

REPORT ON THE
PROPOSED
BLUE MOUNTAINS FOREST RESERVE

BY

H. D. LANGILLE.

1906

DEPARTMENT OF THE INTERIOR

GENERAL LAND OFFICE

WASHINGTON, D.C.

April 30, 1906.

The Honorable
The Secretary of the Interior

Sir:

By your letter L. & R.R. Div., L.I.P., dated December 24, 1902, I was directed to proceed to the Blue Mountain district of Oregon, examine into the boundaries of the proposed reserve and report such changes as would seem desirable for reasons of topography, forest conditions or economic reasons of settlement, etc.

Also to "Notice and report, if possible, the number of placer mining claims that have been located within the limits of this proposed reserve," and to determine whether or not these claims were located in good faith for mining purposes or for the timber thereon.

In accordance with the above instructions I have the honor to transmit herewith my report on the proposed Blue Mountain Forest Reserve, together with an original map and other data which pertains directly to the matter of the proposed reserve.

Very respectfully,

H. D. Langille,

Forest Inspector.

Enclosures:

1 map of reserve
1 map of mining district
written report

REPORT ON THE PROPOSED BLUE MOUNTAINS FOREST RESERVE

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BOUNDARIES AND TOPOGRAPHY.

The proposed Blue Mountain Forest Reserve is situated in the Eastern part of the State of Oregon in Umatilla, Union, Baker, Grand, Malheur, Harney, Wheeler and Crook Counties. It covers the greater part of the main range of the Blue Mountains, and extends southward approximately 100 miles from a point about 45 miles south of the north line of the State. At the southern end of the Blue Mountains proper are two prominent spurs extending at right angles from the course of the main range. The eastern spur is known as the Burnt River Mountains which extend almost to Snake River. Westward from the main watershed extend the Strawberry Mountains, a high rugged and barren ridge. West of these the country is broken by the canyon of the South Fork of the John Day river beyond which reaches the divide between the John Day and Deschutes river watersheds. The reserve follows the divide westward at right angles with the main body of the withdrawal forming an irregular extension 138 miles in length from east to west.

The geographic location of these mountains, occupying, as they do, a peculiar isolated position in the great inter-mountain region lying between the Rocky mountain system and the Cascade Range in Oregon, bears an important relation to the economic resources of the territory included within the drainage system.

Without these mountains, which rise above the plains to a sufficient elevation to penetrate higher atmospheric zones and intercept the storm currents, the entire region would be desert in character. The watershed is of incalculable economic value to all parts of Eastern Oregon since the topography of the territory surrounding the mountains is such [text unreadable] distances in all directions before finally entering the channels which lead to the Columbia River and are mostly available for irrigation purposes.

The drainage forms a number of important streams, principal among which are the Grande Ronde, Powder, Burnt, Malheur, Silvies, Crooked and John Day rivers which radiate in all directions from the summits and distribute their life-giving flow to nearly all parts of Northeastern Oregon.

The topography of the Blue Mountains is not characterized by any striking features, presenting mainly a series of comparatively even contours broken occasionally by a dome-like or, rarely, rugged peak rising above the ordinary altitude of the rather broad crest of range.

Nearly all parts of the country are easy of access along the courses of the streams which flow smoothly over remarkably gradual descents. The canyons are frequently deep-cut but the walls are rarely precipitous.

The altitudinal range of the mountains is from approximately 3000 feet above sea level to a mean maximum of approximately 7000 feet with some points rising to extreme altitudes of more than 9000 feet.

The total area of the original withdrawal, as nearly as may be determined from the incomplete survey, is 3,053,178 acres, included within 152 whole or fractional townships.

The total area of the lands covered by my recommendations is 2,813,769 acres, lying in 154 whole or fractional townships. All of the lands originally included within Malheur County are excluded by my recommendations, leaving the reserve entirely within seven counties. The area in each county has not been computed.

The proposed Elk Creek Forest Reserve, which was withdrawn for the purpose of protecting the water supply of Baker City, is all within the exterior boundaries of the proposed Blue Mountains reserve, and forms a part of the eastern boundary.

It should all be incorporated in one reserve and special restrictions placed upon that portion in which the city is interested to protect it from grazing and other injury.

CLIMATE.

The climate of the Blue Mountains region is very dry and during the winter season the temperature falls to a very low degree. Mercury frequently freezes at points in Harney and Malheur Counties.

The prevailing winds are from the west, as they are in all parts of the state, but the high summits of the Cascade Mountains rob them of their moisture and the dry inter-mountain territory over which they pass reduces the temperature during the winter and increases it during the dry summers, so that the climate is one of extremes.

The average annual precipitation of the region is only 13.38 inches by the observation made by the U.S. Weather Bureau at Baker City, Beulah, Dayville, La Grande and Prineville, at which points the stations nearest the reserve are located.

The following table shows the average monthly and annual precipitation at points in the vicinity of the Blue Mountains.

AVERAGE ANNUAL PRECIPITATION AT POINTS IN EAST OREGON.

Baker City, Oregon.	15.15
Beulah, Oregon	10.90
Dayville, Oregon	12.53
Happay Valley, Oregon	13.22
Heppner, Oregon	15.00
Joseph, Oregon	17.25
La Grande, Oregon	19.30
Pendleton, Oregon	14.18
Prineville, Oregon	9.01
Sparta, Oregon	24.46
Weston, Oregon	23.56
Walla Walla, Wash.	16.77

The annual precipitation in the mountains is very much greater than at the points named in this table, but I have no means of determining even approximately what it may be.

