

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			Karen Hill, CEO		
Trout Mountain Forestry			Girl Scouts of Oregon and SW Washington, Inc.		
MAILING ADDRESS			MAILING ADDRESS		
1800 NW Upshur St., Suite 201			9620 SW Barbur Blvd.		
Portland, OR 97209			Portland, OR 97219		
APPLICANT'S SIGNATURE AND DATE			PROPERTY OWNER'S SIGNATURE AND DATE		
			<i>Karen Hill, CEO</i> 10/7/14		
PHONE: (503) 233-2131			PHONE: (503) 977-6829		
E-MAIL: mike@troutmountain.com			E-MAIL:		
LOCATION OF PROPERTY			PROPERTY ADDRESS (IF APPLICABLE)		
TOWNSHIP: 3N	RANGE: 8E	SECTION: 25	Girl Scout Road		
QUARTER SECTION: Portions of NW, SW, and SE		TAX LOT: 4000	101 Arrowhead Rd. Stevenson, WA 98648		
PARCEL SIZE (ACRES): 266			COUNTY: Skamania		
EXISTING LAND USE: Camp/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 future vegetation structure and reforestation plan (species, spacing).**

Background:

Camp Arrowhead is a 266 acre Girl Scout Camp that is surrounded on three sides by the Gifford Pinchot National Forest. Douglas-fir forests cover most of the property, ranging in age from 30-100 years, with the majority being in the 60-90 year range. Given its proximity to the east-side of the Cascade Range and its predominantly south-facing aspects, the property also has some scattered Ponderosa pine and Oregon white oak trees. A Forest Stewardship Plan was completed for the Camp in December 2009.

Since 2009, two forest thinning projects have been successfully completed at the camp to enhance forest health by removing smaller, suppressed trees to allow dominant and co-dominant trees to maintain large, healthy crowns with reduced moisture-stress. Pine and oak trees in good condition have been favored in the thinning operations where present.

In the spring of 2012, a large ice-storm event resulted in significant damage to the forest and infrastructure at Camp Arrowhead and in the surrounding National Forest lands. Trees throughout the camp were blown over or had tops broken out. The large amount of downed-wood and stressed trees resulting from the ice storm has caused Douglas-fir bark beetle populations to grow significantly in the Home Valley area between Wind and Dog Mountains and in other areas nearby. The large population of bark beetles emerged from the freshly-downed wood in 2013 and began to move into live trees in various portions of the camp, particularly in stands stressed by the fungal disease, Laminated Root Rot (LRR). It was noted in 2009 during the stewardship planning process that LRR was present in some of the Douglas-fir stands, but the scope of the disease has become more evident as the bark beetles are attacking seemingly healthy trees in the vicinity of LRR disease centers that are not yet outwardly displaying symptoms of LRR.

Purpose

Given its purpose as a youth camp for the Girl Scouts of Oregon and Southwest Washington, LRR and associated bark beetle mortality has become a major safety issue and a threat to the overall health of the forest at Camp Arrowhead. The purpose of this forest practice is to mitigate the spread of LRR in affected areas and to improve the overall vigor of the un-affected trees (and thus resistance to bark beetles).

This forest practice will have three project areas: North, Central, and South.

North

The North project area covers approximately 9 acres of 90+ year old Douglas-fir with scattered bigleaf maple. This area contains one of the more heavily impacted areas by LRR on the property. It was lightly thinned in 2009, but in 2012 this area was severely impacted by the ice storm, resulting in significant windthrow and broken-tops.

Current density is approximately 100 trees per acre, though it varies with the stand depending on the severity of LRR impacts, with DBH (diameter at breast height, 4.5 feet) ranging from 16-36 inches.

Tree heights range from 120-145 feet. The desired future condition in this area is a mixed-species, mixed-age stand that includes more species resistant to LRR, including ponderosa pine, western white pine, western red cedar, and bigleaf maple.

Central

The Central project area covers approximately 5 acres of predominantly 90+ year old Douglas-fir. Current density is approximately 150 trees per acre, with DBH averaging 16 inches. This area has not been thinned in recent years, if ever, and would benefit from a light thinning to remove the suppressed-crown trees as well as those with broken tops from the 2012 ice storm. As with the rest of the property, thinning to promote tree vigor and resilience to insect and disease is a primary objective. This area is clearly visible from the main parking lot next to Home Lake as well as many of the roads. The adjacent parking lot is designated as an emergency assembly point in the case of wildfire, making fuels reduction another important objective in this stand. The desired future condition is a healthy, mixed-species stand of large, old Douglas-fir with a mid-story of bigleaf maple and western red cedar.

