Section VII. X.

Wall Analysis Area
Environmental History Overview

Edited by Michael Hampton

This overview of environmental history of the Wall Analysis Area is a compilation of excerpts from three historical accounts that relate to the area. Entries in italics are clarification added by this editor. Additional emphasis **(BOLD)** *has been added to highlight particular excerpts that address the "reference" conditions that relate most directly to the ecosystem analysis.*

From: The Proposed Heppner Forest Reserve, Oregon, 1903
By: H.D. Langille, Agent and Expert, Bureau of Forestry

Area

The original withdrawal included approximately 334,000 acres, but a large part was found to be unsuitable for forest reserve purposes because of the non-timbered character of the lands. Other sections, outside the withdrawal, were later shown to be vacant, public timber-bearing lands, and these have been included in the recommendations here made. Since these extensions have been decided upon subsequent to the examinations, this report relates particularly to the original withdrawal.

The area of this reserve, as recommended, is approximately 261,600 acres.[1] Of this total 18,320 acres, or 7 per cent, is held under adverse title as follows:

Homestead entries,	2,680 acres
Patented,	6,200 acres
Timber and stone entries,	1,560 acres
School sections,	7,680 acres
State selections,	200 acres

Topography

Finding their extreme sources in the swampy basins or on the levels close to the summit of the ridge, the streams flow smoothly downward across the wide slope uniting the numerous small tributaries, and steadily cutting their ditch-like channels deeper until the upper escarpment is reached. There the erosion of ages has worn deep, impassable gorges back from the cliffs where once were gleaming cascades and waterfalls dropping to the bench below. Along the crests of the divide dome peaks, such as Madison, Tupper, and Peters buttes, Bald and Little Bald Mountain, rise from the general level of the divide and form conspicuous lookouts, but generally the country is one of unusual topographic sameness, and every part looks identical with the others.

[1] Proclamation signed July 18, 1906, area 292,176 acres.

Climate, Precipitation, Etc.

The lateral divides or spurs, such as the one upon which the proposed reserve is located, are more in danger from such storms than is the main range, and that such phenomena are not uncommon is evidenced by the surprising number of lightning-scarred trees, and the soilless tracts found upon the area under discussion.

While the terrific storm which dealt death and destruction to the unfortunate people of Heppner was the worst recorded in the history of the country, many similar but less severe downpours have occurred before and since.

With the exception of infrequent storms such as those referred to, or light showers during the month of June, or occasional rains during September, no rainfall can be counted upon from May 1 to October 1, and often no abundant precipitation falls until November.

The mean annual precipitation recorded at Heppner is 15 inches, but this is not a criterion of the amount of moisture deposited upon the higher elevations, where the indigenous flora clearly indicates a marked increase over this amount. At times snow falls to a depth of 6 feet on the summit of the spur, but this is unusual. The average depth probably would not exceed 3 feet. Usually, severe snow storms are followed by warm Chinook winds from the west, which quickly bare the hills of snow. The range of temperature is probably 120° F., or from -20 to 100 in the shade, but none of these extremes maintain during long periods at any season.

The Forest

There are no extensive forests of continuous character anywhere within the proposed reserve, mainly for the reason that the entire tract comprises one of the outposts of forest growth standing on the ragged edge, as it were, and the components of the forest are of necessity extremely susceptible to climatic and topographic relations. Upon the tracts covered by the various types of growth there is a striking similarity in all parts, but the types are curiously intermingled as each follows the contour of its adapted soil or exposure. Looking upon the forest cover from any elevated station, it presents an extremely broken and irregular appearance. This is especially true of the extreme western end of the withdrawal in Township 6 South, Ranges 26 and 27 East (Skookum & Little Wall Creeks), as seen upon looking southwest from Tupper Butte. **Throughout this district 40 per cent of the surface is barren, scab land, upon which, from present appearances, no timber has ever grown.** This scab land also occurs in many other parts of the withdrawal.

The forest is naturally divided into two general types--the north slope and south slope--but a closer segregation would separate each of these into less important classes exemplifying the effects of exposure and subdrainage. Two timber zones--the yellow pine and lodgepole pine--are immediately distinguishable, but each penetrates the other with singular disregard for the usual lines of definition, both being bounded and defined by conditions other than attitudinal range.

Yellow pine is the predominating species, representing fully 80 per cent of the entire forest. It comprises almost the entire stand of south slope type, being but sparingly interspersed with Douglas spruce of very inferior quality, or occasional groves or specimens of juniper.

The north slope type is represented by a mixed growth of the other species named, and occupies, mostly, the north and east exposures, though on the north side of the mountains it covers the bottom lands which contain sufficient moisture to promote the growth of its components, and frequently creeps up the western and southern exposures.

Over the greater part of the area covered by this type (and that is much the greater portion of the withdrawal), the forest occurs in open stand which differ materially in height, diameter, and volume of merchantable timber. Naturally, the best timber is found along the canyon and ravine bottoms, where a stand of from 20 M to 30 M is sometimes attained, but on the slopes the stand immediately decreases until, on the crests of the low ridges, it runs not higher than 3 to 10 M per acre, even in the most continuous forest.

