged structure of the forest and absence of old-growth trees.

Archaeological and Cultural Resources

There are no known archaeological or cultural resources present on the property. If any sites or artifacts are discovered, an Inadvertent Discovery Plan for archaeological sites will be followed and activities will be delayed until the significance of the site can be ascertained.

Forest Health

Insects and Disease

Generally, the forest is healthy and free of insect or disease problems. The west side of the property may have some old root rot pockets, which could explain the current dominance by red alder and brush. Encouraging species diversity will contribute to overall insect and disease resistance. Root rot risk may increase over time in stands with high stem densities in even-aged Douglas-fir or hemlock. Inclusion of hardwoods and cedar in Douglas-fir stands helps prevent the spread of root rotting pathogens since these species are either immune to or resistant to these diseases. Hardwood and shrub diversity also encourages diverse bird populations, which serve as important insect bio-controls.

Invasive Species

The property contains a minor amount of Himalayan blackberry and Scotch broom.

Regular monitoring and early control is important to preventing the spread of invasive weeds. Seeding roads, trails, and landings can also help prevent weed establishment. Competition in new plantations can be limited by thorough site preparation and early

weed control. Dense young conifer plantations and vigorous native understory vegetation can shade out and kill understory blackberry.

Fire Plan

The Smith property is in the Skamania Rural Fire Protection District.

The primary objective of forest fuels management is to minimize the potential for catastrophic fire. Forest fuels will be managed through periodic thinning that removes trees in overly dense stands and ensures vigorous and healthy timber conditions. The greatest risk of fire is from escaped brush fires on abutting lands. Hardwood in mixed stands serves as a natural "fire break," and should be encouraged. Further information on what to do in the event of a forest fire is included in the appendix.

Forest Practices Rules

This plan and all management recommendations must comply with regulations at both the state and federal levels. Because this property is located in the Columbia River Gorge National Scenic Area (CRGNSA), timber harvests must first go through an application process with the US Forest Service to determine consistency with the CRGNSA Management Plan.

With approval from the Forest Service, the forest practice must then be approved by the Washington Department of Natural Resources (DNR). Most forest operations require filing a Forest Practice Application/Notification (FPA/N) and a 30-day review period. The FPA/N should be filed with the regional DNR Forest Practices office, which in this case is the Pacific Cascade regional office in Castle Rock, WA.

Tax and Business Management

Tax Status

The Smith property is zoned as Designated Forest Land. In place of paying property taxes on the value of timber, private landowners in Washington pay a 5% Forest Excise Tax on the stumpage value of the timber at the time of harvest. The Forest Tax is due to the Washington Department of Revenue at the end of the month following the end of the quarter in which timber was harvested. Taxes may be filed online or by mail.

