

6060NF
P12

Report
Natural Areas
Mt. Baker

January 4, 1936
Amended December
12, 1933

REPORT ON NORTH FORK HOESRACK NATURAL AREA

1. Description of Areas:

(a) This area consists of portions of Sections 33, 34, and all of 35, uncurveyed and part of 36, surveyed, T. 40 N., R. 8 E., Willamette Meridian.

(b) The area is bounded on the south by the Mt. Baker Highway and on the east by Walcome Creek. Its north and west boundaries are established by approximate legal subdivision lines.

(c) The total area is approximately 1495 acres of public land, all North of the Mt. Baker Highway. Two unpatented mining claims are within the boundaries; all other private lands have been excluded.

A. Acreage by Dominant Cover Types:

- (a) Timberland bearing commercial stands - 1219 acres.
- (b) Timberland bearing noncommercial stands - none.
- (c) & (d) Timberland cut over - none.
- (e) Woodland bearing commercial stands - 4 acres.
- (f) Woodland bearing noncommercial stands - none.
- (g) & (h) Woodland cut over - none.
- (i) Burned area - 153 acres.
- (j) Barren areas - negligible.
- (k) Brush areas - none.
- (l) Sagebrush - none.
- (m) -Grassland or meadow - 145 acres.
- (n) Cultivated land - none.

5. Physical and Climatic Conditions Prevailing on Area:

- (a) Elevations range from 1700 feet to 4000 feet.
- (b) There are only about 100 acres of fairly level or gently sloping land; the rest is steep side hill of 20 to 60 percent slopes.
- (c) The soil on the bottom lands is river deposit consisting of sand and gravel, covered to about two feet by a heavy soil of silt, clay and decayed vegetation. On the slopes the soil is washed gravel, sand, and decomposed limestone with numerous outcroppings of limestone and conglomerate rock.
- (d) The average annual precipitation is about 45 inches; snow-fall for most years averages about two feet on the bottom lands, varying from 6 to 12 feet on the uplands in the vicinity of this area.
- (e) The temperature ranges from a maximum of 75° F. in the summer to a minimum of 0° F. in winter, with colder temperatures on the uplands.
- (f) The lowland of the area is usually free from frost from April 35 to October 1, the upland from June 1 to September 1.

6. Forest Values:

(a) Four distinct timber types are included: a small area of burn which is restocking in varying degrees of density from light to heavy; the remainder of the area is old growth timber consisting of hemlock type, Douglas fir type, and hemlock-cedar type. The hemlock and Douglas fir types are good thrifty stands which, though mature, show little sign of decay as yet. The hemlock-cedar type is over-mature and decadent; the cedar, about 5 percent dead and 25 percent defective; the hemlock, 30 to 35 percent defective; the small amount of Douglas fir and other species in this type are good clear timber; the Douglas fir being of very large size. A light understory of hemlock and silver fir reproduction is present in all the old growth types.

(b) The estimated amount and class of timber on the area by type is as follows:

	<u>Douglas fir type</u>	<u>482 acres</u>
Douglas fir	20577 Mbf	
Cedar	5800 "	
Hemlock	3053 "	
Silver fir	245 "	
	<u>23675 "</u>	

<u>Cedar-Hemlock type</u>		<u>437 acres</u>
Douglas fir	1544 Mbf	
Cedar	4784 "	
Hemlock	9362 "	
Silver fir	2369 "	
Red alder & black cottonwood	96 "	<u>4 acres*</u>
	<u>18775 "</u>	

<u>Hemlock type</u>		<u>296 acres</u>
Douglas fir	5614 Mbf	
Cedar	2782 "	
Hemlock	10345 "	
Silver fir	1450 "	
	<u>18491 "</u>	

<u>Burns</u>		<u>133 acres</u>
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The burned area is mostly a clean burn though there are a few isolated trees or groups of trees which were considered negligible and not included in the estimate.