The lodgepole pine ranks next to the yellow pine in acreage, but it is mostly of a size suitable only for poles. Tamarack is second in value as a commercial timber, and attains an excellent growth, particular in the Willow Creek basin in Township 4 South, Range 28 East. Mingled with the tamarack is some very good Douglas spruce, but the trees are mostly small, usually from 12 to 20 inches in diameter. The other species represented are of but little commercial value, and occur only is small tracts and sparingly.

Reproduction is not general throughout all of the townships except upon the lands covered by the north slope type, where there is usually a dense and thrifty young growth of the component species, most of which reproduce well. In the yellow pine belts the young growth appears mostly in spots, springing up in very close ranks and making a thrifty growth. There are wide tracts upon which little reproduction appears, but where it is needed to replace decaying growth the species is providing well for the future. Throughout the lodgepole pine zone, or, more exactly, above the yellow pine on the south slope, the lodgepole pine has reclaimed hundreds of acres, particularly in Township 5 South, Ranges 28 and 29 East. In many places it was noticed that the yellow pine is encroaching upon the scab lands which lie within seedling distance of the parent trees. East of Potamus Creek in Township 6 South, Range 29, there is a lack of reproduction, there being only occasional thickets of north slope species or yellow pine, sparingly distributed. The outlook for natural reforestation is promising over the entire withdrawal.

Industries

Three companies have been organized to exploit the field, and active work was in progress at the time of my visit. The Heppner Railroad and Coal Company has engaged an expert on the ground, and several prospect tunnels were being driven to determine the extent and value of the veins. This company has about 2,800 acres of coal land located at the head of Willow Creek in Sections 25, 26, 27, 33, and 34, Township 4 South, Range 28 East. All indications point to the development of valuable coal deposits which would be of inestimable value to the

country. A railroad survey has been made up Willow Creek, and the road will be constructed as soon as a sufficient body of coal has been uncovered to justify the expenditures.

As will be seen from the township plats herewith, all of the north half of Township 5 South, Range 28, is also located as coal land, but no development work was in progress at the time of my examination, and it is probable that much of the land will be relinquished and the claims canceled.

Many of the outlying claims have been located without definite knowledge of their character, but, as I overheard one locator remark, there is timber enough on my claim to pay me for the investment, even though I find no coal.

The Forest as a Protection Cover

The beneficial effect of the forest cover on these lands can not be overestimated. Under climatic conditions such as those described, the soil is subjected to destructive washing and erosion, particularly during the terrific downpours which accompany the electrical storms referred to. As an evidence of this force, **it was everywhere observed that upon tracts upon which there is no forest cover there is no soil. The scab lands referred to are startling illustrations of this erosion. At one time these areas were covered with soil to a depth of from one to two feet, and sufficient soil binding vegetation grew upon it to resist the destructive elements--wind and water--but persistent overgrazing destroyed this cover, and, there being no tree growth to protect the soil, it rapidly disappeared, leaving nothing but a bed of exposed rocks, upon which almost nothing grows.** Frequently there may be seen small beds of soil surmounted by resistant forms of vegetation which have held the soil intact and now remain as striking illustrations of the necessity for the perpetuation of the soil cover to prevent the entire mountain slopes from becoming barren wastes of rock.

That the forest has a highly beneficial effect upon the water flow can not be questioned. Most of the living streams find their sources above the yellow pine zone in small, swampy tracts; **the creeks which head lower in the yellow pine belt run dry early in the season.** Even as early as June 20 the question of water for sheep was a serious one at the lower altitudes where the larger streams flow through deep gorges. Throughout the entire territory the relation between the forest and the water flow is apparent. **Where the forests are dense, springs are numerous.** Doubtless the reverse is equally true, but the dependence of each upon the other is obvious.

A glance at the map accompanying this report will show that almost the entire watershed is toward the south, the streams flowing directly into the John Day River through a section which is not adapted to agriculture, because of the steep, broken character of the land. The outflow from the proposed reserve is, therefore, of little importance at the present time.

The streams which flow northward, on the contrary, are of great value and importance, since

the population of the long, fertile valleys through which they flow is wholly dependent upon this water supply. It is indeed unfortunate that the north slope was not reserved prior to the relinquishment of title by the government. Willow, Butter, and Rock creeks should have been fully protected. As far as I could learn, little or no use is made of the water that flows southward.