South

The South project area covers approximately 20 acres of 60-70 year old Douglas-fir in the southwestern portion of the property. This stand has never been thinned, with tree densities ranging from 150 to 200 trees per acre and DBH ranging from 8-28 inches. There are several large pockets of LRR present in this stand, covering up to an acre each. Some of the more recently affected pockets are full of fallen trees exhibiting the classic “root-ball” appearance of LRR. Many standing trees within, and around the perimeter of these pockets have been recently attacked by the Douglas-fir bark beetle and are either dead or dying, exhibiting pitch streamers and pouch-fungus conks at beetle entry points.

- 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).**

North: The silvicultural prescription for the North project area will be a mixture of thinning from below and small group selection. The objective is to remove suppressed and broken-topped trees (from 2012 ice storm) as well as small groups of Douglas-fir impacted with LRR to further reduce its spread. This stand has an abundance of existing snags due to ice damage and LRR, most of which will be retained for wildlife habitat where they pose no threat to camp infrastructure or users in this location. The majority of snags to be retained already had the tops broken out and are therefore more stable and safe. A small percentage of full-height snags will be removed for camp and operator safety. Bigleaf maple will be retained where present. Western red cedar will be under-planted throughout the stand following the operation to introduce greater stand complexity, to boost stocking levels, and to mitigate the impact of LRR on canopy closure.

Central: The prescription for the 5 acre Central project area will be a light, even-age thinning (from below) to improve tree vigor and to promote the growth and retention of long, healthy tree crowns. Suppressed and ice-damaged trees will primarily be selected for removal. Snag retention or creation in this area will be limited due to proximity to power lines and other camp infrastructure. Fuels reduction measures will also be taken in areas adjacent to the large parking lot, a designated

emergency assembly point. These will include removal of thick brush and other fuel ladders as well as piling of slash and other fine fuels to be burned.

South: The South project area prescription is primarily an even-aged thinning from below, with some small-group selection in areas impacted by LRR. Western red cedar and/or ponderosa pine (where adequate sunlight exists) will be planted in gaps created by LRR and/or Douglas-fir bark beetle to boost future stocking levels, and to mitigate the impact of LRR on canopy closure. Snags and down wood are abundant in this stand due to LRR and they will be retained where possible for wildlife habitat.

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

North: The current timber volumes in the North project area vary widely, depending on the level of LRR impacts and damage from the ice storm in 2012. Areas of heavier stocking currently range from 25-30 MBF/acre, while more widely-spaced areas range from 15-20 MBF/acre. Thinning and small group selections will remove approximately 8 MBF/acre on average of Douglas-fir across the entire area. Tree densities will range from 30-80 trees per acre, depending on the level of LRR impacts. Canopy closure will range from 40-70 percent, with the lower percentages being located in already open areas due to LRR. Western red cedar will be planted throughout the more open areas to improve canopy cover.

Central: Current timber volumes in the Central project area are approximately 40 MBF/acre. 5 to 8 MBF/acre of Douglas-fir will be removed in a light thinning. Canopy closure will not be reduced below 70 percent. The target tree density will be 100-125 trees per acre.

South: Current timber volumes in the South project area range from 25 to 40 MBF/acre, depending on site quality, as much of the stand is located on poor, rocky soils with southwest exposure. Volume removals will range from 5 to 8 MBF/acre of Douglas-fir. Tree densities will be reduced to 125-150 trees per acre. Canopy closure will remain above 70 percent in all areas except LRR pockets where openings of ½ acre or greater are already present. Trees surrounding LRR centers will be removed to reduce its spread, further increasing canopy openings in the short term; however, western red cedar and ponderosa pine will be planted to improve canopy closure in the future.

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.

Lop and scatter will be the primary slash treatment method. Small wildlife piles may be created in areas of heavy slash accumulation.

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

- Application form completed and signed
- Site Plan
- Key viewing areas checklist (attached)
- 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.

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

None of these areas are visible from the project area. The Columbia River can be glimpsed through the trees from one small area near the main lodge, which is not located within the proposed project area. In most cases, terrain features block visibility. The Camp is on the northeast flank of Wind Mountain, which blocks most views to the south and west. Further, the dense vegetation makes long vistas rare and limited. Mt. Defiance and Dog Mountain are also both visible from certain areas of the Camp.

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

For Your Information:

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

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

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

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

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

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