Snow falls to a depth of from 4 to 10 feet, depending upon altitude, and remains on the ground for several months affording excellent sleighing throughout the winter season. The rainfall is

very light in comparison with that of more western portions of the State, the cold, dry condition of the atmosphere causing the greater part of the precipitation to fall in the form of snow.

When the spring "break up" comes, usually about March 1, the warm Chinook winds, stronger than at any other season, reach across the plains and rapidly melt the snow from the mountains causing floods in all of the streams. At this season travel is almost impossible until the frost has been drawn from the ground and the roads have settled.

AGRICULTURAL SETTLEMENTS.

As far as my observations extended there are no sections of strictly agricultural land within the withdrawal. As I have stated elsewhere the climatic conditions preclude the production of any crops other than the hardest grasses, except in occasional spots where some hardy vegetables may be grown.

The settlements are mostly confined to the narrow creek bottoms where small tracts of level land may be irrigated and hay produced. In addition to these opportunities for settlement there are open parks of different areas at higher elevations where irrigation is practicable but the stockmen have availed themselves of every opportunity.

The largest area of such land is in Bear Valley which comprises a large timberless tract at an elevation of over 5000 feet. This is almost all patented land which has passed into the hands of a few of the more determined ranchers who have persistently endured the hardships incident to acquiring a home in such a locality.

The aim of each stockman in this district is to acquire title to as much land as possible to be used for fall and spring range. It is frequently the case that one stockman will buy out all of his neighbors and acquire title to large areas of range.

It is a part of the protest of the Grant and Harney County people that the reserve has included lands upon which homeseekers would locate and build up homes thus increasing the amount of taxable property in the different counties. This would possibly be true at some future time when actual **Bona fide** homeseekers would desire to [one line of unreadable text] upon these lands, but the statement is not sustained by present conditions which show the best of the land has been patented and title relinquished for a paltry sum to cattle companies or large holders.

The residents of almost every section agree that no lands remain vacant that a man would use his rights to secure. Almost every strip of bottom land along the creeks upon which a few ton of hay could be produced has been patented under one form or title or another.

Another factor which may be considered in this connection is the fact that inasmuch as stock raising is the only branch of agriculture in which the settler may engage, and the range is already stocked there is very little opportunity for successful operation along this line. Below the forested areas is an altitude which permits more diversified farming there are thousands of acres of the best soil which only awaits the magical touch of water to develop it to a state of productiveness. Irrigation projects are now proposed which, if carried out, will make thousands of acres of level land outside the withdrawal available for settlement and it were far better for the country that the future settler should locate upon such tracts and leave the mountainous sections to conserve the water supply which is of such inestimable value.

ALIENATED LANDS.

As is shown by the general map herewith (Exhibit A) there is a large area of located and patented lands within the lines of the temporary withdrawal.

Besides the many locations made under the Homestead, Preemption, Timber and Stone, Timber Culture, and Desert Land Acts there are a great many tracts of State Lieu Selections which have been selected mainly by the stock men in 40 acre tracts to cover desirable springs and watering places on the ranges.

This has been practiced to such an extent in the Blue Mountains that the range is virtually controlled in this way in many places. The Pacific Live Stock Company, which is the Oregon branch of the noted Miller and Lux concern of California, has acquired title in this way to a very large area of land which gives them a great advantage over the local stockmen.

The Willamette Valley and Cascade Mountain Wagon Road and The Dalles Military Road grants also touch the proposed reserve, involving approximately 10,800 and 61,160 acres respectively.

As is doubtless well known to the office the school lands included within the reserve were all purchased by agents, who, doubtless, had received from some source, knowledge of the fact that this withdrawal would be made. Almost all of the school lands to which title remained in the State were bought up for the purpose of securing lieu base. The following clipping from Gov. Geer's message is interesting in this connection:

"The temporary establishment of large reserves in the northeastern part of the State created an unexpected demand for school sections in that region, that had been for sale without any buyers for many years past, notwithstanding the usual demand for land. Suddenly, however, these hitherto worthless sections were bought up, many of them in [unreadable text] and [unreadable text] any information of [unreadable text] the contemplated creation of the reserve[?]. This supports the conclusion that the purchasers of these lands had some information of the intended withdrawal, and bought them with a view of using them for a base in the selection of valuable indemnity lands. Some of these sections were already so far in process of adjudication as to have been approved by the local United States lands offices, but the fact had not been reported to the state land board. The result is that these purchasers of hitherto unsalable lands for purposes of speculation will, if the reserve shall be finally established, be entitled to the selection of valuable indemnity lands in their place, but if not made, it is not likely any further payments will be made, and the state will have gained the sum of twenty-five cents per acre already paid." Since many of these sections are absolutely worthless for agricultural purposes and have little or no value as timber land it is obvious that the purchasers had no purposes in view other than to secure lieu base.

Unquestionably a great deal of fraud has been practiced in securing title to lands in this region. Many homesteads have been located and final certificates secured on lands situated high up in the mountains. I was repeatedly told that the Pacific Live Stock Company had secured title to a great many claims by directing their cowboys and other employees to locate homesteads on tracts of desirable grazing lands or springs, then paying them \$50.00 and their expenses for their trouble and ranch.