Settlements

There are no settlements within the proposed reserve, and scarcely a habitation. Along the stage road in Section 28, Township 6 South, Range 27 *(Morphine Ridge/Bacon Creek)*, there is a stage station around which some improvements have been made by clearing and sowing grass, and some grain truck is raised. In Section 15, Township 5 South, Range 28, there is a cow ranch that is occupied by a family during the summer season. One of the homestead claims in Section 8, Township 5 South, Range 30, has a small shack that is occupied part of the time by an old man who looks out for the cattle pastured along the creek, but he was absent when I visited the place. Many homesteads have been located in different parts of the reserve, but they were taken solely to secure rights to water and usually small natural meadows along the streams, which are used for cattle ranges. Backed by a homestead claim, the cattleman commands respect and recognition from the nomadic sheep men, and for this purpose all of these claims were filed upon, though apparently no attempt has been made to comply with the homestead law. My observations warrant the assertion that each and all of these claims could be canceled for noncompliance with the terms of the law. Some desirable tracts of range land have been patented by stockmen who now virtually control all of the surrounding range. Examples of this are found in the meadow lands shown upon the map in Township 5 South, Range 28. Old cabins remain as relics of the days when the homesteader was 'holding down' his claim, but they are now abandoned and the places used, as they always were, simply as summer camps for the herders.

The entire district is essentially range land, and offers but little inducement to the home builder.

During the fall of 1902 professional timberland locators 'discovered' the timber bodies within this area, and **industriously resurveyed the lines around the most continuous timber belts and located scores of patriots upon the lands for a consideration of $100 per location.** Their operations were temporarily suspended during the winter, but resumed during the month of May. Filings began to pour into the local Land Office, and the rush was on, but fortunately my request for the withdrawal was acted upon promptly and further entries were debarred in time to protect the remaining tract, much to the disappointment of the professionals. I was advised later by one of these that they had planned to locate every timbered 40 acres in that district.

Roads and Railroads.

The entire reserve is easy of access by wagon road, and almost all parts can be reached at the present time. **The principal thoroughfare is the Heppner-Monument stage road** *(approximately located along Forest Road 22)*, which crosses the pass at the head of Rock Creek, thence south to the John Day River, through Townships 6, 7, and 8, Range 27. This

road is one of the main arteries of trade with interior points, and a large amount of freight, including the wool clip, is hauled over it. The second road in importance crosses from Heppner via Butter Creek to reach Ukiah and other points on the upper North Fork of the John Day.

Lumbering

There has been no lumbering done within the territory I recommend as a permanent reserve, but there is a sawmill in the northeastern part of Township 4 South, Range 28 *(Upr. North Willow Creek)* (Photo No. 41267), one on Rock Creek about 3 miles from the reserve line, in Township 5 South, Range 26, and an old mill was operated several years ago on Willow Creek near the north line of Township 4 South, Range 28. No cutting has been done south of the divide. The output from these mills was all used locally, the greater part in the building up of the little towns in the county and on neighboring ranches, but owing to the expense of the long haul from the mills to Heppner it has been found cheaper to import lumber from western Oregon by rail *(railroad to Heppner completed in 1888)*. This condition will be changed, however, upon the completion of the proposed railroad to be built to the coal mines. This will afford an opportunity to supply local demands for fuel, lumber, etc., at a minimum cost, and eventually the demand for timber will extend to the reserve.

Grazing

The use of these lands for grazing purposes is the most important factor to be considered in determining the economic relations between the people and the proposed reserve. The west slope of the Blue Mountains and the adjacent broken plains are essentially a grazing section at this time, and upon this industry the communities are largely dependent. A maximum amount of stock to a minimum amount of feed is the usual basis of calculation, the stockmen depending entirely upon the open range except during the most severe winter months. As early as possible in the spring stock is turned out on the foothill range. If the owner has an enclosed tract of bunch-grass land it is used for early range and occupied until about May 15, when cattle are driven to the mountains.

Sheep are handled in much the same way, but reach the mountain range later usually between the 1st and 15th of June, though some crowd ahead and enter in May.

There is demand for every acre of range included within this withdrawal and much more. The **mountains have been pastured persistently ever since the rapid increase in numbers of stock demanded the utilization of all of the range lands, and this area has been subjected to particularly hard usage by reason of its geographical location** *(See attached 1930 map with main stock driveways)*. As already described, this spur extends westward from the main range, partly bisecting a wide treeless region, used as winter range. This spur affords an excellent driveway across public lands over which sheep may be driven and ranged in transit, without encroaching upon private lands, and affords earlier range than that of the Blue Mountains proper. This has led to the adoption, by some owners, of a system by which the bands are driven to the earlier range immediately after shearing and lambing, held there for a time, and then taken on to more desirable summer range in the higher mountains *(see Ericksen, 1907, for more on the early season sheepgrazing)*. This higher range is

occupied, usually, until October 1, when the return trip is commenced. The same system is followed on the homeward journey, and the bands are held on the lower range within the proposed reserve until October 25-31, when they are returned to the winter range on the bunch-grass lands below.

