UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

Establishment Report

STEAMBOAT MOUNTAIN RESEARCH NATURAL AREA, ADDITION

Gifford Pinchot National Forest Skamania County, Washington



SIGNATURE PAGE

for the amendment to the

RESEARCH NATURAL AREA ESTABLISHMENT RECORD

Steamboat Mountain Research Natural Area

Gifford Pinchot National Forest

Skamania County, Washington

The undersigned certify that all applicable land management planning and environmental analysis requirements have been met and that boundaries are clearly identified in accordance with FSM 4063.21, Mapping and Recordation and FSM 4063.41 5.e(3) in arriving at this recommendation.

Prepared by Salfw Chtt Date 10 26 98
Sally W. Claggett Dotanist, Mt. Adams Ranger District
Recommended by Wary Glasson Date 1/20/99
Mary Gibson, Acting District Ranger, Mt. Adams Ranger District
Recommended by Date Date Date Ted C. Stubblefield, Forest Supervisor, Gifford Pinchot National Forest
Concurrence of Starla Storma Date 3/32/99
Thomas J. Mills, Station Director, Pacifc Northwest Research Station

Title Page

ESTABLISHMENT RECORD for STEAMBOAT MOUNTAIN
RESEARCH NATURAL AREA
within
Gifford Pinchot National Forest,
Skamania County, Washington

ESTABLISHMENT RECORD

FOR AMENDED BOUNDARY TO STEAMBOAT MOUNTAIN RESEARCH NATURAL AREA GIFFORD PINCHOT NATIONAL FOREST

INTRODUCTION

This establishment record amends the Steamboat Mountain Research Natural Area (RNA) establishment record, signed by the Chief on August 16, 1973, by the addition of approximately 40 acres (16 ha) to the existing 1400 acre (560 ha) RNA. The original Steamboat Mountain RNA was established to protect subalpine fir, Pacific silver fir-mountain hemlock forests, three major wet meadows or montane mires, a small lake, and areas of rock outcrops and talus.

LOCATION AND ACCESS

Steamboat Mountain RNA is located on the Mount Adams Ranger District and the Mount St. Helens National Volcanic Monument, Gifford Pinchot National Forest, in Skamania County, Washington, 29 km northwest of Trout Lake (Fig. 1). It is located primarily in sections 30 and 31, T. 8 N., R. 9 E., and sections 35 and 36, T. 8 N., R. 8 E.; small portions are in section 25, T. 8 N., R. 8 E., section 1, T. 7 N., R. 8 E., and section 6, T. 7 N., R. 9 E., Willamette Meridian (lat. 46 8" N.; long. 121 degrees 44' W.). The addition will be primarily in section 35, T. 8 N., R. 8 E., with a small portion in section 26 of the same township. The proposed new boundary and addition of a wetland is shown in Figure 2. A new description of the boundary that includes the wetland is in Appendix A.

To reach the natural area from the Mount Adams Ranger Station, Trout Lake parking lot, proceed left (west) on Highway 141 for 1 mile. Turn right (north) on Forest Road 88 and continue for 13.5 miles to the junction of roads 88, 8851, and 8841 (known locally as the Big Tire Junction). Take road 8851 (straight ahead) and continue for 4 miles to the junction of roads 8851 and 8871. Turn right on 8871 and continue for 0.25 mile to the junction of 8871 and 8871.095. Turn right on the 8871.095 road and continue for 1.5 miles to the end of the road. The RNA is on the right (south) side of the road.

JUSTIFICATION

The proposed boundary change will clear up confusion over the exact location of the boundary of the northwest portion of the RNA. In the 1973 Establishment Report for the RNA, a portion of the northern boundary was identified as a line on an azimuth of 73 degrees between two identifiable road points. However, on the ground, the true azimuth between these points is not 73 degrees, but approximately 83 degrees.