In one instance it was shown on my plats that the individual had secured title to a homestead of 160 acres, a preemption of 160 acres; 40 acres of desert land and 40 acres purchased under the timber and stone act. As nearly as I could determine the desert and 'timber' lands were identical in character, there being no timber in that section except an occasional juniper tree.

As shown upon the map a large number of school sections in the central portion of the reserve have been adjudged to be mineral in character and relinquished by the State. It is doubtless true that some of these sections are mineral lands but those who are familiar with the conditions declare that many of these tracts bear no traces of mineral and denounce the relinquishment as a scheme to secure base for lieu selections.

TIMBER.

The timber belt of the Blue Mountains extends from an elevation of approximately 3000 feet upward to the upper limit of timber growth at an altitude of more than 6500 feet.

The timber consists of six (6) species vis: Yellow pine, Douglas Spruce, Engelmann Spruce, White Fir, Tamarack, Lodge Pole Pine, Juniper (*Juniperus Virginiana*) and one known grove of White Barked Pine on Strawberry Mountain.

Of these the prevailing species are Yellow and Lodgepole Pine. At the higher elevations the tamarack and spruce are the principal components of the forests. The Douglas spruce is very sparingly distributed over most parts of the reserve in the favorable localities but nowhere forms clear stands. The yellow pine is the only species in sufficient bodies to be considered of commercial value and millions of feet have been logged and shipped out of the state by the Grande Ronde Lumber Company and the Oregon Lumber Co.

The value and importance of the Blue Mountains timber belt cannot be over-estimated. It is the only timber body between the Cascade and Rocky Mountains and the demand will be very heavy and constantly increasing as the mines and other resources are developed. The bodies of merchantable timber lie mainly at the lower elevations and usually these are of a very ordinary quality. The forests are of slow growth and the open stands have resulted in a heavy-crowned and rather scrubby growth. Two and one half million feet per $\frac{1}{4}$ section is considered an excellent stand. Unfortunately the withdrawal of these lands from entry was too long deferred and the sawmill companies and speculators have located the best and most accessible timber of commercial value wherever extensive bodies exist.

In some of the more remote sections, however, there are extensive tracts of merchantable pine which have been exempt from location but the withdrawal was made just in time to prevent wholesale locations upon these tracts by parties under the guidance of professional locators who had been at work for weeks and had formulated plans to secure every section of timber in that region. There was a mad rush to file timber entries at the Burns Land Office after it was learned that the withdrawal would be made and before official notice reached the local land office, but fortunately these filings were cancelled.

The demand for timber for local domestic purposes is not large, but the consumption of mining timber and cord-wood at the mills aggregate an immense amount, and with the growth and development of the mining industry the demand will increase proportionately.

During a number of years past the Grande Ronde Lumber Company has been operating along the Grande Ronde river and the destruction of the forests which has followed this cutting is deplorable indeed. The hillsides have been wiped clean of every thing large enough for saw timber of any kind. In many places fire has followed the cutting and the destruction is complete. The Company's mills are located at Perry, and the logs are driven down the river. At the time of my visit millions of feet of logs were being banked along the small streams which form the head-

waters of the Grande Ronde. A very few years of such work as is being done by this Company would denude the entire watershed of this stream.

The Oregon Lumber Company (which has recently absorbed the Grande Ronde Company) has its headquarters and mills at Baker City, and logs are brought to them over the Sumpter Valley Railway which was first built to Sumpter but has now been extended to Whitney to reach the timber belt of that section. All along the line of this road the destruction of the timber is almost complete. Only the best portion of the trees is used, leaving a dense heavy litter of the logged-off areas.

During the past twenty (20) years this Company has been actively engaged in acquiring title to timber lands, not only in this part of the State but elsewhere. It is common knowledge that their employees have been supplied with funds with which to purchase lands under the Timber and Stone Act, and it is a matter of record that these claims have been transferred to the Company on the same day or the day following receipt of patent. In this way large areas of timber land which are now included within the temporary withdrawal of the reserve are held by this Company. If these lands are retained in the reserve the timber will be stripped off and the lands relinquished for Scrip.

There are several small sawmills in operation within the proposed reserve and it is apparent that flagrant violations of law are committed at each of them. There are three (3) mills within or adjacent to the reserve in Harney County which supply the local demand, and lumber from these mills is hauled to points 150 miles distant on wagons, there being no other timber supply available.

The methods in practice at these mills is very wasteful and it is high time that something be done to conserve the timber supply upon which such an immense undeveloped region is dependent.

The amount of timber and fuel consumed at the stamp mills and mines is considerable. Such mills as those at the North Pole, Bonanza, and other mines consume 5000 to 6000 cords of wood per annum beside from 500,000 to 1,000,000 feet of mining timber. Besides these demands many persons are engaged in cutting timber from Government land for fuel and hauling it to the towns located away from the timber belts.

The general character of the forest is an open stand of yellow pine with very little undergrowth of any kind. Frequently the southern slopes of the hills are barren of timber as shown in photo No. 167.¹ Fires have swept over large areas destroying the yellow pine and other species and the lodgepole pine has followed in very dense stands. At the higher elevations this is the prevailing tree but in the same zone the tamarack and white fir also occur in groves or scattered among the pines. The young tamarack is especially adapted for mining timber and large quantities are used by the prospectors and miners.