But these transient herds are not the only ones, nor all of the stock that this range is depended upon to sustain. Many herds of sheep are summered upon it in addition to the numerous "bunches" of cattle that wander up from the settlement or are driven in from neighboring valleys. The number is at all times greatly in excess of the capacity of the range which, as a result of this unrestricted, persistent grazing and trailing of band after band, presents a deplorable condition of impaired natural vitality *(see attached table for 1923 levels with Wall area and earlier estimates).*

Utilization of this range under the system described makes it obviously difficult to determine the amount of stock by which it is annually occupied or the length of the period of occupation. To the transient owner, or, rather, those who do not control range by private claims, it is a **substitute** range which the occupant is prepared to leave at any time if something better offers in another section. The camp tenders are constantly searching for feed overlooked by others, and the bands are always moving. **At the time this examination was made (June 20-30) the open range was already incapable of properly supporting the stock dependent upon it. Gaunt and hungry sheep were trailing everywhere, with apparently as little vegetation before them as there was behind.** The ground had already been run over, in some places not only once but many times. There seemed to be no other place to which these herds could go; the range everywhere was fully stocked. Upon what these sheep would subsist during the coming hot months I could not understand. The herders were at a loss to know what to do with their bands, and several declared that they would throw up their jobs rather than herd in a country where there was no feed. During my examination I encountered twelve bands of sheep, averaging 2,000 head per band, and was told of several others. There were at least twenty bands, or 40,000 sheep, besides hundred of cattle, ranging upon this limited area of denuded range.

At shearing time of this year there were approximately 240,000 sheep in Morrow County. Adding to this 50 per cent increase by lambs, gives a total of 360,000 from which approximately 6,000 should be deducted to cover a decrease by marketing of spring mutton and shipments to Rocky Mountain range for summer feeding, **leaving on the local summer range a total of approximately 300,000 sheep and lambs.** Of these 250,000 must have gone to the Blue Mountains to increase the already excessive number owned in the counties in which the Blue Mountain Reserve is situated. That the summer ranges can not long continue to produce sufficient forage to sustain such numbers of stock is obvious to all *(from Giles and Ericksen, the peak in sheep grazing occurred around 1908, as numbers began to decline somewhat upon initiation of permit administration. However, rail head access at Shaniko in 1901 had already began to impact the decline in the Heppner sheep economy).*

The general character and value of the grazing land contained within the proposed reserve does not differ materially in different sections except as it has been injured by abusive overgrazing.

The forest type is the most extensive. Throughout the forest there is more or less grass differing in character according to the density of the shade, slope, etc. In some places in the open pine woods the rich, nutritious bunch-grass remains, with some other species, but the tufts are often far apart and afford but little feed. The most abundant species is the common pine grass which forms a beautiful carpet of green over wide stretches of open forest, but it is of little value for feed. Horses and cattle eat it readily while it is young and tender, but sheep simply run over it and trample it down unless very hungry. In the mixed forests, or north slope types, there are more or less undershrubs affording browse, and often quantities of coarse grass, but this type occupies only a limited area, mainly near the summits of the higher sections. The park lands, as the term is usually understood, are very limited in extent at the present time, though it is reasonable to suppose that at one time the parks were co-extensive with those tracts here classed as park and scab. Over these areas is found more or less grass of different species, but it grows sparingly and affords but little feed.

In the swampy meadows, such as shown in Photo 41291, there is a rank growth of grass and weeds, but these are mostly patented lands and fenced. The amount of damage done to the forest by sheep is greater than I have ever seen in any other locality. In many places the seedling yellow pine has been persistently browsed from year to year to such an extent that they have failed almost entirely in height growth, and over large areas they are short, stunted, and much branched from the pruning done by sheep. A specimen which illustrates the result of this browsing is shown in Photo 41289. I have long contended that sheep would not browse upon coniferous species unless driven to it by hunger, but while watching a band ranging in open pine woods (Photo 41278) I saw an old ewe approach a pine about 3 feet in height, rise upon her hind feet, and deftly gather in, in a manner born of practice and long experience, the tender spring growth which topped the seedling. The same performance was repeated many times on this occasion, and by sheep that were well filled and ready for their noonday rest. This demonstrated to me that, after the taste is once acquired, these tender leaders are palatable to sheep and frequently eaten as food.

It is probable that the greatest amount of damage to the forest growth is done in the fall when the hungry flocks are returning over a denuded range, but the fact remains that the development of young growth on parts of this reserve has been seriously retarded by browsing done by sheep.

Naturally there has been a great deal of contention between the cattle and sheep men, but no serious conflicts have occurred between them. The cattlemen feel that they are entitled to the full use of certain parts of the range, but, according to their statements, their requests for parts of the range have been ignored and promises made by sheep men have been violated. Widely blazed lines have been marked by the cattlemen around several sections of land in the vicinity of Five-Mile Creek, and notices posted along the line requesting the sheep men not to encroach upon the interior area, but these are disregarded, and in the end the cattlemen are practically driven from the range.

