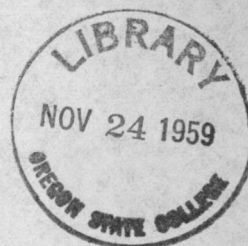


OREGON LAND PLANNING

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A

TERM PAPER

submitted to

PROF. EARL G. MASON

in partial fulfillment of
the requirements for
course No. F 505

May 1940

SCHOOL OF FORESTRY
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CORVALLIS, OREGON

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OREGON LAND PLANNING

Purpose

The object of this paper is to look at the broad aspects of land utilization in Oregon and to suggest some possible solutions for the conditions which we find.

DATA NEEDED

From an analysis of the Oregon State Planning Board in it's report of 1935, we find that 49 per cent of the land area of Oregon is now used primarily for the growing of forests and 42 per cent is used principally for pasture and range, while only 8 per cent is arable land.

From the above analysis it is evident that land use in Oregon falls into three major classifications; timberland and rangeland because of the tremendous areas involved and agricultural or arable lands because of their relatively high value.

To effect any kind of a useful land policy for Oregon it is necessary to have the basic information about the State, its lands and its problems. A. S. Burrier in his outline of the action of the Land Use Problems In Oregon as studied by the Oregon State Planning Board, gives the following as the basic data needed:-

"Physical Data:

1. Reasonable accurate base map showing the locations of water ways, railroads, highways, cities, towns, habitations, schools, power lines, rural industrial plants, dams, reservoirs, irrigation and drainage ditches, and legal subdivision boundary lines.

2. Topographic maps showing elevations, contours, and slope by classes of steepness and roughness.

3. Detailed soil maps showing classifications of the various soils according to their physical and chemical properties.

4. Climatic maps showing from existing data amount of rainfall, length of season and other pertinent data, such as amount of sunlight upon the land.

5. Cover maps showing in reasonable details the present types of cover found upon the land.

6. Maps and tabular material showing ground water, stream flow, reservoir sites, and other similar data indicating available supplies of water for domestic use and irrigation.

7. Maps and tabular material showing crop indices or relative yield features for each principal crop on each soil type.

8. Maps showing areas subject to over-flow and supplementing tabular data showing usual overflow dates, duration of floods, etc.

9. Maps showing areas susceptible of improvement by drainage, and tabular material showing costs and benefits of such drainage.

Economic Data:

1. Status of ownership, including intent.

2. Assessed valuation.

3. The costs of public services, such as roads and schools.

4. Taxation and tax delinquency of land.

5. History of abandonment of land for farm purposes for typical areas.

6. Study of the present and future needs for agricultural lands.

7. The cost of preparing land for generalized and specialized agricultural and forest crops.

8. Rural fire insurance rates and losses.

9. Status of part-time and subsistence farming.

10. Farm cost of production data.
11. The extent and distribution of governmental financial aid to rural families.
12. Mortgage indebtedness covering both amount and delinquency.
13. Markets, transportation facilities etc.
14. Farm business analysis records. "

Benefits of Data Secured

Such information according to Mr. Burrier would be of benefit for and provide the basis for the following:-

"1. Show where the cost of local government may be reduced by eliminating maintenance of schools, roads, and other public services for scattered settlements on submarginal agricultural lands.

2. Provide a sound basis for a program of highway and road development and for extension of facilities such as telephone and electric lines.

3. Indicate the extent and location of areas adapted to more intensive use and therefore offering opportunities for development and the location of new settlers.

4. Protect new settlers and buyers of farms from wasting their savings and efforts on lands unsuited to agricultural production.

5. Show where public relief expenditures may be reduced by zoning out agricultural settlement on submarginal lands where there is no possible hope that settlers can become self-supporting.

6. Provide factual data showing areas wherein rural rehabilitation can be expected to succeed in so far as the land is responsible for successful rehabilitation.

7. Provide a factual foundation for more accurate property assessment and taxation.

8. Provide factual information for an intelligent policy dealing with county, state and other publicly owned lands.

9. Provide factual information which will permit the drawing up of legislation necessary to control unwise and uneconomic sub-division and other land exploitation schemes.

