

T. T. Munger

THE WIND
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COLUMBI

The committee on experimental forests and ranges and natural areas when they met on February 9, 1932 and decided on the setting aside of the Wind River Experimental Forest agreed that approximately 900 acres of the withdrawal should be further set up as an addition to the existing virgin timber reservation of 280 acres. This existing reservation was agreed upon and described in letters and memoranda dating from September, 1925 to October, 1926, and was approved as an administrative site and designated as the "Trout Creek Experimental Forest" by District Forester Granger's "RS Supervision - Reserved Sites" letter dated October 5, 1926.

There is no record in our files of this area having been set aside as a natural area by the Forester as is required by the modification of Regulation L-20 dated August 7, 1930; therefore, both the existing area and the proposed addition can be included in this report for the Forester's approval and will be known as "The Wind River Natural Area".

Location and Description

The proposed withdrawal is located near the geographic center of a broad belt of Site II and III Douglas fir that extends north in Washington and south in Oregon on the west slope of the Cascade Range at the middle elevations. It is admirably suited, both from the standpoint of composition and location for the purpose of preserving virgin forest conditions and the ultimate development of the climax type for research and educational purposes. On parts of the area the development of the climax type is well under way at the present time.

The tract lies within the boundaries of the Wind River Experimental Forest on the Columbia National Forest and may be reached by a 70 mile surfaced highway from the Portland headquarters and a 2-mile forest road from the Wind River Field Station headquarters at Stabler, Washington. Both the original reservation and proposed addition are shown on map Fig. 1 and on the experimental forest type map and estimate sheet.

The area lies mostly in the Trout Creek watershed extending from Trout Creek north through the low divide into the Wind River drainage. The legal subdivisions included are as follows:

The original reservation:

N $\frac{1}{2}$ of NE $\frac{1}{4}$, SW $\frac{1}{4}$ of NE $\frac{1}{4}$, and NW $\frac{1}{4}$ of Sec. 21, T. 4 N., R. 7 E. (280 A.)

Proposed addition:

E $\frac{1}{2}$ of SW $\frac{1}{4}$ and SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Sec. 8 (160 A.)

E- and E $\frac{1}{2}$ of W $\frac{1}{2}$ of Sec. 17 (480 A.)

NE $\frac{1}{4}$ and that part of N $\frac{1}{2}$ of SE $\frac{1}{4}$ and E $\frac{1}{2}$ of NW $\frac{1}{4}$ that lies north and east of a 300-foot strip along Trout Creek in Sec. 20 T 4 N, R 7 E (200 A.) making a total of approximately 900 acres.

Reasons for selecting specific tract from watershed

This area was selected from the 15,000-acre timbered Trout Creek watershed for the following reasons:

1. The area is beautifully typical of the virgin forests of the Douglas fir region.
2. Lying within two miles of the Wind River Nursery, Hemlock Ranger Station and the Wind River Branch of the Experiment Station, it is admirably located for administration and study.
3. This tract can better be isolated and protected from interference when the remainder of the watershed is logged; only the west boundary will be exposed to future logging and that lies within the experimental forest. The area to the north and east was logged and now has a 15-year old stand of young growth; to the south, half of the area was logged and the remainder along Trout Creek will never be cut. Lying in its strategic position it divides the watershed with a barrier of green timber that will have a tendency to stop sweeping fires from getting started and moving from one end of the valley to the other.

Physical and Climatic Conditions

The elevation of the area ranges from 1200 to 2000 feet but the topography is not rugged, most of the area being flat or gently sloping, but along the east and there is about 10 acres of steeply sloping

AREA

Fir Type

RSST

Dominant Cover Types

Except for about 40 acres of cedar type in the NE $\frac{1}{4}$ of Section 21 and a few acres in the SE $\frac{1}{4}$ of Section 20 where the area was touched by the 1902 Yacolt burn, the entire tract is typical mature and over-mature Douglas fir.