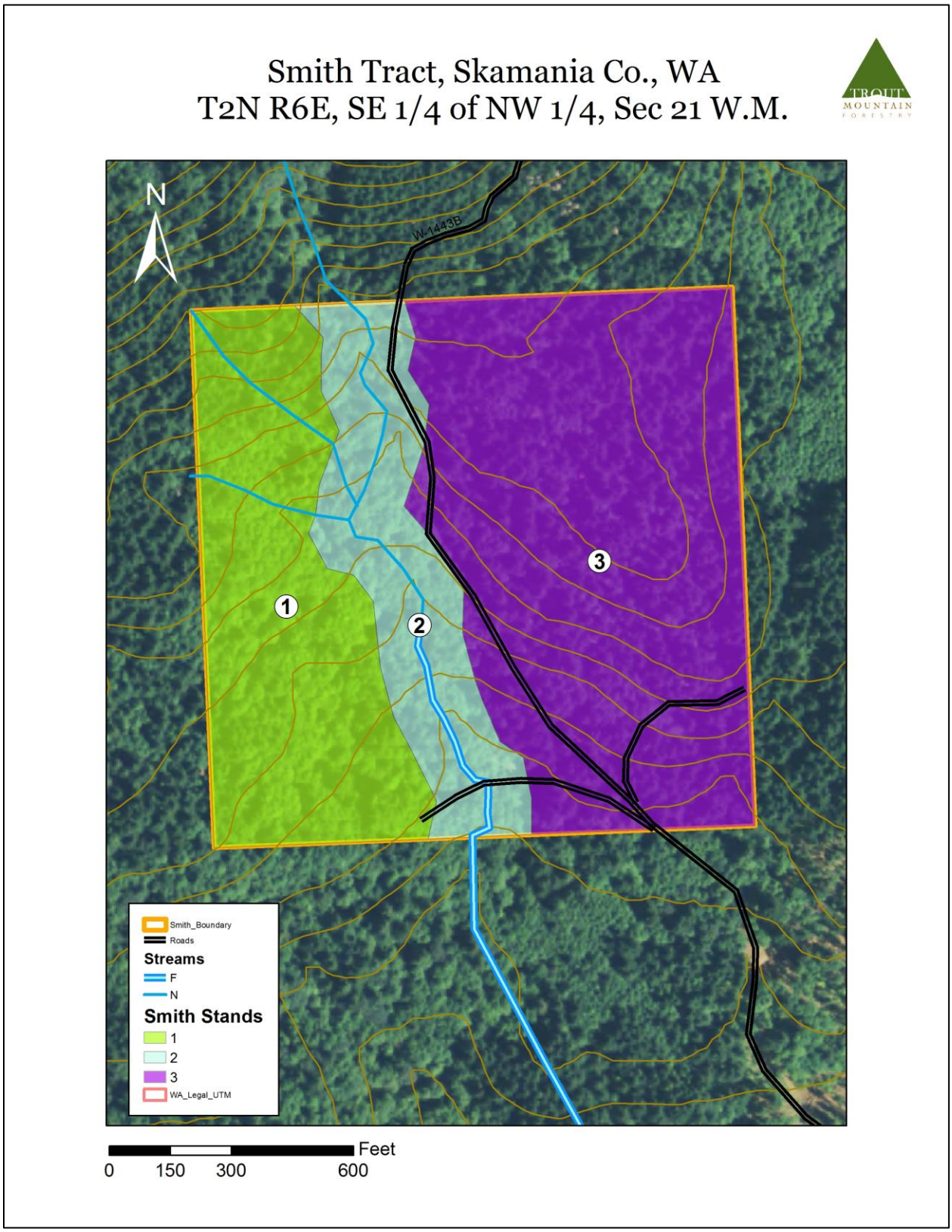
For timber harvested during...	Taxes are due...
Quarter 1 (January 1-March 31)	**April 30**
Quarter 2 (April 1- June 30)	**July 31**
Quarter 3 (July 1-September 30)	**October 31**
Quarter 4 (October 1-December 31)	**January 31**

Roads & Access

There is currently a rocked road that approaches the property from the south that crosses private and federal lands before arriving on the Smith property. A road use permit must be obtained from the US Forest Service to haul timber across federal land and a road use agreement will also be required to haul across the adjacent private lands.

On the property, an old rocked road parallels the stream, heading northward. Its current, highly eroded condition is not suitable for pickup or log trucks and is passable only by ATV or jeep. Significant road repairs would be required prior to utilizing the road for log hauling. Given its location near the stream, it may be preferable to construct a new road higher on the ridge. A lightly-rocked road crosses the meadow at the south end of the property, leading to an old stream crossing that has washed away.

Stand Map


Smith Tract, Skamania Co., WA
T2N R6E, SE 1/4 of NW 1/4, Sec 21 W.M.
N
W-1443B
1
2
3
Smith_Boundary
Roads
Streams
F
N
Smith Stands
1
2
3
WA_Legal_UTM
Feet
0
150
300
600

Stand Analysis & Recommendations

The following section contains detailed data, description, and recommendations for each of the vegetation types identified above in the **Stand Map**.

Stand 1 (11.7 acres): Mixed hardwood/conifer

Stand 1 is located on the west side of the property and is characterized by a predominantly hardwood canopy with several pockets of conifer throughout. The terrain is generally accessible to ground-based logging equipment, except in the NW quadrant where a portion of the property is isolated between deep stream draws. The remainder of the area is hummocky in appearance, likely the result of being deposited by old landslides from the slope above, consistent with the soil type description. Access for management is located at the southern end of the property, where an old crossing appears to have washed out and would need to be repaired or crossed with a temporary structure.