Reforestation is good throughout the reserve where favorable opportunities are offered. Throughout the yellow pine belt the usual absence of young growth under the crown canopy maintains, but where cutting or burning has admitted the light reproduction follows quickly in extremely dense stands. The density and abundance of reproduction by yellow pine is one of the most striking features of the Blue Mountain forests. Unquestionably the removal of the matured

¹ There are numerous references to photo numbers in this report. When a copy of this document was examined at the National Archives in Beltsville, Maryland, no photographs were included with it. It is unknown if the photos were separated from the report and exist in the photograph collection at the Archives.

timber would be followed by a much denser growth which would prove to be a more potent factor in the conservation of the water supply.

My observations did not cover the entire area withdrawn affording an opportunity to form a definite idea of the relative area of the two classes of forest land, but I venture the assertion that 50 per cent of the forested lands are covered with yellow pine; the remainder consisting mostly of lodgepole pine intermingled with tamarack, spruce and other species.

The final establishment of the reserve along the lines of my recommendation will be followed by a large demand for timber particularly under the free-use act and eventually the timber business of the reserve will be extensive.

Along the southern slope of the mountains upon the watersheds of the Malheur and Silvies rivers, between the main timber bodies and the sage brush plains below, there is a belt of scattered yellow pine mixed with more or less juniper.

The latter species increases as the plains are approached and finally becomes the sole component of the forest. The actual timber line is very irregular, the timber growth being restricted to a very marked degree by slope and exposure. As a result there are many points of timber projecting far below the normal timber line while, on the other hand, many strips of sage brush reach well up to the outer crest of the hills. It is impracticable to draw a line to follow the sinuous course of these numerous interdigitations, therefore in my recommendation I have drawn a line which includes as much as possible of the valuable timber and eliminates a large area of the juniper belt which is of little value for forest reserve purposes, but affords excellent grazing. Quaking asp occurs sparingly in small groves in different parts of the Blue Mountains, but is nowhere abundant. The number of deciduous species is very limited. A small form of willow grows abundantly in places along moist creek bottoms. Western Birch (*Betula occidentalis* Hook) is also indigenous to the region and is occasionally found along streams.

The undergrowth of the mountains consists mainly of mountain mahogany (*Cercocarpus lodiifolius* Nutt), an evergreen arborescent tree which sometimes attains a diameter of six inches and a height of about fifteen feet. It occurs sparingly within the yellow pine forest, but forms dense, impenetrable thickets upon large areas where the forest has been destroyed by fire or where, apparently, no forest has ever existed. It affords excellent fuel and is invaluable as a conserver of moisture upon the timberless areas it occupies. A characteristic growth of ceanothus (*C. velutinus*) also occurs in some places but it is rarely such an obstacle in the way of travel as it is in the more western mountains.

Service berry, buck-brush, wild cherry, rosebushes and thorns are among other species represented, but they are nowhere sufficiently abundant to form a rich vegetable mold.

THE STOCK INDUSTRY.

At the present time the stock business is the most important industry in the Blue Mountain region and the creation of a forest reserve will materially affect more people engaged in stock raising than in any other calling.

Not only will the residents of the counties in which the reserve is located be affected thereby but distant counties will also feel the effects through the exclusion of stock which has always ranged through the Blue Mountain districts. The entire region is essentially a stock country and can never be of value for any other agricultural purpose. The introduction of irrigation canals and

reservoirs would develop the productiveness of the region, but the climatic conditions are such that, except in certain locations, hay is the only crop which can be depended upon to mature. Most of the country is very [?] and subject to frosts at any and all seasons of the year. It is plain therefore that unless some climatic changes are brought about by settlement and cultivation the region of the upper valleys and plateaus must ever remain strictly grazing in character.

Without irrigation the lands are of no value except for grazing, and the areas of irrigable land within the reserve is very limited being confined mainly to the very narrow bottom along the streams.

A very large number of cattle are owned in Grant, Harney, Malheur, Union, Umatilla and Crook Counties and all of these find summer range in the Blue Mountains beside the hundreds of thousands of sheep from these and other more western counties.

It is a fact recognized and admitted by all that there is more stock in the country than the range is capable of supporting [unreadable text] mountainous counties against those from the western plains because of the fact that stock is driven into the mountains and the range which they consider to be theirs by rights is destroyed by these migratory herds.

All indications point plainly to the fact that there is a range war at hand, and it is probable that it will break out during the coming season. Sheep from Wasco, Crook, Sherman, Gilliam, Umatilla and Morrow Counties are driven to the mountains early each season and ranged up to the very doors of the actual settlers and cattle owners. There has been some trouble in the past resulting in bloodshed, but nothing as serious as that which threatens to come about in the near future.

The protest against the reserve have come from the miners and cattlemen, the latter having been particularly aroused through fear that the outside sheep men would secure rights to the range to the exclusion of their own stock.