10. Indicate areas where soil and climate conditions are conducive to the development of special enterprises, such as fruit growing, poultry, darying, vegetable production etc. "

Much of this information has already been obtained. There is of course much more that is needed, however enough has been gathered that some applications can be made.

TOOLS FOR ESTABLISHING A LAND USE POLICY

Policy and Administration

To utilize this information a policy forming body should be set-up with representatives from the different land use interest and with a technically trained man in land use administration to act as chairman. In conjunction with the policy forming body a permanent Administrative Body should be set up to advise the policy forming body and for the control and management of the lands. This Administrative Body should be made up of men technically trained in the various phases of land use and related fields so that the problems can be dealt with intelligently and so the policy forming body can be impartially advised.

Land Classification

A suitable land policy for the state operation of lands should be established and a system of scientific land classification should be made. Land use should be regulated by this classification in order that uneconomic use of the land may be avoided.

In the Oregon Land Planning Board a classification of ten types of problem areas was made. Some changes in these problems have occurred since the study. For example since the study the grazing lands of eastern Oregon have come under the influence of the Grazing Service and are being effectively bettered by the Grazing Service and other agencies, mostly Federal. In this paper no such technical classification will be attempted, only broad suggestions for management of timberland, Pacific Coast grazing land and recreational areas will be mentioned.

Land Zoning

After the classification of the lands, legislation should be designed for zoning purposes by the Administrative Body and these land zoning laws pushed through the State Legislature.

Zoning laws should be effective on those land classification areas over which there is little or no controversy and which are accepted to be of a certain type. The more controversial areas could be zoned at a later time when more information becomes available and there is more unanimity of opinion.

Land zoning was first applied to cities, it has since extended to the suburbs of cities, the next logical step is to extend it to rural areas. Zoning has been practiced under the police power, that is, the power of the State or of a governmental unit to regulate private conduct where

necessary to protect the public health, safety, morals or welfare. By decreasing public expenditures and preserving lands from erosion etc., and by preventing the people who would settle on submarginal lands from doing so and becoming public charges, should be ample justification for the exercise of the police power in the zoning of rural areas. Zoning will harmonize the land use and stabilize values.

The object of zoning laws enacted, would be to group the various kinds of activity, and to restrict activity to areas suitable for that particular type of activity or operation. Zoning laws would prohibit the introduction to an area of any further development along a line deemed uneconomical for that zoned area. For example no more agriculturalists would be permitted to settle in a forest land zone. Furthermore any change of ownership where the present owner is indulging in an activity not included in the zone in which he is situated could sell his property but the new owner could not practice any but the accepted activities. Any land reverting to the counties would of course be devoted to the designated purpose.

Land Development

To facilitate and induce the movement of the individuals engaged in the undesired and uneconomical activity from a zoned area, the state should develop areas suitable for the resettlement of these people. For example, the State should develop lands suitable for agricultural pursuits to which submarginal land owners might be induced to migrate. There

is opportunity in Oregon for development of certain areas by irrigation, drainage, etc. for this purpose.

State Cooperation with Federal Conservation Agencies

The State of Oregon should cooperate with other agencies in the development of the land use program. The State can work with such federal agencies as the Forest Service, The Soil Conservation Service, The Grazing Service, The Agricultural Adjustment Act, The Park Service, The Indian Service, The Reclamation Service, The Biological Survey, The Bureau of Fisheries, etc. to the mutual advantage of all. Such cooperation can extend from the dissemination of information and education to actual land management and the blocking of lands for more efficient operation.

State Ownership

Increased interest in State owned and operated forests is evident and is commendable, and the counties where they are unable to manage forests of their own should be encouraged to deed reverted lands to the State for the purpose of establishing forest units. The State is often able to undertake the building and maintaining of forest land, which the narrow tax base makes impossible for the counties to accomplish. Even though in many instances the State would not be able to return an immediate revenue to the counties, much of the county reverted lands are an actual liability to the counties, and should they be deeded to the State, the State would bear the burden of protection etc. It is also

frequently necessary to protect non-productive lands to safeguard more productive areas. In connection with the securing of county lands by the State, more liberal laws should be passed so that clear titles could be obtained easier and at less expense.

For much the same reason that state forests are feasible, grazing districts might be established and managed by the State in cooperation with the Grazing Service.