Red alder is the dominant tree species and it varies in age, size, and density throughout the stand. The tallest alder observed was 80' in height, and DBH ranged from 12-18" in the merchantable trees. Past harvesting followed by poor regeneration success resulted in heavy brush and a preponderance of alder, which naturally grows in disturbed soils. For timber quality, this area is not a good growing site for alder, which prefers lower elevations and richer soils. Timber volumes in Stand 1 are relatively low, due in part to uneven stocking and the quality of the alder. Hemlock, cedar, and fir are present in several patches and generally have good timber quality. Conifer patches have dominant tree heights of 120-130,' densities of approximately 125 TPA in well-stocked areas, and average diameters in the 18-22" range. Cedar diameters are larger due to its growth form, averaging approximately 30".

Recommendations

Given the difficult terrain and lower timber volume, waiting to harvest in most of this stand is recommended. Much of the alder needs additional time to reach a merchantable size. That being said, a small area at the southern end of the stand is reasonably accessible once across the stream and has some more mature alder and conifer that may need be thinned sooner. Some portions of the stand in the north may prove inaccessible due to the topography and stream buffer requirements and would thereby be managed as de facto reserve areas.

Stand 2 (7.2 acres): Riparian

Stand 2 encompasses the primary, perennial stream that bisects the property, which is fish bearing in the lower half of the property. The canopy is comprised primarily of red

alder, with scattered Douglas-fir, western redcedar, and western hemlock. The understory vegetation is dominated by salmonberry, vine maple, and devil's club.

Recommendations

As this stand represents the area of a 105 foot, no-cut buffer around the stream (per Washington State forest practice laws), no harvest-related activities would be recommended. Understory planting of shade-tolerant conifer species would provide an enhancement for long-term stream health, as the alder canopy will be relatively short lived and would succeed to a shrub-dominated canopy without intervention. Planting of cedar, hemlock, and grand fir, combined with minor brush control to help the seedlings survive, would provide a head start for the next generation of trees to provide shade and down wood for the stream. The road along the east side of the stream provides good access for planting and monitoring of seedling survival. Cost-share funding for this type of project may be available through the Natural Resources Conservation Service or the local Soil and Water Conservation District.

Stand 3: Douglas-fir (21.5 acres)

Stand 3 is located on the east side of the stream and is the most accessible area for forest management. It is comprised of approximately 70 year old Douglas-fir, with young red alder growing in the old skid trails. It appears the stand had partial cutting around 20 years ago, with cutting concentrated around skid trails, rather than thinning. Dominant tree heights are 120-130 feet and diameters range 18-30". The stand was exposed on its east side during the winter of 2015/2016 by an adjacent clearcut and has experienced some subsequent blow-down.