In the past the range has been seriously overgrazed in many places and it is plain that the outside stock must be kept out or the resident owners give way to them by going out of business. In either event a decrease in numbers must follow in one section or the other. There is range enough in the Blue Mountains to maintain the numbers of stock owned in those counties which are partly within the reserve, but the range cannot long continue to support all that has flocked to it during the past years. The final adjustment of the range question must result in the exclusion of sheep from distant counties and this means that many sheep men will be obliged to dispose of their herds for want of summer range. And in fact the winter range is incapable of supporting more than is the summer range.

A few years ago Eastern Oregon was one of the best range sections of the West. The rich bunch grass waved knee deep on hill and plain in such close growth that it was mowed with machines for hay, but range stock was never fed on hay. At all seasons of the year there was an abundance of feed on the open range. Now this is all changed, and thousands of tons of hay are produced. Feeding begins with winter and continues until the grass starts up in the spring. Each herd of stock is regulated in numbers by the proportionate dimensions of hay stocks on the home ranch.

The stock goes to the range as early as possible in the spring and remains in the hills until the snow falls. The small irrigated meadows afford little or no fall and spring pasture. Many horses winter out and are able to sustain life through any but the most severe winters, but the worthless

range horses once so numerous are being removed from the range and the advanced prices of good stock makes it preferable to produce better breeds and care for them during the winter.

The wooded areas of the Blue Mountains afford but little grazing from the fact that there is no underbrush upon which animals browse and the 'pine grass' which everywhere appears in the typical open pine forest is of little value as a forage plant. Bunch grass is the prevailing variety and it rarely occurs under the canopy of the forest. Most of the grazing is found upon the open hillsides or in the parks which occur within the body of the forest. Under these conditions it is possible to admit a large number of cattle to the range without material injury to the forest cover.

At high elevations there are numerous tracts of a swampy nature in which different grasses and weeds of characteristic species occur and on the hills and in old burns peavine and other forage plants grow in greatest profusion. There are not nearly as productive as formerly but still supply an abundance of feed for sheep. I was told by an ex-shepherder that about 15 years ago he drove a band of sheep into these hills and camped 40 days in one place.

The segregation of sheep range from cattle range will be a difficult matter for the forest officers to adjust, but nature's biological zones suggest the proper divisions. Since it is not known that grazing will be permitted on the reserve, if established, discussion of further details would be premature, but my recommendation would be that the fullest possible license be granted to the local stockmen in utilizing these range lands for the reason that so far as grazing is restricted just so far will the prosperity of the country be impaired. If grazing were prohibited in the stock counties the industrial interests would suffer materially.

MINING CAMPS.

The most important camps or towns in the Blue Mountain mining district included in the withdrawal are Granite, Bourne, and Greenhorn City. Granite is much the larger of the three towns and is a substantial place built up originally by the placer workings in the vicinity. It is now supported mainly by the Red Boy mine 3½ miles distant.

Bourne is a small typical mining town situated near the North Pole, Columbia, Golconda, and other mines in the Cracker Mining District.

Greenhorn City is a mushroom town in the Greenhorn District located on the crest of a high ridge at an elevation of about 5000 feet. It consists of about a dozen buildings about one half of which are occupied as saloons.

There is a large number of people living in the mining districts who would be more or less affected by the creation of a permanent reserve, but in no way injured thereby.

ROADS AND TRAILS.

The entire reserve is accessible to travel over established routes. Within the mining districts there are roads and trails everywhere, most of which are in fairly good condition.

Upon the final establishment of the reserve and the inauguration of a patrol system it may be necessary to open a few trails to reach some of the more remote sections in the high hills, but work will be necessary only where thickets of lodgepole pine or mahogany exist. Throughout the greater part of the region one can travel at will through the open forests on horseback.

One of the miners' objections to the reserve is that permits will be necessary to construct roads or trails. They contend that when a prospect is struck a trail or road is at once necessary to procure supplies, and if they are obliged to wait until a formal permit can be obtained the season will have passed without any development of their property.

I have shown many roads upon my map, but incomplete data renders it impossible to designate all or the exact course of each.

The accessibility of the country will be the least of the forest officers troubles.

EXAMINATION.

It is to be regretted that my recall was ordered before my work in this territory was completed, but my examinations covered nearly all of those areas against which the inclusion of which there were any protests from the people interested, and I feel reasonably safe in recommending the permanent boundaries of the entire reserve.

Most of the work done was accomplished under very trying circumstances, the snow being very deep and the thermometer reaching a low degree.

It was necessary for me to find food and shelter at some place each night and in many places the settlements are widely separated which made it impracticable for me to examine each area as closely as was desired.

Work was begun at the northern end of the withdrawal on the headwaters of the Grande Ronde river. Then the mining districts were visited and examined sufficiently to determine the character of the country and the existing relations between the miners and the forests.

Thence I crossed into Grant County and met the protesting stockmen at Canyon City at a public meeting held for the purpose of selecting delegates to present their remonstrance to the Department. At this place an organization known as the "Honest Forest Reserve Organization" for the purpose of collecting data relative to the character of the lands withdrawn and a great deal of interesting knowledge was secured. All of this data was placed at my disposal.

Examinations were made of many of the interior townships and nearly all of the exterior townships along the southern line were traversed. The work had been carried as far as Prineville when my recall was received.

Since my return to Washington I have carefully examined the field notes of the official surveys of those townships which I was unable to examine personally, and of which there was any question of their suitability for forest reserve purposes, and by this means have fully satisfied myself regarding the character of the lands involved.