Some non-productive areas in the future if properly protected and managed will undoubtedly have a high recreational value. Such lands could well be acquired by the State and managed extensively for recreation purposes if intensive management is not yet economically justifiable. Many recreational areas, especially along the coast are somewhat in danger of losing some of their recreational value in the future because of over development by private enterprise, and by other less sustaining uses. The State should acquire these areas now, when in some cases such lands are liabilities to the counties, and protect them from future abuse.

State Cooperation With County and Municipal Ownership

When feasible the State should encourage and aid county and municipal ownership of forest lands for sustained yield practices, watershed protection etc. By the same token recreational areas and perhaps even grazing lands might be efficiently managed by local governmental units.

State Encouragement to Better Utilization and Management of Farm Woodlots and Small Timber Holdings

The State Administrative Body should study the possibilities for farm woodlot and small timber holding cooperatives. It appears that the Oregon farm woodlot owners and small timber owners could by cooperative effort place their collective timberlands on a sustained yield basis and secure the services of capable forest managers to efficiently manage their small holdings. Also such action would increase their bargaining power and thereby increase the value of their holdings and give them more regard for the care of their properties.

If cooperation appears useable the State Administrative Body should prepare bills for legislative action that would aid in the formation of such cooperative enterprise, and perhaps even draft bills for the extension of credit for the initial steps to such management.

Educational Activity of the Administrative Body

To make any kind of a proper land use program effective, education of the public is essential, and a development of a conservation minded public is of great importance.

It is suggested that the Administrative Body among other functions undertake an educational program based on conservation of natural resources and wise land use. Courses of study on conservation problems should be introduced into the Grade Schools and High Schools of the State.

Adult education and awakened public interest would be accomplished by a wide dissemination of literature on this subject, by the further utilization of the State owned broadcasting station of K.O.A.C. at Corvallis, by other radio programs that might be sponsored over other stations of the State, by further utilization of slides and motion pictures, and by lectures, demonstrations, etc.

VERTICLE MOBILITY EFFECTS OF ZONING

In any zoning or resettlement there are some people who will be at a disadvantage by such a move, but by and large most of them will benefit by the change as well as the public as a whole.

Poor managers tend to be found on submarginal lands so that in resettlement more regulation could be expected so that all would tend to maintain themselves above the margin because they are forced to better practices by governmental regulations. In resettling, the conditions would be made as nearly uniform as possible for all individuals, then verticle mobility would take place in accordance with natural laws.

No preference between individuals or groups should be given for opportunities for verticle mobility as we have no measuring stick to determine who or what group would ascend the verticle mobility scale, and thus we must rely on natural development to designate the leaders and those who will profit most by changes of environment.

MAJOR PROBLEMS OF OREGON'S EASTERN SECTION

The following pages will be given to a discussion devoted to suggested aids or remedial action of some of Oregon's major land use problems.

Geographically Oregon is divided into two parts, that part east of the Cascade Mountains and that part west of the Cascade mountains. In the eastern section of Oregon we find the largest per cent of the land devoted to grazing, with some timber and some agricultural lands. In the western section we find the land principally devoted to timber lands, with some grazing and agriculture.

Eastern Section Timberlands

Let us first examine the eastern section or Oregon. Here we find timberland owned mostly by large timber companies or by the National Forests with some Indian Lands also. Timber lands under Federal administration do not lend themselves to management by the State, but it can be assumed that they will be somewhat adequately managed. The management of private timber holdings and state lands etc. will be discussed under timberlands discussion on the westside section.

Eastern Section Grazing Lands

Next we might turn our attention to the eastern Oregon range lands. Since the Taylor Grazing Act went into effect in 1934, the improvement of grazing conditions have been

greatly increased. Programs of the Soil Conservation Service and the Agricultural Adjustment Act have also been instrumental in the improvement of these range lands so that they are becoming increasingly well managed. The State may aid these agencies mainly by cooperating and by facilitating the blocking of lands into more economical units.

Eastern Section Arable Lands

Arable lands of eastern Oregon that have become problem areas are mainly areas where irrigation districts etc. have placed too heavy a burden on the land owners; and where the injudicious use of land for agricultural purposes has taken place and agriculture has been attempted on lands which are unsuited for anything but grazing. Land classification and zoning should do much to keep the uninformed and unsuspecting buyers from wasting their savings and labor on such lands unsuitable for agriculture.