Recommendations

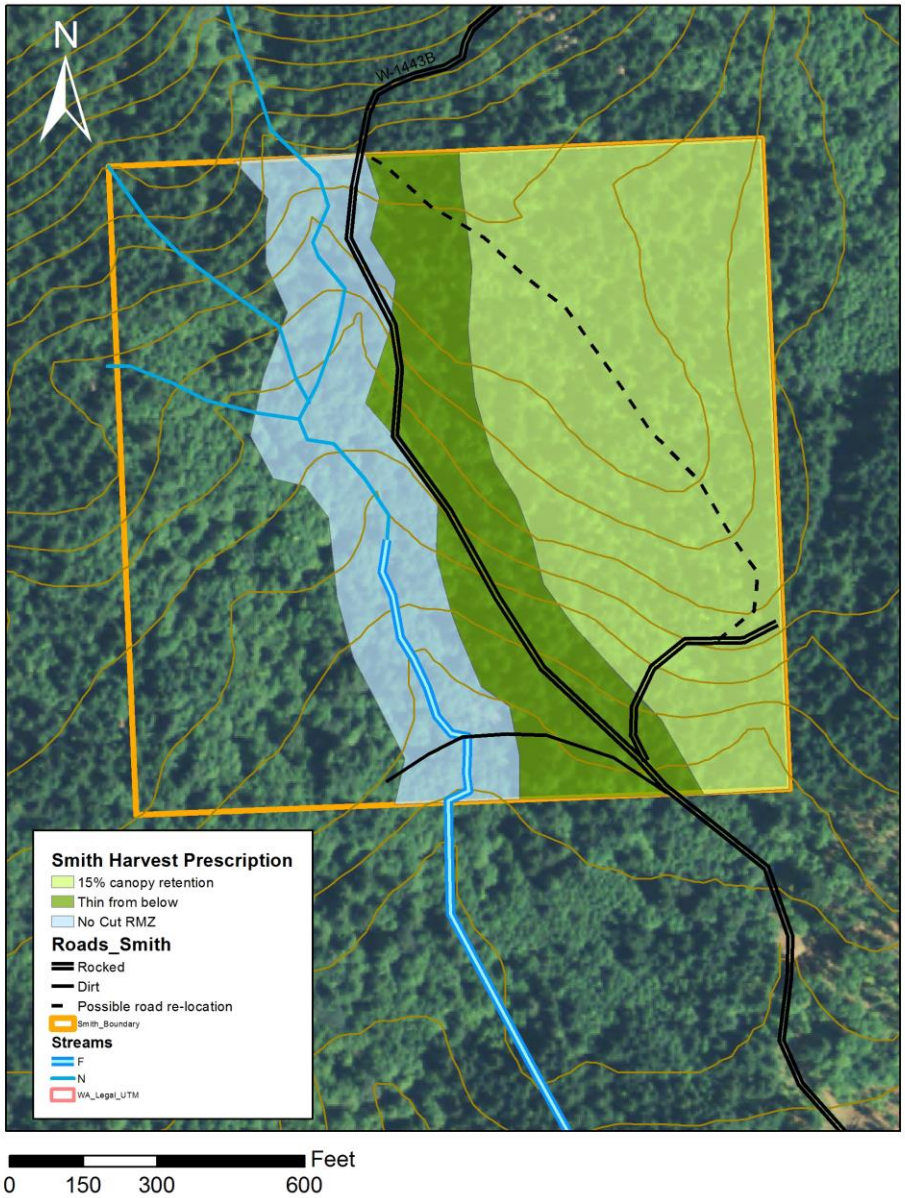
This mature stand does not contain sufficient stocking to warrant a moderate thinning due to the partial cutting that occurred approximately 20 years ago. The recent exposure on the east side will also increase the likelihood of significant blow down along the ridge after a thinning. Transitioning the stand to an un-even aged composition is recommended, as it will permit greater flexibility for future harvesting by retaining greater canopy cover.

To accomplish this goal in the short term, the next harvest entry should regenerate a significant portion of the stand in areas away from the stream, retaining at least 15% canopy cover distributed throughout the openings (which will include 3 of the largest trees/acre to be retained in perpetuity), which may be no larger than 15 acres in the Scenic Area. As the stand is 21.5 acres total, 6.5 acres will be thinned and retain greater canopy cover. The thinning area will be concentrated adjacent to the stream buffer, where it will be more protected from the wind and provide increased shade for the

riparian stand. The thinning will include the outer 95 feet of the 200 foot buffer for perennial streams in the Scenic Area. A No-Practicable Alternative Test and mitigation plan will be filed during the application process for that to occur.

Following the harvest, the entire stand should be replanted (or under-planted where thinned) with a mix of Douglas-fir, western hemlock, and western redcedar. The shade-tolerant hemlock and cedar will facilitate future un-even aged management as they readily provide natural regeneration.

Proposed Harvest Layout
Smith Tract, Skamania Co., WA
T2N R6E, SE 1/4 of NW 1/4, Sec 21 W.M.



Forest Management Schedule

The table below lists all proposed management activities by property for a 5-year planning period. All dates flexible to allow for contingencies such as cost-share funding, market conditions, weather, access, etc.

Year	Stand	Prescribed activity	Acres
2016-2017	3	Variable retention harvest (regenerate 15 acres, thin 6.5 acres)	21.5
2017	3	Replant mix of fir, hemlock, cedar	21.5
2017	1, 2	Investigate NRCS cost-share options for Brush control, under-planting along streams, Etc.	
2021-2022	1	Evaluate for thinning	11.7
2026	All	Update plan	

Assistance

Agencies and individuals that can provide assistance to the landowners are as follows:

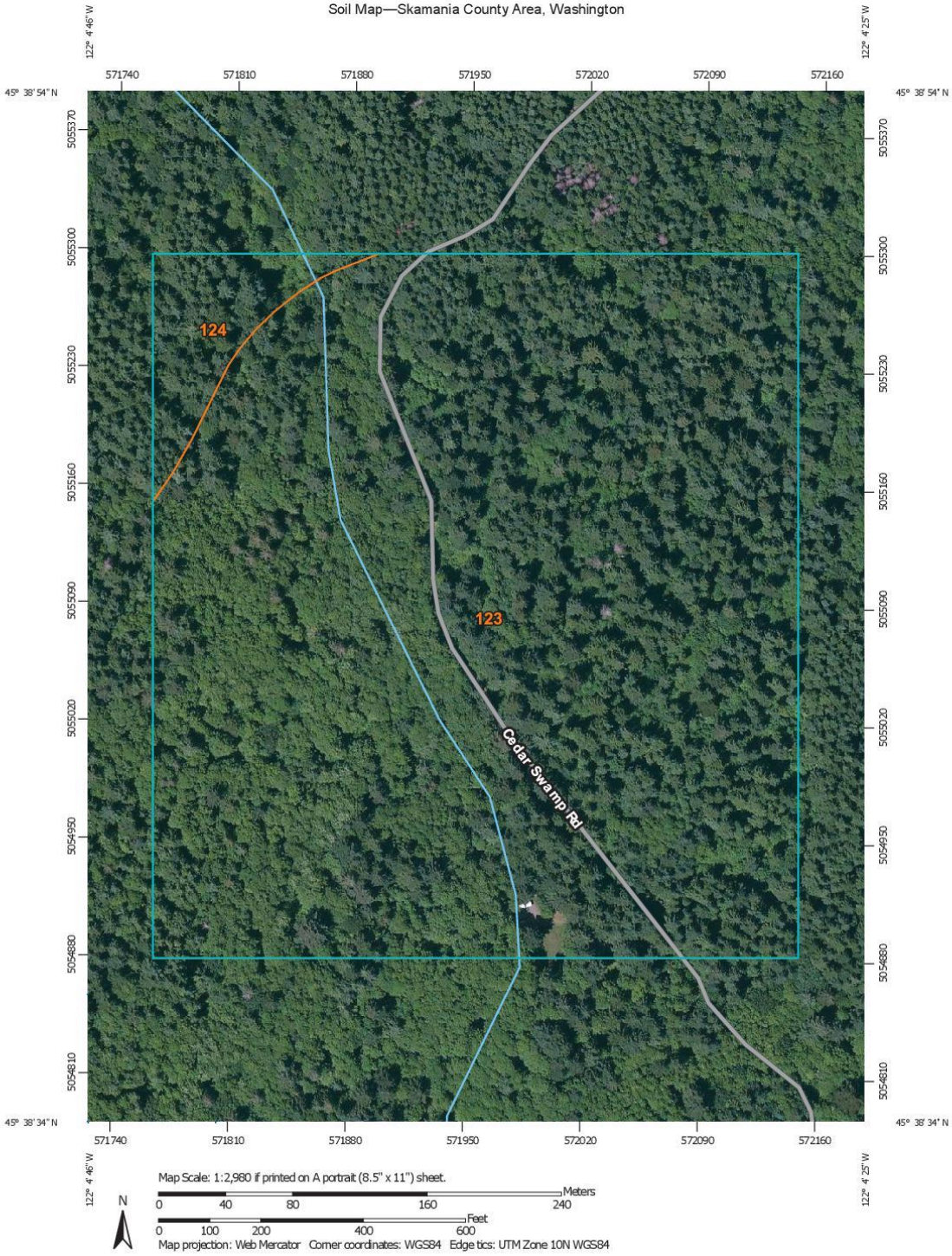
Anitra Gorham
Resource Conservationist
Natural Resource Conservation Service, Brush Prairie Service Center
11104 NE 149TH ST BLDG C STE 400
BRUSH PRAIRIE, WA 98606-9565
Tel: (360) 883-1987 x 108
anitra.gorham@wa.usda.gov

Underwood Conservation District
(509) 493-1936
info@ucdwa.org
170 NW Lincoln
White Salmon, WA 98672 (Office)

PO Box 96
White Salmon, WA 98672 (Mail)

Appendix A: Soils map

Soil Map—Skamania County Area, Washington



Map Scale: 1:2,980 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Skamania County Area, Washington
Survey Area Data: Version 11, Sep 15, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 8, 2010—Aug 27, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Skamania County Area, Washington (WA659)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
123	Steever stony clay loam, 2 to 30 percent slopes	38.1	95.5%
124	Steever stony clay loam, 30 to 65 percent slopes	1.8	4.5%
Totals for Area of Interest		**39.9**	**100.0%**

Appendix B: Fire safety information

In the wildland/urban interface, it is important for residents to be prepared. The following items may serve to assist in being prepared for fire events.