Cattle are driven to the mountains about May 15, and held there as long as the feed lasts, but during late years most of the stock has been removed during the month of August (and even on August 1) because of the shortage of feed. So long as forage can be found for the sheep outside the cattle district there is no trouble, but as soon as hunger comes upon the bands it

is impossible to hold them anywhere. Herders become desperate and no man s rights are respected. Throughout the entire range the herders would attempt to conceal themselves at the approach of a stranger, or would greet him suspiciously, fearful lest the visitor had come to warn them of trespass committed, or that he was encroaching upon the rights of others. What a striking contrast between conditions here and on the Cascade Reserve where the use of the range has been regulated! There the sheep men and cattlemen now camp at the same spring, cook by the same fire, and enjoy the most friendly relations, grateful for the changes that have been brought about. Verily the lion and the lamb shall lie down together!

A solution of the range problem in this reserve is not a difficult one, **but proper administration will demand a considerable reduction in the number of sheep occupying the range.** The territory should be divided between the sheep and cattle, and the cattlemen should unite their herds and use the range assigned them without special allotment. The sheep range should be allotted to the different permit holders, and each restricted to the range to which he may be assigned.

By 1917 from available map, cattle/horse and sheep/goat allotments had been established in the Wall analysis area. However, C&H was from Morphine Ridge to Sunflower Flat (Little Wall, 3 trough and Lovett Creeks). T&M and C&H included Little Wilson, Board and Indian Crk. The rest of the area was for sheep.

The divisions indicated will amply provide for the number of cattle now using the range, and, with improved conditions to follow, also for any increase in numbers that may occur in future. The remaining public land, comprising 197,000 acres, should support 40,000 sheep even in its present depleted condition, and this number should be permitted to go upon the reserve. This arrangement allows about 5 acres to each sheep, and more than 30 acres for the 1,600 head of cattle said to be owned in the vicinity of the reserve. This is a very large acreage per head but some opportunity must be given the range to recuperate. The permit holders should be required to sow a certain amount of seed per acre each year, as I have often recommended to the Interior Department. In this ways the range may soon be brought up to a much more productive condition than at present, and in future the number of stock allowed may be materially increased.

Sheep should not be permitted to enter the reserve before June 15, and should be removed not later than October 20. Such a long grazing season will tax the range to its utmost capacity, but by June 15, the forage will have attained its growth and should carry the stock over the dry months of July and August and into early September, when copious rains will quickly renew vegetation sufficiently to support the stock until the winter range has recuperated. Because of the fact that the altitude of this range is comparatively low--a transition zone, as it were, between the plains and the Blue Mountains proper--it is better adapted to spring and fall grazing than to summer feeding, but the great demand for summer range and the dependence of local stock upon this territory requires the fullest utilization compatible with the purposes of the reserve.

Cattle should be allowed to occupy the range from June 1 to October 15. **Finally, I have to recommend that 2,000 head of cattle and horses, and 40,000 head of sheep be authorized to graze upon this reserve.**

From Ericksen's report, the numbers were well in excess of these recommended numbers for many years. The National Forest acres within Wall Analysis Area represents 36 percent of the original acreage of the Heppner Forest Reserve.

From: Report on Heppner, Oregon, National Forest, July 1907
By: M.L. Erickson, Forest Inspector

Grazing

Heppner Forest has been a sort of dumping ground for sheep not allowed by permit on the other Forests. Naturally the result was to heavily stock and overgraze. Upon the remaining range, which is less than one-half the total area of the Forest, excess sheep have grazed so heavily during the past season as to markedly deteriorate the feeding capacity of it. Considerable meadow land at the heads of the creeks is already privately owned, and as these meadows are principally the source of the streams... In the cattle districts no instances of overgrazing were observed.

Grazing Districts

Between Kayler and Bologna Creeks on the south side and Wall Creek on the north. **This divide should be used as a division line between the cattle and sheep.** This summit is already the division between the two. Approximately 67,000 head of sheep and 8,000 cattle and horses upon the Forest. I am of the opinion that an average cut of 10% on sheep should be made next season. I deem it unwise to make any cut on cattle for the District.

This year neither cattle or sheep were counted. It is abundantly evident that less cattle use the Forest than the number paid for and permitted on it. Many owners pay no attention to their stock after turning them loose upon the range. Especially true for users of Madison Butte and Black Mt. ranges.

Sheep Driveways

No. 3 spreads out to a width of one mile after leaving the head of Ellis Creek. The width should be reduced to one-fourth. Nos. 1 and 2 are one-fourth mile wide. ...thence crossing the deep canyon of Wall Creek in order to get back to the Heppner-Monument wagon road. The sheep coming back from the Blue Mts. may use it.

Unlawful Fencing

In the western end it would appear that most of the land comprised within the borders of the Forest is alienated because fences are numerous.

Spring Range

An area between Potomas and Taylor Creeks was set aside. These claims are hardly supported by facts. Some of the sheep men may have used a portion of the Heppner Forest as spring range; most of them never did and all of them can get along with the foothill range until June 15. Mr. Sheller conceded to their wishes, laid out an area of approximately 24,560 acres and approved application for 74,000 head of sheep. Only one-half of them paid the grazing fee. The result, however, was extremely bad. About 30,000 sheep were chucked upon an area of 24,560 acres as early as May 25. None of this area furnished good feed because it had been excessively grazed in the past.