Multiple Use in the Eastern Oregon Section

In the establishment of land zoning in this section it should be remembered that multiple use is often quite feasible here.

Grazing when properly managed, that is, when the area is correctly stocked, proper seasonal use is observed, stock is properly distributed, etc. grazing can often be carried on simultaneously with the major use in forest zones. It has been proven that in the pine lands of this area grazing when properly conducted is not detrimental to forest

reproduction, in fact it is frequently beneficial. Grazing may help in the planting of seed and in other cases where reproduction of timber species is so thick that stagnation is inevitable, heavy grazing has been used to advantage to thin out the forest reproduction.

MAJOR PROBLEMS OF THE WESTERN OREGON SECTION

The State of Oregon's most pressing land problems are on the western side of the Cascade range, and particularly in the coast area.

Better Land Use Predicated On Control Of Fire

Particularly in the coast counties of Oregon, man-caused fires have been one of the major obstacles to good land use. It has been fairly well established that fire when properly used and controlled and when the proper follow-up procedure is used is a very beneficial agent in establishing grazing lands in the coast region. However in many coast counties fire has been used indiscriminately with no follow-up procedure, by grazing interests who believe that fire in any form helps their grazing lands. The results have been a very disastrous deterioration of grazing lands. As firing was illegal no planned or regulated use of fire could be expected and the resulting incendiary fires not only deteriorated the range lands, but effectively stopped the reproduction of forests on much of the cut-over lands suitable only for forest growth and unsuitable for grazing. It has

also been a constant menace to merchantable timber stands.

By zoning and setting up grazing districts, controlled use of fire under strict regulation can be practiced, thus tending to eliminate much of the widespread burning.

Control of fire is essential to proper land use and some suggested fire law enforcement policies and techniques which should interest the Land Use Administrative Body are given as follows:-

1. A more comprehensive and suitable body of fire law should be passed.

2. A certain number of qualified crime detection men should be employed on a year 'round basis, so that the apprehension of fire law violators becomes as nearly inevitable as possible.

3. Wide publicity of the Oregon Land Fire Laws, and the long range efficiency of the law enforcement department should be given publicity.

4. There should be a general educational program on forest, range and recreation conservation.

5. There should be a uniform fire law policy which is strictly adhered to.

6. There should be a training of forest, grazing and recreational officers in the techniques of law enforcement and public relations.

7. A feeling should be created that violations of the fire laws will not go undetected. Prestige should be built

around those responsible for the enforcement of fire laws, such as surrounds such organizations as the F.B.I., G. Men, or Canadian Mounted Police.

8. Every arrest should lead to a conviction, and some sentence or fine however light should be imposed.

9. The conviction should be more important than the penalty.

10. No purchases of supplies or equipment, nor the hiring of any men for fighting a fire should be done in the area in which a man-caused fire is being fought.

11. Breaking of fire laws should be made to bear a moral and social stigma.

Western Oregon Timberlands

Western Oregon is largely a timbered area and the problem of proper management of forest lands is of considerable magnitude. It may be taken for granted that fairly good land use practices will be carried on in the timbered areas administered by the National Forests, at any rate there is little that the State can do in changing land uses of the National Forests areas. The problem as far as the State is concerned is that of stabilizing the forest industries of the State and placing them upon a sustained yield basis; that ample watershed protection may be maintained; that erosion and floods which deplete the amount, fertility and moisture of the soils and damage irrigation projects, silt dams etc. should be prevented; that water available for

irrigation of the arable land shall be retained, and that the protective cover for wildlife, both animal and fish be maintained along with many other desirable economic and sociological features of sustained yield.