1) **Know your resources**. Understand how the firefighting agencies work. During fire season, the Interagency Dispatch centers of DNR, BLM, and USFS compare situations and update each other every morning. Local agencies call in with changes in their situations only.
The USFS and DNR have daily weather (and safety) briefings during fire season, at both local and regional levels. (This also happens during non-fire periods.)
During a large fire event, a larger, dedicated dispatch center for that fire is often set up, allowing the regular dispatchers to go back to their normal duties. Dispatch operations may expand to meet the needs of a situation that is increasing in severity. This enables the regular dispatchers to more effectively prepare for and deal with new emergencies.
Dispatch centers are not a place for obtaining public information. The first few hours of a wildfire event are not the time to be trying to get information. Over 90% of all fires in this area are contained to less than 10 acres and are out within the first two hours. (So, let the fire fighters go after them!) Scanners are a good way to obtain information on where a fire is and who's on it.
All agencies and communities work together during a wildfire event trying to balance the amount of resources needed to suppress the fire while maintaining some protection for new starts, but without overspending. Fire suppression is never free; we all pay for it the following year through our tax dollars.
2) **Evacuation**. Understand the meaning of an evacuation order. The decision to recommend an evacuation is made by the fire's Incident Commander and may be enforced by local law enforcement. It is always a hard call to balance the liability of possible loss of life or property with a desire to warn but not unnecessarily displace residents. Once an area is evacuated, road blocks will be maintained to prevent people from entering. If an evacuation center is established, it is important to check in there, so you can be accounted for. Should power and phones be disrupted, this check-in list becomes an official record for friends and family to confirm your safety. If residents follow a contingency plan of going to a neighbor's house, they should still check in at the evacuation center so they can be accounted for and not considered MIA. If the evacuation will be for a substantial period of time, the agency ordering the evacuation will often contact the Red Cross, who will make shelter arrangements for displaced residents until the danger passes.

Fire safety information modified from the Applegate Valley Fire Plan, Applegate Partnership

M E M O R A N D U M

From: Mike Messier, Trout Mountain Forestry

To: Robin Shoal, USFS Columbia River Gorge National Scenic Area

Date: September 2, 2016

Subject: Practicable Alternative Test and Mitigation Plan- 2016 Smith Forest Practice

Background

The 40-acre Smith Parcel is located in the Columbia River Gorge National Scenic Area, Special Management Area (SMA), which requires water resource buffer zones that exceed those required by Washington State Department of Natural Resources (DNR). The required buffer zone on perennial streams, lakes, and ponds is 200 feet, to be left untouched and natural. The 'no-touch' buffer zone area proposed in the application (on the map) is 105 feet, which deviated from the SMA requirements, but meets the DNR requirements for Site Class III in fish-bearing waters. The stream crossing the Smith parcel is fish-bearing for approximately half its distance across the property, before becoming a perennial, non-fish-bearing stream.