<u>Grand Total</u>	
Douglas fir	25835 Mbf
Cedar	15366 "
Hemlock	23530 "
Silver fir	4064 "
Red alder & black cottonwood	96 "
Total	<u>68941 "</u>

(c) As stated under 6(a) the cedar-hemlock is a poor class of timber, the Douglas fir type is very good timber but is located on steep, rugged ground and could only be logged at heavy expense. The hemlock type might have a value in the future as pulp timber or even lumber, but this value is negligible at the present time. Allowing for the long truck haul and the poor quality of the readily accessible timber, I would not consider the timber on the area as having much commercial value at the present time.

(d) The timber undoubtedly has considerable protection value to the watershed by retaining the moisture and preventing erosion; and this is of importance to the power plant and numerous ranches located downstream.

(e) There are only a few small patches of young growth, purely reproduction, outside of the burns. These areas are well stocked thrifty stands consisting mainly of cedar and Douglas fir. There is a fair understory of hemlock and silver fir reproduction scattered over the area. The burns have only a medium restocking, mostly Douglas fir and cedar.

(f) A large burn lies north and west of the area; about 133 acres

*The 4 acres shown hereon are narrow strips, too small to type, scattered throughout the cedar-hemlock type, and an estimate of combined area was made on the ground

of this burn and spots from it were included in the area. This was a clean burn and is restocking slowly with reproduction up to 10 years in age.

(g) This area is readily accessible; and is quite suitable for experimental purposes.

(h) At present there is no use being made of the timber from this area.

7. Agricultural Value:

(a) There is no portion of the area in cultivation with or without irrigation.

(b) I do not believe that any of the area is adaptable to cultivation, the very small portion of the area which is level enough for such use has a poor quality of subsoil and the topsoil has a high vegetable content which would be lost in clearing.

8. Grazing Value:

(a) Nearly all the meadow land is good grazing land, but owing to the large extent of adjoining range compared with the small number of stock grazed, this portion within the proposed natural area has never been utilized.

(b) Average dates grazing season opens and closes: June 20 to September 20.

(c) Lands at present not in use.

(d) No grazing at present.

9. Mineral Value:

(a) The area has been prospected over at various times and a number of claims located. A small amount of development work has been done on these claims but all have been allowed to lapse except two, one at the west end and one at the east end of the area. These two are being relocated year by year.

(b) The bottom lands are made up of a heavy river deposit from which no mineral value has ever been taken and about the only possibility for development would be for sand and gravel. Such development is remote owing to the distance from market. The uplands have numerous outcroppings of conglomerate and limestone. The limestone may have a prospective value but the location of large deposits nearer to markets makes its removal impractical. (See report, RS-Research Reserves, North Fork Nooksack, September 28, 1920, by Mineral Examiner Wm. H. Friedhoff, copy of which is attached to this report.)

10. Value of Area for Public Uses Other Than Those Above Enumerated:

(a) The bottom lands of the area include a possible hydro-electric development site which has been examined and surveys made, but it was abandoned as the resulting power production would not pay a reasonable return on the investment. All the lands within 1/4 mile of the Nooksack River within Sections 33, 34, and 35, and the public lands in Section 36, bordering the river, are withdrawn by Power Classification No. 126, dated 1/23/23.

(b) The same that applies to (a) would apply to reservoir development for irrigation, also no lands within the watershed are in need of irrigation.

(c) The area is little suited for the development of any recreational use outside of camp grounds, which are amply provided for outside of the area.

(d) One group of summer home sites is located at the west end outside the area, but are not in demand at present and there is little probability of any demand for use of the area for any other purpose.

12. Transportation Facilities:

The area is bounded for three miles by the Mt. Baker Highway on the south and a way-trail crosses the west end running north and south. There is also a trail just outside the boundary on the east. There are no other transportation facilities within the area although some trails or way-trails may be built in the near future for protection purposes. As public demands increase for widening or procuring better alignment for the highway, there will undoubtedly be some changes from the present location, and some trees will have to be removed.

13. Public Sentiment:

The public demand is that the forest bordering the Mt. Baker Highway should be left in a natural state, and therefore public sentiment would be very favorable for the establishment of a natural area at this point.