PUBLIC SENTIMENT.

The protests which have been filed against the proposed Blue Mountain Forest Reserve were mostly based upon misunderstandings of the objects and purposes of the Department and misapprehension of the results to follow the establishment of the reserve. When the points in question were explained and the real objects and purposes of the reserve set forth, there was immediate subsidence of express opposition, and marked change was apparent in the sentiment of the local papers.

It is apparent that a few interested persons who have engaged in public land matters such as dealing lieu scrip, securing fees, etc., have persistently endeavored to arouse sentiment against the reserve by dealing to the less-informed ranchers and others, fanciful tales of wrongs to be inflicted upon the people by an unwise and oppressive government. Among the small stock owners there is now but little opposition to the reserve, the consensus of opinion being that "the range conditions can be made no worse than they are," and that they have confidence in their government to do what is best for them.

Any action which will exclude the migratory herds of sheep from the mountain range will be approved by the local cattlemen and miners. I met with the "Honest Forest Reserve Organization" at a public meeting at Canyon City, called for the purpose of selecting delegates to bear the stockmen's protest to Washington and to raise money to defray the expense of the delegation. I addressed the meeting setting forth the purposes and intentions of the Government, and answered all questions. At the conclusion of my remarks the meeting adjourned without taking any action and many of the strongest opponents of the proposed reserve afterward came to me and said that if the facts were as I had stated them they would welcome the reserve.

THE MINER'S OBJECTIONS.

The withdrawal of the proposed Blue Mountain Reserve aroused a strong feeling of antagonism among the stockmen of Grant and Harney Counties and among the miners of Baker and Grant Counties. Since the withdrawal was made there had been a storm of protest from various sources and one might have believed that the reserve had no friends in or near its limits, but such is not the case.

I called upon the leaders of the opposition at Baker City and later upon some of the prominent mining men of the district, as well as the mine workers and prospectors. From each of these I requested a plain statement of their objections, but in no case was a logical argument presented. The substance of their objection is summed up in the statements of one attorney who represents different mining concerns: "We are getting along very well as we are and want to be let alone."

This simple but plain statement illustrates the position of the large mine operators. In the past they have helped themselves from the available supply of public timber without objection from any source. Timber land has been secured under the mineral land laws and stripped of its cover. Many claims are held as mineral and possibly some assessment work is done on them – just enough to prevent their location by bona fide prospectors.

Throughout the area known as the mineral belt which is shown on the map herewith (Exhibit B) it is possible to find mineral indications almost anywhere, hence it is held by the miners that it is mineral land and they have assumed that the right to locate this land as mineral and remove the timber for use at another claim. Many of the large companies, which operate stamp mills and concentrators and require large quantities of wood acquire title to mineral claims by purchase of the locator's rights, expend some money in performing assessment work and remove the timber to another claim or their mills even though no mineral in place can be shown.

The Blue Mountain mining district is rapidly developing and promises to become a rich and permanent mining section. The number of developed mines is not large at present, but the work done in them has demonstrated that the ore bodies are deep and improve as greater depth is reached. The permanence of the camps is assured and I am told that more outside capital has

been invested during the past six months than during the history of the district. Development work is being pushed and locations are seen in every part of the mineral belt. From the map herewith (Exhibit C) it will be seen that these locations extend over a wide range but the mineral zones or districts are, in some instances quite widely separated.

It is desired by the protesting miners that the shaded area of this map (Exhibit B) be not included within the reserve, and they contend that under the existing regulations these lands cannot properly be included within the reserve. In support of this statement they refer to paragraph 3 of the Rules and Regulations issued April 4th, 1900, which reads: "It is the intention to exclude from these reservations, as far as possible, lands that are more valuable for the mineral therein, or for agriculture, than for forest purposes".....

It is held by the miners and their agents that these lands are mineral in character and more valuable for mining purposes than for timber. It is true that at the higher elevations the timber has little commercial value as saw timber, but the tamarack, which is the most valuable component of the forest, is an excellent timber for mining purposes and all will be needed in the development of the present and prospective mines. Under the usual methods of cutting which are practiced by the miners this timber supply will not long continue to supply the demand, but under proper restrictions and protection from fire I believe the supply can be made permanent and therefore out of consideration of what must be for the best interests of the mining industry I recommend the retention of these lands within the permanent boundaries of the reserve.

In some localities I found the sentiment of the miners to be quite strongly in favor of the reserve when the rules and regulations were explained to them, and many of the small miners are prepared to welcome the reserve as a means of protection to themselves from the large operators and saw mill companies which would secure the best of the timber and ship it out of the state. Several of the prospectors offer the statement that the small miner or prospector who is developing his claim is, at the present time, largely at the mercy of the large operators who have large capital and paying properties. They secure title to different properties which are located ostensibly as mineral claims but are held solely for the timber. If the prospector has no timber on his own claim or has exhausted the supply and is surrounded by "Company" claims, he is unable to procure the timber necessary in the development of his claims and may be seriously inconvenienced or obliged to sell to the timber holders.