Justification for No Practicable Alternative

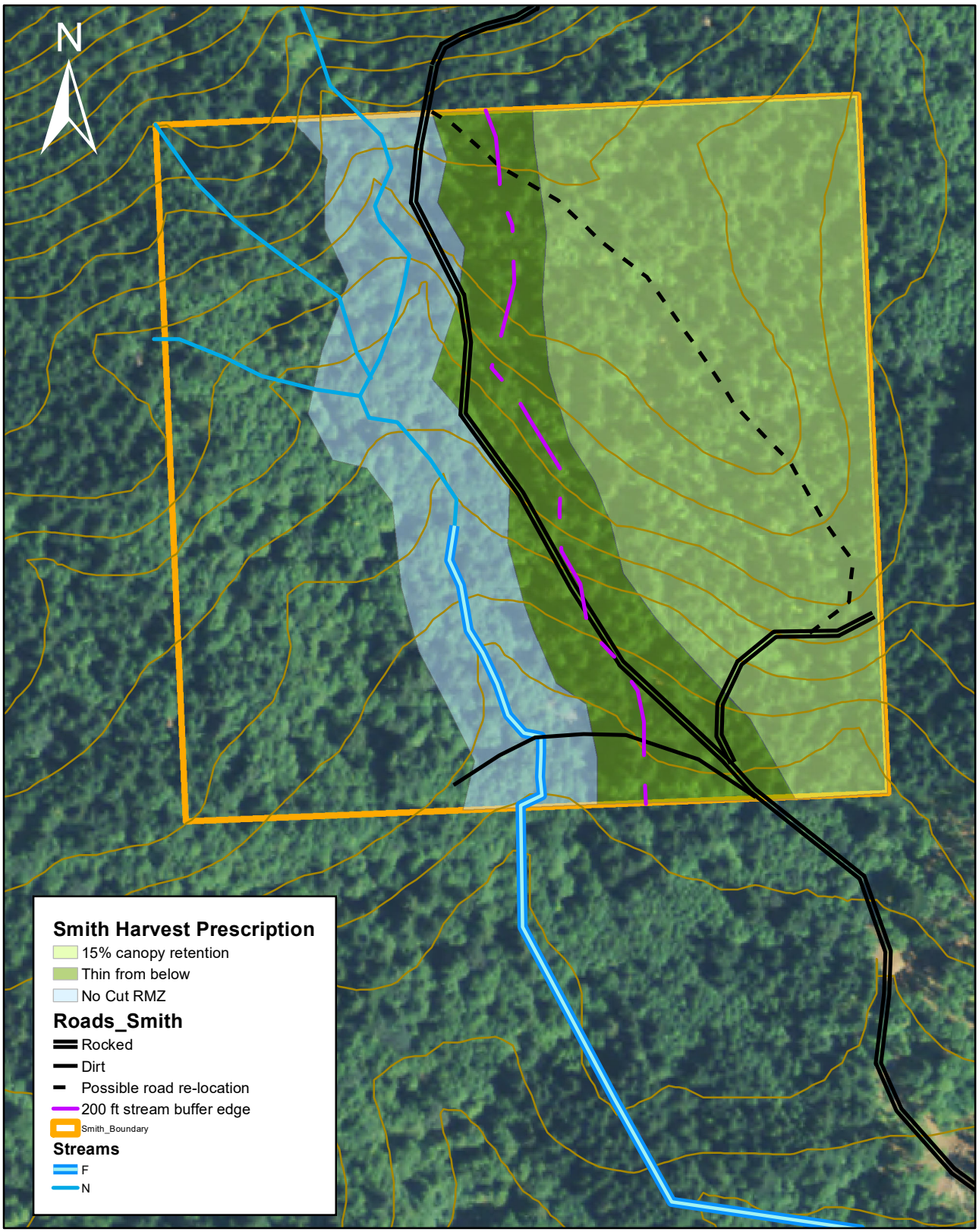
The proposed no-touch buffer zone for the perennial stream in the project area is 105 feet, rather than the 200 feet required for SMA lands, so that a light thinning (~33% volume removal, single tree selection) may be employed to improve forest health in the outer 95 feet of the riparian zone, to release pockets of advanced regeneration in the understory, and to develop characteristics of old growth forests, including very large trees, snags and down logs.

These benefits are desirable not only in the uplands, but in proximity to riparian habitats as well. Therefore, a substitution of other upland acres for the area within the outer 95 feet of the 200-foot buffer zone would not accomplish the desired objectives of the project.

Mitigation Plan

To minimize machine travel and soil impacts within the 200-foot SMA buffer zone, trees within the outer 100 feet selected for harvesting will be directionally-felled out of the buffer. The logger selected for this project has a long and successful history working with Trout Mountain Forestry on sensitive sites, including the Girl Scouts' Camp Arrowhead near Carson, WA, and has a reputation for his conscientious approach to thinning. In addition, the badly eroded road that parallels the stream is within the outer portion of the riparian zone will be repaired to restore proper drainage and prevent erosion.

2016 Forest Practice Layout
Smith Tract, Skamania Co., WA
T2N R6E, SE 1/4 of NW 1/4, Sec 21 W.M.



Feet

0 150 300 600