Upon examination of the territory I found it absolutely grazed out. I could not distinguish it from the main driveway where thousands of sheep had trailed. The territory was so fully crowded and so badly overgrazed that very little benefit resulted to the stockmen using it. I believe that not one band of sheep can find support upon it during the summer.

I urgently recommend that no Blue Mts. sheep be allowed to use any portion of the Heppner National Forest for range at any season. No more than 2,500 sheep should be permitted upon it.

Forest Fires

The open character of the major portion of the forests of this withdrawal precludes the possibility of serious damage by fire. **Fire scars at the bases of the yellow pine are evidence of the fact that many tracts have been burned over by creeping fires, but the injury resulting is not noticeable except in that the seedling growth has been destroyed over limited areas.** In the upper zone, however, where lodgepole pine and other indigenous species have formed a stand sufficiently dense to carry overhead fires, a few small tracts have been burned over, but without serious consequences since each area has quickly restocked with a forest cover more dense than the first. **Apparently these fires are attributable to carelessness on the part of the builders of camp fires. Possibly lightning has caused an occasional conflagration, but I have yet to discover evidences of such phenomena.**

Patrolling against forest fires will be an inconsiderable part of the duties of the forest officers on this reserve.

Sentiment

The withdrawal of these lands caused but little comment except from timber-land locators, and, so far as I could learn, there is no outspoken opposition to the creation of a permanent reserve.

My examination was made during the days following immediately after the awful disaster at Heppner, when men's minds were filled only with the horror of that awful event, but from knowledge obtained I am convinced that a reserve will be welcomed.

Naturally the question is one of vital concern to the sheep men and cattlemen, and that they will be grateful for any measure which will bring order out of the present chaotic conditions existing on the range is certain. All unite in declaring that they are willing to try the reserve plan, realizing that the present conditions can not be long maintained without ruin to the business. The cattlemen who have endeavored to use a portion of the range are especially eager to have some administration given these lands, believing that they will be allotted a portion for their herds.

Mr. Geo. Couser, of Heppner, one of the most substantial business men of the county, and mayor of the town, was asked for his opinion. He said: ''You who have studied this question know more about it than any of us can know. Go up into the mountains and look over the situation; if you think a reserve will benefit our county, go ahead and create it. I have confidence enough in my Government to believe that nothing will be done which will injure our county or community, and I am willing to leave it to you.''

The editor of the Heppner Gazette also expressed himself as favoring the proposition, and assured me that the sentiment of the county is decidedly in favor of the reservation of these lands.

No arguments against the reserve were presented. Every one appreciates the facts that these lands are for no value other than for the timber that is upon them, the grazing, and as a protection to the water supply. Moreover, they believe that much will be done to mitigate the deplorable conditions existing on the range, and that needed protection will be given to a valuable timber supply which will soon be in demand for local use.

I recommend that the lands included within the following-described boundaries be set apart as a permanent forest reservation to be known as the Heppner Forest Reserve.

Combined Fire Line, Trail and Telephone Line

From Taylor Creek east to Madison butte covered with a dense stand of lodgepole pine (second growth), white fir, tamarack, and among it all is very much dead and down stuff. This dense stuff with the large quantity of dead material on the ground makes the liability of a forest fire, now difficult of access due to the dense reproduction, underbrush and extensive windfalls and firefalls, and answers perfectly for a direct telephone route. Beginning at a point at the head of the East Fork of Board Creek, thence northeast to the Lookout on Madison Butte. The best route is that shown on the map.
(Present day Copple Butte Trail) This area of upper Swale, Alder and Skookum Creeks is similarly described today. This analysis was unable to find evidence that any fires of consequence have occurred in this area in the past 90 years.

The Fire Line

The past fires have been very severe. Nearly the whole area of the Forest has at some time in the past been burned over.

The Forest consists almost entirely of lodgepole pine, white fir and tamarack.

Electrical storms are frequent; campers and travelers are numerous in the hills during the hot summer.

A scheme of fire protection and a system of fire lines is quite necessary for the insurance of the greatest public safety.

It follows short ridges connecting with open meadows.

The numerous open ridges and roads intersecting the fire line will divide the area.

The route outlined is well up toward the heads of streams and selected to follow ridges as much as possible and then direct down on a meadow and up another ridge. A width of at least 100 feet is recommended. Wide enough to be an efficient check to an advancing crown fire. Strip 25 miles long and 100 feet wide. It is certain no one cares to purchase the timber. The cost of felling the large timber averaging 4 M feet per acre. The large trees of tamarack, yellow pine and red fir occurring within the strip may be allowed to stand. Cost per mi. $76. This plan has been worked very successfully in some of the southern California Forests.