Argument for Extension of Low Interest Rate Credit as Inducement to Sustained Yield

Owners of range lands are subsidized by the A.A.A. for improving their ranges on the grounds that a sustained and stabalized livestock industry is a desirable public good and that depleted, eroding ranges are detrimental to the public welfare. The government also subsidizes many other industries that it believes essential to public welfare. At the present time there are bills before Congress to extend farm credits at low rates of interest, also on the grounds of public welfare. Therefore the govenment should be induced to extend credit to timber holders or timber companies that are attempting to place their operations on a sustained yield basis. Certainly the forest areas from which our headwaters spring are as great or greater factors in erosion and flood control, in wildlife and recreation protection, etc. as the range and agricultural lands. Also a stabalized timber industry is almost as important as a *stabalized timber industry?* stabalized livestock industry, especially in a State such as Oregon where nearly one half of the land area is in forests, upon which much of the agricultural and grazing lands are also dependent for protection from floods and erosion.

Arguments for a Penalizing Tax for Liquidation Operations

Extension of low interest bearing credit is only an inducement which should be offered to the forest operator to operate on a sustained yield basis, and probably like the Oregon Reforestation Law yield tax will have little affect toward inducing the timber operator to accept sustained yield and must be augmented by some other factor. Therefore it appears that a reform tax is needed that will penalize the timber operator who is cutting on a liquidation basis, thus inducing a change of operating basis to the desired sustained yield basis aided by low interest rate credit extension.

Justification for a penalizing tax is founded upon the fact that taxation has been used in many instances as a restraining factor or to tax some socially undesirable commodity or activity out of existence. All land should be so managed that an annual tax return can be made to the government and the government should expect such an annual return. Only a sustained yield operation will return an annual tax indefinitely. The government should be justified in collecting a tax from any operator which falls short of this to the amount of the present worth of the taxes that would have accrued to the government under a sustained yield operation to infinity. If such a tax was imposed in most cases the tax for liquidation operations would be so high that the operator would be forced to change to a sustained yield basis.

State Protection Of Sustained Yield Forest Lands

One of the costs hindering the establishment of sustained yield and the growth of forest crops is the cost of protection of these lands from fire and insects.

The various governmental units spend millions of dollars yearly to protect agricultural lands from floods. It appears therefore that there is also justification for the same governmental units to protect the forest operators from fire and insects who are practicing sustained yields or who are growing a forest crop from which governmental units will profit through tax revenues. If the costs of protection were eliminated forest operators would be in much better position to practice sustained yield.

Fire is particularly a public menace and it therefore should have the costs of preventing and controlling paid for from the public coffers. It is also true that the public is responsible for a large per cent of the fires that start and that the forest operators must now pay the costs of protecting their property from fires caused by public negligence and carelessness.

THE WESTERN OREGON CUT-OVER LAND PROBLEM

Not only do we have the problem of unwise use of the timber resources but especially in some western Oregon counties we have the problem of already cut-over lands. Some counties of western Oregon have thousands of acres of cut-over lands the majority of which are reverting or have

reverted to county ownership through tax delinquencies.

These cut-over lands greatly reduce the tax base and jeopardize the financial standings of the counties.

Different Viewpoints on Cut-over Land Uses

The cut-over land areas are subject of strong controversies. The foresters are inclined to take the position that as these lands once grew forests they are only fit for forest growth and would reforest them all. However such a procedure is costly and will certainly bring no immediate returns to the counties.

The grazing interests believe that these lands are admirably suited for grazing and should be utilized for that purpose. However to keep these areas from reverting to brush-land of little or no grazing value, it would be necessary to utilize fire to keep down the brush, thus endangering any forest nearby, decreasing the fertility of the soil and often materially increasing erosion. The use of fire on these lands must be coupled with other rather costly practices.

The county governments are more favorable to grazing than to forestry because it does bring in some much needed revenue. However the counties have sold some of this land several times in hopes of securing a tax revenue, and it has often reverted again to the county, with foreclosure expenses greater than the sale price.

As these areas form a public liability which should be

alleviated the State views these areas as reclamation projects and feels a certain responsibility for them. The broad viewpoint on these cut-over lands is that in all probability many of the cut-over areas if properly managed will be suitable for grazing and should be utilized for the highest use, and ordinarily grazing is a higher use than timber production. However these grazing lands can only be made productive at considerable expense which at present most purchasers or owners are either unwilling or unable to undertake. The State should take equal interest in developing forest and grazing lands in this area.