The great destruction of timber wrought by these large plants is causing alarm even to the companies who have consumed the material. As I have said the timber supply at the higher elevation is not unlimited and the large consumption of wood for fuel and timbers has already made noticeable inroads upon the forests in the vicinity of the mills. With an increased number of mills and proportionate demand for fuel the forests of the mining sections will soon be a thing of the past unless some action is taken to conserve the supply by regulating the cutting and requiring more careful use. Many of the principal mills are contemplating the introduction of electric power as a means of reducing the cost of operation and also that the timber may be saved for mining purposes.

At present there are many properties in the hands of companies which are nothing more than prospects which the owners are struggling to develop, and it is alleged that since the free-use privileges are denied to companies these people would be required to purchase timber for development of their claims which they could ill afford to do.

Another objection presented by the companies is that in the event of an application being made for the purchase of a certain tract of timber which would be depended upon by the applicant for

use during the following season, some speculator or another company might overbid the applicant and secure the timber even though all points of equity in the case would indicate the applicant's right to the timber. Failing to secure the required timber the applicant would be obliged to submit to the terms of the speculative bidder or close his mill. It is my opinion that a ruling should be made allowing the applicant to amend his original bid and purchase the timber at the figures submitted by the highest bidder if he desires to do so.

And again the argument is advanced that when an application is made to purchase timber from a certain described tract some person may at once locate the ground as a mineral claim which would prevent the consummation of the sale. This is a logical argument which might be supported by such an occurrence in some instances, but it appears to me to be very far-fetched. While the mineral belt covers a wide territory the amount of land which is actually mineral in character is comparatively small as is shown upon the map of the mineral belt.

The actual conditions do not warrant the elimination of this immense territory from the reserve. This would open it to spoilation by lumbermen and in the end result disastrously to the miners.

The argument of the mining men is simply that they do not wish to be hampered by the regulations. There is enough timber on the ground for present needs and they have no regard for the future for the reason that by the time the available supply is exhausted the present operators will have abandoned the field of speculation and they are willing that their successors should take what they leave.

Looking into the future it appears imperative that, for the best future interests of the districts, these lands should be reserved.

RECOMMENDATIONS.

In drawing the lines I have recommended for the permanent boundaries of the reserve I have endeavored to eliminate as far as possible all lands which might be used as base for lieu selections, and have materially reduced the area of same without impairing the value of the reserve.

The lines recommended differ little from those of the withdrawal except in the southern part, where a large area of bunch grass and timberless land undesirable for forest reserve purposes was included within original lines. It has been my purpose at all times to eliminate timberless, grazing lands, particularly in the vicinity of settlements where there would necessarily be more or less difficulty in handling the neighboring stock at all seasons of the year.

Eliminations recommended.

In the southeastern part of the withdrawal I have recommended the elimination of Sections 13 to 36 in T. 15 south, range 37 east; all of townships 16 and 17 south, ranges 37 and 38 east; T. 17 south, range 36 east; the north one-half of T. 18 south, range 36 east; the south half of township 18 south, ranges 33½, 34 and 35 east; and the west ½ of T. 19 south, range 33½ east; for the reason that there is no timber of any kind upon a large part of these townships, and all is valuable grazing land. (Photo No. 173)

The south half of T. 15 south, range 37 east, and T. 16-37, have a scattered growth of yellow pine and juniper timber and dense thickets of mountain mahogany which would make them desirable forest reserve lands were it not for the fact that The Dalles Military Wagon Road covers the odd sections.

I have also recommended the elimination of portions of townships 15 and 16 south, range 30; 15, 16, and 17, range 31; and 16 south, range 32. These townships include Bear Valley, a timberless area about 12 miles in length by 6 in width, most of which is patented land. This proposed elimination joins the strip along Silvies river which was not included in the original withdrawal and forms a break in the lines of the reserve almost dividing it into two parts. The character of the lands in Bear and Silvies Valleys is shown in photos Nos. 170 and 171.

In the townships about the headwaters of the South Fork of the John Day River the timber bodies terminate abruptly as shown on the general map herewith, and I have cut out those areas upon which there is no timber.

Those portions of township 14 south, ranges 29 and 30 east which are outside the timber limit are also eliminated. Other smaller tracts have been excluded for reasons of settlement or unsuitability.

Additions recommended.

I have recommended the inclusion of the southeast quarter of T. 4 south, range 36 east; the south $\frac{1}{2}$ of T. 4 south, range 37 east; the east $\frac{1}{2}$ of T. 5 south, range 36 east; all of 5 south, range 37 east, and the west $\frac{1}{2}$ of T. 5 south, range 38 east.

These lands lie upon a high spur of the mountains which divides the waters of the Grande Ronde and North Powder rivers. Limber Jim, Beaver, and other important creeks find their sources in these mountains. There is some good timber land in these townships but the greater part, as nearly as I could determine, is covered with a dense growth of lodgepole pine. The land is of no value for agriculture as is evidenced by the fact that there are no locations [unreadable word] the [unreadable word] boundaries.

In Silvies Valley section I have included some timber bodies which were not covered by the original withdrawal and have recommended that they be withdrawn from entry at once.

The greater part of T. 21 south, ranges 27 and 28 east have also been withdrawn upon my recommendation, and should be made a part of the permanent reserve. They cover portions of a narrow timber belt which extends some distance southward along the divides between Silvies river and Silver creek. No important streams head within these limits but the timber is of excellent quality and should be preserved. In townships 14 and 15 south, range 20 east, there is a body of good timber which protects the sources of branches of Crooked River, and I have also asked that these lands be withdrawn from entry.