The Trail

It is suggested that Mr. Chidsey do the actual location work and make all plans. Probably no culverts or grade work will be required in making. The grade should be kept within 15% for such a low grade is easy to secure.

Cabins

No cabins of any use are known by me to exist upon the Forest.

Game

The cause of the lack of deer and other game is probably due to the annual hunt of the Warm Springs and Umatilla Indians who come into the country en masse with large bands of horses.

Summary of Recommendations

Spray-Hardman Wagon road, Heppner-Monument wagon road. That a fire line 100 feet wide be constructed to the Heppner-Monument road.

General

Yakima National Forest - If Sheller had directed the details of organization, the result might have been as bad as much of the grazing initiated by him.

I recommend that it be suggested to Chidsey that he make it plain to his men that more work, more results, a better spirit amounting to enthusiasm, if possible, will be expected

from them. **He should further instruct them that results, not merely listless performance of duty, is the ultimate object and the true mark of efficiency.** *(Not dissimilar to current instructions for completion of ecosystem analysis.)* Recommend his title be changed from Acting Forest Supervisor to Forest Supervisor.

From: Homesteads and Heritages: A History of Morrow County, Oregon, 1971
By: Giles French

People are Coming

There were numerous methods of obtaining land for the government was anxious to get rid of it, to get it into the hands of homeowning citizens who would produce from it and pay taxes on it. The government, in those days, was helpful.

Grass is Going

The dross from years, yea centuries, of tall grass, was six inches deep on the ground, so deep that no drop of moisture could run off the land. Not until the thick pad of decaying grass was trampled into powder and the grass eaten that supplied it, was erosion made possible--and that was the beginning of the end. The livestock industry destroyed its own resource.

1891

H.M. Thorton, below Ione, had a band of 3,000 sheep, had lambed 110 percent, spent $400 for herders, $210 for camp tending, $100 for board, $200 for lambing expense, some for salt and wool sacks, eight cents a head for shearing 2250 for a total of $1,258. His average clip was nine pounds and he got 12 ½ cents for the wool. That was encouraging. *Band grew at 183% profits $.42/sheep - later would have to pay .07/sheep/lamb pr. Permit.*

It was still a country not completely rid of the native flora and fauna. Jones had turned a coyote loose with 300 yards head start of the hounds, and they soon caught the varmit.

By the fall of 1893 wheat was down to 35 cents and three-year-old steers were selling for $2 per hundred and the price of wool was down to six cents.

By 1898 sheep were selling for four dollars or more and wool brought rom 10 to 16 cents, and the demand for sheep to drive east on well-used sheep trails was good. There were 3915 horses and mules worth $53,534, 3344 cattle worth $50,935, and 170,196 sheep worth $235,467. Total property, real and personal, was $1,445,404, an increase of 50 percent since 1888 despite the depression. The land office at La Grande reported that Morrow County was 25 percent timbered mountain, 40 percent grazing, 20 percent arid and 14 percent farming land.

Heppner was still a wool center and there was a constant complaint about the condition of the road to Monument, but they hauled over it. The Monument Road was Heppner's lifeline, its contact with the great basin of the John Day, that was one of the most productive areas of the state with its flocks of sheep and herds of cattle providing certain wealth every year. It was a seasonal road used mostly in April and May after the wool was clipped.

Well into the 1920s, the greatest contribution to the economy of Morrow County provided by the Wall Creek area in addition to grazing, was the commerce of the Heppner/Monument Road.

In 1898 the county engaged Henry Scherzinger to improve the Monument road and he did, keeping within the appropriation and finishing on time. The freighters on the road to Heppner used six to ten head of horses and even so had to double up on some of the hills. From Parker's Mill to the summit of the Blue Mountains the road climbs 600 feet in 3 ½ miles.

The trip took eight days, which meant camping out for the teamsters and the weather was not always the best for outdoor living. They took grain for their horses and depended on grass for bulkier feed, turning the horses loose at night and rounding them up in the morning. The route wasn't only used for hauling by wagon. **Stock was trailed over it, bands of wethers going to market or Montana or Colorado for a summer,** before hitting Chicago to become mutton chops for the affluent and mutton stew for the poor. Cattle were trailed over the road, taking time to eat down the grass that grew on the south slopes between the summit of the Morrow County ridge of the Blue Mountains and the north fork of the John Day River.

Hauling wool in the spring and hauling the supplies throughout the year, together with a tri-weekly stage to Monument and Long Creek made Hardman a sizeable town before 1900.

That gave it the name of Dairyville or Dairy by which it was known for years. David Hardman, who had the post office on his ranch near town, moved the office onto the main street and eventually the name of the postoffice became the name of the town. The men who came through Hardman hauling wool or freight or moving the lumber from Parker's Mill to Heppner.

In the **late 1890s there were several instances of sheep shooting in the hills behind Heppner.** Cattlemen resented the intrusion of sheep. Asa Thompson had a band shop up on Indian Creek and lost 200 sheep and Mrs. H. Welsch lost 125 sheep in a similar attack. But the sheep and cattle war was never so vicious or as it became in Crook and Grant Counties.