14. Conclusions and Recommendations:

This area is well suited for timber species containing as it does nearly all the types found in this section of the state. The remoteness from market offsets what commercial demand there is for the timber, also located as it is on a recreational highway, public sentiment is for it to be left in a natural state. Mineral values are as low as can be found on any similar sized area in the vicinity and are not apt to interfere with the preservation of the area intact. Therefore, I recommend that the area as shown on the accompanying map be considered for a Natural Area.

R. F. Cooke *Cornit*
Senior Forest Ranger

Plan of Management

In accordance with the provisions of Regulation 2-20, the following plan of management is to be appended to and made an integral part of Ranger Cook's report on the proposed North Fork Nooksack Natural Area.

This area is set aside for the purpose of maintaining a tract of the mature western red cedar-western hemlock type in its natural state. The management of the area therefore will consist chiefly of protection against fire, grazing, cutting, trespass, or disturbance of any sort that will change natural conditions. The area will be administered by the Supervisor and his staff as on contiguous national forest lands.

Distinctive signs should be posted along the highway and where people might enter the area along trails and streams to inform the public of the purpose of the reservation and to warn against cutting of trees, camping, etc. To facilitate the management of the area and to prevent unintentional trespass or disturbance, the boundaries of the area should be run out and adequately marked by blazing and signs or by other means, particularly at points where people might enter the area. In some instances it may be necessary to do some brushing out in order to make the boundary conspicuous.

Because of the dense character of the forest, ways into it are necessary for fire protection and to make possible the use for which the area is set aside, namely, observation and study. A way-trail now crosses the west end of this tract and a few other rough trails may be found necessary for protection purposes and to provide convenient access to the area. At the present time, there is no apparent need for fencing, firebreak construction or other improvements.

The fire protection of this area will be handled by the regular protective force as on other national forest lands. Special care should be taken to eliminate or reduce the fire hazard if cutting takes place on lands adjacent to the boundaries of this area.

Since the area is to be maintained in its natural state, no further cutting of either living or dead trees should be permitted, except such as is necessary for straightening the Mt. Baker Highway or in an emergency such as fire fighting.

No grazing of domestic stock will be permitted on this area.

A detailed technical examination of the area should be made as soon as possible by the Experiment Station and a report prepared. This report will serve as the foundation or beginning of the written life history of this area and should include studies of the different

timber types and age classes present on the tract, descriptions of the soil profiles, flora and should also include photographs from established photo points. From time to time as changes occur, progress reports should be prepared by the Experiment Station.

Special uses. There is at present no demand for special uses on this area that can not be provided elsewhere and none should be granted. Provision is here made, however, that on a strip 200 feet wide along the north side of the Mt. Baker Highway as now located, recreational, commercial or administrative use of the land will be permitted where it is determined by the Regional Forester that such uses can not be accommodated elsewhere on the national forest without detriment to the public interest, but only under conditions that the area so used will be limited to the smallest possible area compatible with such usage.

The natural area as set forth in this report will be administered by the local forest supervisor according to this management plan exclusive of technical or scientific work done. No deviations from this plan should be permitted without the approval of the Forester, as set forth in Regulation L-20.

(Mt. Baker National Forest--North Fork Nooksack Natural Area)

Approved:

L. B. Pagter 1-4-34

Forest Supervisor

T. T. Munger 1-13-34

Director

E. N. Kavanagh 2-5-34

Acting Regional Forester

Washington, D. C.
April 10, 1934.

By virtue of the authority vested in me by Reg. L-20 of the Regulations of the Secretary of Agriculture relating to the occupancy, use, protection, and administration of the National Forests, I do hereby designate as the North Fork Nooksack Natural Area the lands described in a report dated January 4, 1934, by L. B. Pagter. Said lands shall hereafter be administered as a Natural Area subject to the provisions of said regulation and the instructions thereunder.

F. N. SULLOY
Forester.

as amended December 12, 1933, by K. F. Cook,