The stockmen of Crook County have petitioned for the inclusion of several townships surrounding the western end of the western extension, and Congressman Williamson has endorsed the petition in part, but an examination of the tract books shows a large amount of alienated land in these townships and the publicity given the matter by the Stockmen's Association has caused many locations to be made, presumably for the purpose of creating base for lieu selections, hence I cannot approve the recommendation. The ardent advocacy of the stockmen in desiring to extend the reserve in this section is due to a desire on their part to have the Government protect the local range from the migratory herds of sheep from other counties.

Finally, my earnest recommendation is that the permanent boundaries of the reserve be established as I have recommended them. The timber and water supply of the Blue Mountains is invaluable not only to the industrial interests of the immediate, contiguous sections but to the en-

tire surrounding country. As I have shown the timber is in demand from points 150 miles distant; the streams flow through semi-arid plains in all directions and the latent resources of these distant lands can be developed only by the application of the waters from these mountains; the entire Northeastern Oregon region is vitally interested and dependent in a greater or less measure upon the natural resources of the lands in question, and only by the forest reserve system can these resources be conserved.

If there is one section in the State of Oregon where a forest reserve should be established it is the Blue Mountain region, and my endorsement of the measure is strong and unqualified.

Respectfully submitted,

Forest Inspector.

FUTURE MANAGEMENT OF THE RESERVES.

The success and value of the reserve will depend very largely upon the man who is selected to have supervision over it. This is true of all reserves but will be particularly so of this one in which so many interests are involved.

The Supervisor should be a competent man, of unquestionable integrity and possessing a great deal of tact. Proper administration of affairs would soon win friends for the reserve among all classes and these will be of great assistance in protecting it against forest fires.

The amount of work connected with the administration of this reserve will be great but a large force of men will not be required to patrol during the fire season for the reasons that in nearly all parts of the territory there are more or less settlers who are sufficiently interested in the protection and welfare of the forest to insure their assistance in time of need, and the forest conditions are such that destructive fires are not common, particularly in the yellow pine belts.

One of the causes of alarm among the people who have protested against the reserve is the fear that an unscrupulous Supervisor will be appointed who will stand with an ever-open palm ready to apportion privileges to those who offer the greatest inducements.

The many conflicting interests and necessity for the use of the reserve commodities will offer an opportunity for "Graft" that is excelled in no reserve I have visited.

The greater part of the work in the reserve will be in the mining district where there will be a demand for timber at all seasons of the year.

The Supervisor's headquarters should be at Sumpter. Two Ass't Supervisors should be allowed; one to assume immediate charge of the western extension where grazing will be the most important work, and the other to attend to sales and timber use in addition to the grazing on the northern and eastern portions. A total force of fifteen men should be sufficient.

PLACER MINING IN THE PROPOSED BLUE MOUNTAIN FOREST RESERVE.

The Blue Mountains of Eastern Oregon have produced a very large amount of placer gold and the end is not yet.

Since the early 50's when the famous Canyon City diggings were opened more or less placer work has been done in this region each year and pay dirt has been struck in many different sections within the proposed reserve.

The most extensive workings are in old channel diggings along the course of an old "wash" which, it is said, has been traced from the famous Salmon River mines of Idaho to the Sacramento Valley in California and opened at intervals through the State of Oregon. Beside this old channel there are numerous deposits of local gold which have been worked profitably.

It was a difficult matter to procure definite information regarding the number of placer locations and the actual conditions existing for the reason that all of the placers are abandoned during the winter season while the streams are frozen as they were at the time of my visit to these sections.

It was learned, however, that there are many channels about the headwaters of the Grande Ronde, John Day and other rivers along which legitimate placer mining operations are in progress.

On the head of the Grande Ronde river in the Camp Carson mining district there are properties which have been worked more or less since 1863 during which time a large amount of gold has been washed from the gravel deposits of the old channel. There are about 50 claims owned or held at present in this camp. Active work will be commenced again this season.

I also visited placer workings on Bull Run, a tributary of the John Day river, and the Greenhorn district and others, but found no evidence to show that the claims are held for purposes other than legitimate placer mines.

My investigations among the quartz-mining districts showed conclusively that many tracts of land are located as placer ground for the timber that is upon them or for purposes other than legitimate mining. Unfortunately my early recall prevented an examination of the records in many cases but there was no attempt on the part of the mining men to conceal the fact that they had provided a present and future supply of timber for their mills and mines in this way.

Superintendent Melzer of the North Pole mine indicated upon a map a large tract of land designated as placer claims which he said he had purchased for the company. Later while riding together through a body of timber he informed me that it was one of his company's placer claims. I then questioned him closely regarding these alleged placers and he said: "Well, we do our assessment work and that is all that is necessary."

I asked what returns they received from the work done and he replied laughing, that "if the men who did the work found any nuggets they failed to turn them into him." Possibly some colors could be shown to support the statement that the land is mineral in character but it is held solely for the timber which will be used in the mines and at the mills.

Doubtless a close investigation would show many fraudulent entries under the mineral act. These are advantageous to the companies but often work a hardship on the smaller miner and certainly will result in the destruction of the forests upon these lands.

Respectfully,

H. D. Langille.