Heppner never did do a satisfactory job of keeping the Monument road in shape. Part of the road was in Grant County which had to intention of providing a road whereon citizens could go to another county for supplies. **Nevertheless Monument wool was hauled to Heppner far into the twentieth century but trade from areas more distance from Heppner decreased after the construction of the Columbia Southern Railway into Shaniko in 1901.** Shaniko expected--and got--the stock shipments from south, but Heppner was in the running for the sheep that ranged in the Blue Mountains and it held them for a while, sharing

with Pendleton. By 1909 it was reported that the storage of wool showed 4 million pounds at Shaniko, 2.5 million at Heppner, 2.5 million at Vale, 1.5 million at Lakeview, 2 million at Pendleton.

As early as 1901 when Malcolm Moody was congressman he had brought a representative of the Department of Interior to eastern Oregon to look over the country for possible irrigation sites and **a meeting was held at Antelope with Gifford Pinchot for a forest survey.** Oregon papers published the names of sheep men who had permits in the forest reserve. George Young and sons of Shaniko once had a permit for 18,000 head. **It was November 1902 before Secretary of Interior Hitchcock decided to start a Blue Mountain Forest Reserve. It was January 1907 before anything important was done.** Then D.B. Sheller came in to run the Heppner Forest Reserve. **That was the end of unrestrained ranging of sheep and cattle,** an important date in the taming of the formerly free Morrow County stockmen.

By February *(1907)*, Sheller announced that everyone must have a permit before cutting wood from the reserve. Imagine that! The stockmen were told to form two committees, one of sheep men and one of cattlemen to work with reserve officials in determining enforcement of grazing rules. It was made clear that the government would make the rules. First there was a limit of 16,000 sheep to any one owner. Division was made between east and west with the Monument road the dividing line. The first thing to be decided was the trails to be used by bands going to the reserve and that was done without too much trouble.

During that summer T.D. Chidsey came as manager of the reserve (soon to be renamed the Umatilla) and he remained for years. *And Ericksen, Forest Inspector from District 6 (Regional Office), previously cited, conducted his field reconnaissance.*

Eightmile farmers tried to promote a railroad from the Columbia River to Parker's mill. *The site which had for years supplied the lumber needs of pioneers in the south county. (This venture mentioned earlier by Langille, apparently never succeeded.)*

A bag limit for game was proclaimed which allowed 50 ducks a week, any number of geese, upland birds, 10 a day, deer five a season and elk one.

The number of sheep was given as 147,884 to the assessor which was probably about half the actual number and the value was $242,414 which was considerably more than the value of the wheat farmers' horses at $88,392.

Wood 16 to 25 cents, steers $4.75, hogs $8.75 and ewes $4.75.

In 1920, Morrow County had 5617 residents, presumably all working at driving teams, herding sheep or following some of the lesser trades. There were 1324 in Heppner, 439 at Ione, 264 at Lexington, 193 at Hardman. The farmers had increased their wheat acreage from 75,721 in 1910 to 102,859 in 1919 and **sheep were still declining in numbers from the 322,650 of 1900 to 209,057 in 1910 to 169,204 in 1920.** Prices were generally good with wheat selling at around $1.10 and wool bringing thirty cents or more.

Specialization came to other fields also. **After the thirties, the number of sheep men in Morrow County gradually declined.** The thirties were dry and **the government, through the Bureau of Land Management and the Forest Service, held that overgrazing was the cause of depleted ranges. Permits were gradually reduced and sheep men of necessity reduced the number of sheep.** This chart shows the history of Morrow County agriculture:

	1890	1900	1910	1920	1930
Cattle	10746	8746	6161	13388	7961
Sheep	169971	322650	209057	169214	193568

	1940	1950	1960	1970
Cattle	10,632	22,195	29,953	27,147
Sheep	110,624	51,397	44,325	10,617

The numbers of cattle and sheep for adults or cattle over six months and ewes of approximately the same age. What is for acres. Most of the figures are for agricultural census years which are for one year before the decennial census of humans. Also it was not (especially in early days) expected that a stockman have a perfect memory or an exact count when talking to an assessor and it is likely that in its heyday Morrow County had around a half million sheep.

Among old sheep men it was the assumption that the way to make a ewe happy and her lamb to grow to saleable weight by mid-July was to run them on a cool mountain where there was frequent water and where some of the fescues grew thick and lush. Shirley Rugg finds that forbs and weeds are better than grass for sheep, having observed that her ewes prefer that fodder. She moves her bands so skillfully over her range that they never follow one another and they arrive at the cutting pen and the weighing shed on a scheduled unhurried and never excited. And they weigh much better than 110 pounds. The forest management people have recently permitted her to run 200 cows along with her sheep and it is the cows that eat the grass; the ewes fatten on dry sunflower leaves.