New Zealand's Experience In Converting cut-over Lands to Grazing Lands

New Zealand with a climate somewhat similar to our coast climate and a situation much the same as ours has had a great deal of experience in converting forest lands to grasslands. They have found that it is necessary to get a hot burn followed by seeding and heavy pasturing to keep down the fern and brush; that adequate and costly firebreaks must be built to control the necessary fire; that the areas must be well fenced so that stock can be closely managed and controlled; that cattle and sheep must both be run to keep the undesirable vegetation in check although the cattle do poorly; that because of the heavy grazing these lands are subject to a fertility problem in a few years and must be fertilized; that introducing legumes helps this fertilization

problem but does not entirely eliminate it; that steep areas must be fenced off and not utilized because of erosion.

They have found in New Zealand that converting forests to grasslands is expensive and not to be lightly undertaken, and that if the most careful management is not applied the areas so converted to grasslands become utterly worthless. On the other hand it has been found that sheep do exceptionally well on some of the cut-over lands of the coast region and the prospects of a sheep industry on the coast is very bright.

Suitable Cut-over Lands That Should Be Converted To Grazing Lands

Areas of suitable topography and that meet the other qualifications for grazing lands on the coast region should be placed in grazing zones as normally grazing is the use higher than forest production. Thus by legalizing grazing and grazing practices, better control can be exercised. For instance the initial burn necessary to convert cut-over lands to grasslands will be recognized and allowed but only under strict supervision so that fires will not spread from the intended areas to be burned, thus eliminating the illegal firing of lands that takes place at present in these areas.

Cut-over Lands That Should Be Reforested

Where topography is steeper and not definitely favorable to grazing the area should be placed in the reforestation zone.

Use of Non-productive Areas

Areas suitable for neither grazing nor productive forests, should be reverted to a forest cover with watershed protection as the main objective. Although there is contention between the forest interests and the grassland interests for these cut-over lands this contention should not exist as both the timber and the grazing interests have more land that is either definitely grazing and agricultural land or definitely forest lands over which there is no dispute than either interest can adequately manage at the present time, and more than they can probably adequately manage for some time to come.

Use of Western Oregon Agricultural Lands

Strictly agricultural interests on the coast region are relatively few and should be limited to areas of unquestioned agricultural type. Most of the western Oregon agricultural lands are in the inland valleys between the Coast and Cascade Ranges.

Even though outlying shoestring ranches etc. are proven to be self-supporting and suitable for agriculture they should be discouraged by zoning laws as increased expenditures for roads, schools and other public service costs make it unreasonable for public treasuries to furnish these services even to farms that are economically sound from the operators standpoint, unless these farms are somewhat grouped. Also outlying farms are detrimental to other resources, create

a greater fire hazard, are harder to control, and are very detrimental to wildlife.

Development of the Recreational Use

Another type of use which has suddenly sprung into prominence is the recreational use. The increase of recreational activity and the building for a recreational industry that has taken place along the coast highway in the last five years is sufficient proof of this new use.

Recreation on the immediate coast line area bids for the dominant use there. The Administrative Body should recognize this land use and regulate this activity in the immediate coast line area and along adjacent recreational areas of tributary streams and rivers. To this end the streams and rivers carrying a heavy recreational fishing load in particular should be guarded by land zoning from other land uses detrimental to fishing streams.

Some of these rivers and streams also have a commercial fishing value and such practices as felling logs and debris in and across streams, building of impassible dams, logging the immediate stream edges so that water temperatures are raised above the limits for fish endurance, excessive erosion caused by overgrazing, poor agricultural methods and poor logging methods should be carefully avoided.

Multiple Use in the Western Oregon Section

In western Oregon actual multiple use of the land, that is, using the same acre for more than one purpose at the same time is not very compatible for such multiple uses as timber, grazing and recreation. However multiple use on the same area will often be made advantageous by dedicating different portions of the area to different uses. Thus in a forest-land zone, recreation might be carried on advantageously by preserving roadside strips and by maintaining certain portions with special scenic or other features that make it of recreational value for recreation.

Grazing and mature timber stands are not compatible, but light use of cut-over lands for grazing though designated as forest land might well be practiced until the forest growth reached a stage which made grazing no longer profitable. Grazing of cut-over lands might be practiced except in areas where grazing actually damages forest reproduction; there of course if the area is designated as forest land all grazing should be eliminated.