In the late 1970's, the Mount Adams Ranger District marked the boundary of a unit in the Boat timber sale along what they understood to be the RNA boundary (Fig. 3). The unit was sold and harvested. In the early 1980's. Pacific Northwest Research Station (PNW) personnel also established a line they thought to be the boundary, but started from a different point. As a result, 2 separate "lines" were established. From the standpoint of the PNW, the Boat timber sale unit extended into the RNA by some 600 feet.

In resolving the boundary confusion, the Mount Adams Ranger District and PNW agreed to add the wetland to the west, and to extend the line through a clear cut and to Forest Road 8871-095 (Fig. 2), a logical inclusion which makes the RNA boundary more identifiable on the ground. This boundary adjustment to Steamboat Mountain RNA is the proposed addition.

While there is no inventory of the species composition of the wet, swampy area, it is botanically diverse and may substantially contribute to the overall species richness in the current RNA. Of the 40-acre parcel, 35 acres is wetland or riparian reserve area. The remaining 5 acres will be added to the Englemann spruce-subalpine fir forest SAF type (SAF #206) (Eyre 1980) also known as Kuchler's (1964) Fir-Hemlock Forest type (K4). In 1996, fungi and bryophyte surveys were begun in the RNA, including the addition.

A Peeled Cedar Heritage Site (Management Area Category 9L in the Forest Plan) is included in the 40-acre addition. These Heritage Sites have a similar management philosophy as an RNA; little or no active management takes place in these sites, and visitors are discouraged.

IMPACT

Of the approximately forty acres that would be added to the RNA with this amendment, approximately five acres are in Matrix lands, where timber production is a priority (Figure 3). Timber harvest would not be allowed on these five acres. This would have a minor impact on the available PSQ from the Mount St. Helens National Volcanic Monument. The remaining acreage is in Riparian Reserves.

The proposal corrects errors caused by an incorrectly described portion of the original Steamboat Mountain RNA boundary, and provides a more logical on-the-ground location, with minor impacts to timber and other commodity production.

The area within riparian reserves would compliment RNA values by contributing an additional research focal point. The management of riparian reserves would not change with this proposal.

The Peeled Cedar Heritage Site that is included in the addition of the 40-acre parcel added to the RNA is mutually beneficial to both features. Management philosophies for both areas are complimentary.

REFERENCES

Eyre, F.H., ed. Forest cover types of the United States and Canada. Washington, DC: Society of American Foresters; 1980. 148 p.

Kuchler, A.W. Manual to accompany the map of potential natural vegetation of the conterminous United States. Am. Geogr. Soc. Spec. Publ. 36. New York: American Geographical Society; 1964.

Appendix A

Boundary Description for the Addition to Steamboat Mountain Research Natural Area Forest Service Gifford Pinchot National Forest 10600 NE 51st Circle Vancouver, WA 98682

(360) 891-5000

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STEAMBOAT MOUNTAIN RESEARCH NATURAL AREA

Boundary Description-Proposed Addition

The boundary of the proposed addition is located mainly on roads and harvest unit boundaries. 7 corners, Angle points 1 through 7, are monumented with 5/8" X 30" rebar, with 1 1/2" diameter survey caps. Angle points 1-7, Latitude and Longitude in WGS 84 Datum, were determined by GPS Pathfinder differentially corrected to Portland Base Station, 10/10/91.

Beginning at existing RNA boundary, at intersection of roads 8871 and 8871-095. proceeding northeasterly along 8871-095 approximately 1/4 mile to a point where 8871-095 makes a westerly swing; proceeding easterly approximately 200 feet to Angle Point 1; Lat. 46 deg. 08 min. 44.95 sec N. Long. 121 deg. 45 min. 46.36 sec. proceeding W; easterly to Angle Point 2, located on the edge of clearcut, Lat. 46 deg. 08 min. 44.35 sec. N, Long. 121 deg. 45 min. 40.74 sec. W; southerly along clearcut edge to Angle Point 3, Lat. 46 deg. 08 min. 32.16 sec. N. Long. 121 deg. 45 min. 35.32 sec. W; easterly along clearcut boundary to Angle Point 4, 46 deg. 08 min. 34.29 sec. N, Long. 121 deg. 45 min. 21.82 sec. W: southeasterly across clearcut to Angle Point 5, located on old landing, at the end of road 750, Lat. 46 deg. 08 min. 32.26 sec. N, Long. 121 deg. 45 min. 14.40 sec. W; easterly along road 750 to Angle Point 6, Lat. 46 deg. 08 min. 32.81 sec. N, Long. 121 deg., 45 min. 4.78 sec. W; Northeasterly along road 750 to Angle Point 7, Lat. 46 deg. 08 min. 37.07 sec., Long. 121 deg. 45 min. 3.01 sec; northeasterly along road 750 from Angle Point 7 to existing RNA boundary at intersection of roads 750 and 8871-095.