Forest Value

The merchantable volume in M feet of timber as shown by the regional reconnaissance cruise made in 1911 by Hastings is as follows:

	<u>D. fir</u>	<u>Hemlock</u>	<u>True firs</u>	<u>P. pine</u>	<u>Cedar</u>	<u>Total</u>
Present reservation	5766	2038	613	685	1353	10455
Proposed addition	24547	7602	1286	1884	309	35728
Total	30413	9640	1899	2569	1662	46183

Check cruises made in Section 21 by Strehle in 1925 and of Section 17 and the NE $\frac{1}{4}$ of 20 by Briegleb in 1929 show somewhat higher volumes.

Since most of the merchantable volume is contained in the large old-growth trees, the type map shows most of the area as mature Douglas fir but that does not give a true picture of the stand for natural area purposes. Over the entire area there is an understory of hemlock, cedar, yew, and the true firs of varying density and size, some of which is already merchantable.

Broadleaf trees not mentioned above but occurring on the area particularly in moist locations are bigleaf maple, cottonwood, alder, Oregon ash, cherry, willow, and dogwood.

There is a ground cover of brush and herbaceous plants under the timber over the entire area, in places it is dense enough to cover practically all unoccupied surface. The principal species are salal, Oregon grape, huckleberry, pachistima, vine maple, hazel, beargrass, vanilla leaf, twin-flower, and ferns.

The area is essentially forest producing land and has never been considered from a watershed protection standpoint.

It is probable that the existing stand followed a fire but there is no evidence of fire having occurred since except on the small area in section 20 that was touched by the Yacolt burn in 1902.

Agricultural Value

The entire area is in virgin timber and none of it has ever been cultivated.

Not more than 25 per cent of the area is susceptible to cultivation but because of climatic conditions and cost of clearing there is little doubt of the land ever having a greater value for agricultural purposes either with or without irrigation.

Grazing Value

The tract in its present virgin timber state has practically no grazing value; however, surrounding lands of a similar nature but cutover are grazed by cattle and sheep.

There is no stock regularly grazed on the area at the present time, but sheep going to and coming from their high mountain range are trailed through part of the area.

Mineral Value

The area has no known or present or prospective mineral value.

Other Uses

The topography is such that the area would not be of value for reservoir development either for irrigation or hydro-electric power.

Some hunting is done on the area, but this use will never increase to a point where it will interfere with natural conditions. Fishing and recreational use may develop along Trout Creek, but to avoid disturbance from this use a 300-foot strip is being left along the side of the stream.

THE WIND RIVER NATURAL AREA

Representing the Douglas Fir Type

Columbia National Forest

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Research Work

Studies of seed fall, seed storage in the forest floor, germination under virgin timber, phenology, moisture content of forest litter, and forest soil studies are now under way and more studies will be taken up later. A technical description of the area should be prepared by the Experiment Station at the earliest opportunity that will cover fixed areas and photographic points.

Management

The Wind River Natural Area will be maintained free from cutting, grazing, or other forms of use in so far as it is possible to do so. No occupancy under special use permit shall be allowed, or the construction of permanent improvements by any public agency be permitted except as authorized by the Forester or by the Secretary of Agriculture. The Forest Supervisor will be responsible for protecting the area against fire and against trespass.

The area is so located that its setting aside as a natural area should in no way interfere with the normal administration of surrounding national forest land.

Leo A. Isaac

Assistant Silviculturist.

Approved: 9-7-32

W. J. Suckert
Forest Supervisor.

Approved: 9-27-32

W. B. Beck
Regional Forester.

Approved: 8-1-32

Walter D. Hensinger
Director.

Washington, D. C.,

March 28, 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 Wind River Natural Area the lands described in a report dated July 20, 1932, by Leo A. Isaac; said lands shall hereafter be administered as a Natural Area subject to the provisions of said regulation and the instructions thereunder.

J. A. Suckert
Forester.

E. H. H.