Revised Boundary Description for RNA

The Steamboat Mountain RNA boundary description contained in the Establishment report is now inaccurate, in that it refers to road numbers that have been changed. In addition, the original description has one error in the last section, where "north along the escarpment" is used when "south" is the correct direction. The following Boundary description incorporates the new road numbers, the addition, and correction of the error in the original description into a revised Boundary description for the entire RNA.

Boundaries

The boundaries of the Research Natural Area are located mainly on roads, old harvest unit boundaries, and topographic features. 7 points, Angle points 1 through 7, are monumented with 5/8" X 30" rebar, with 1 1/2" diameter survey

caps. Angle points 1-7, Latitude and Longitude in WGS 84 Datum, were determined by GPS Pathfinder differentially corrected to Portland Base Station, 10/10/91.

Beginning at the site of the Steamboat Mountain lookout south along a spur ridge to where Steamboat Mountain trail crosses the spur ridge; east for a short distance along the trail to the Steamboat Mountain quarry road, Forest Road 8854-021; south and west along Forest Road 8854-021 for about 2 1/8 mile to its junction with Forest Road 8854; west along Forest Road 8854 for about 1 mile to it's junction with Forest Road 8851; northwest along Forest Road 8851 for about 1/2 mile to it's junction with Forest Road 8871; north for about 1/4 mile along Forest Road 8871 to it's junction with Forest Road 8871-095; northeasterly along 8871-095 approximately 1/4 mile to a point where 8871-095 makes a westerly swing; easterly approximately 200 feet to Angle Point 1; Lat. 46 deg. 08 min. 44.95 sec N, Long. 121 deg. 45 min. 46.36 sec. W; easterly to Angle Point 2, located on the edge of clearcut, Lat. 46 deg. 08 min. 44.35 sec. N. Long. 121 deg. 45 min. 40.74 sec. W; southerly along clearcut edge to Angle Point 3, Lat. 46 deg. 08 min. 32.16 sec. N, Long. 121 deg. 45 min. 35.32 sec. W; easterly along clearcut boundary to Angle Point 4, 46 deg. 08 min. 34.29 sec. N. Long. 121 deg. 45 min. 21.82 sec. W; southeasterly across clearcut to Angle Point 5, located on old landing, at the end of road 750, Lat. 46 deg. 08 min. 32.26 sec. N, Long. 121 deg. 45 min. 14.40 sec. W; easterly along road 750 to Angle Point 6, Lat. 46 deg. 08 min. 32.81 sec. N, Long. 121 deg., 45 min. 4.78 sec. W; Northeasterly along road 750 to Angle Point 7, Lat. 46 deg. 08 min. 37.07 sec., Long. 121 deg. 45 min. 3.01 sec; northeasterly along road 750 from Angle Point 7 to intersection of roads 750 and 8871-095; east along Forest Road 8871-095 for about 3/4 mile to it's terminus (end of gravelled road on the eastern edge of the clearcut in the SE 1/4 of Section 25); dropping north along the edge of the clearcut to the 4,400 foot contour and thence easterly along this contour for about 5/8 mile to the top of a rock escarpment; and south along the escarpment for about 1 mile to the point of origin on the summit of Steamboat Mountain.

Prepared By:

FOREST LAND SUBVEYOR

Date:

7/28/98