



**Report of Grant County  
Long-Range Planning Conference  
1969**

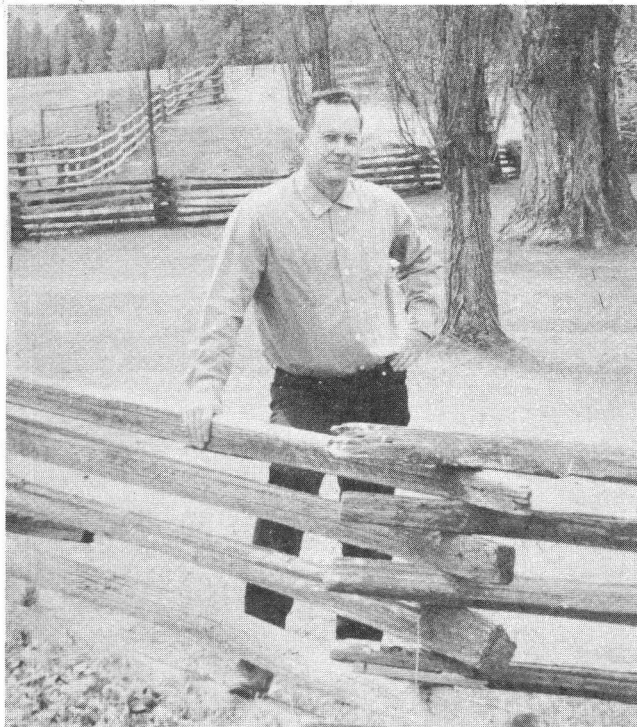
# **Report of Grant County Long-Range Planning Conference**

**1969**

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**ACKNOWLEDGMENTS** Long-range planning conferences are sponsored cooperatively by the Grant County Planning Commission, Oregon State University, and the citizens of Grant County. At 10-year intervals a report is compiled and published with support from local agencies and resource personnel.

## In Memorium



LARRY WILLIAMS

Born  
1918

Died  
1969

This report is dedicated to Mr. Larry Williams in recognition of his untiring efforts to the economic development of Grant County.

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Esma Reynolds, Seneca

Betty Elder, Extension Service  
Replaced by  
Tonia Tucker, Extension Service  
Sandria Grant, Extension Service

# Report of Grant County Long-Range Planning Conference

## Foreword

The Grant County Planning Commission, in behalf of the citizens of Grant County and in cooperation with the Grant County Extension office and the Oregon State University Extension Service, have made planning for the future of the county possible. Planning conferences are assisted and encouraged by the O.S.U. Extension Service at 10-year intervals in order to aid both human and natural resource development prospects in the county. The planning conference committees have considered resources, identified problems and opportunities, and have made recommendations for some long-range steps toward improvement of Grant County as a place to live, work, and enjoy life.

This booklet presents a cross-section of various aspects of Grant County with suggestions or recommendations for improvement that will become action projects for many of the committees and organizations

dedicated to the planning and development necessary to the orderly and maximum use of resources, including the resources of our people. The recommendations are based on the best judgments of lay committees and professional resource personnel.

This document, of necessity, must be brief. The complete background information and more statistical information from each area of study is available at the Grant County Extension office. Background includes a summary of resource information in the publication entitled "Resource Analysis—Grant County." In addition, each committee has on file a detailed resource analysis within its area of consideration.

It is expected that action emanating from this study will result in a new thrust toward the human and natural resource development of Grant County.

## Summary

Grant County is heavily dependent economically upon forestry and agriculture. Recreation and tourism are offering potential opportunities for development of another industry based on natural resources. All of these industries are dominated by a dependence upon federal land and the policies of the federal government with respect to the use of these lands.

In 1964 the total county income was approximately \$21 million; of this total almost \$16 million, or 75 percent, came from forests or ranches with federal grazing permits. A particular point of interest is the relationship between these industries and other sectors of the Grant County economy.<sup>†</sup>

Lumber produced about \$13.9 million in gross income and spent about 24 cents of each dollar within the local area for various inputs, labor, gas, etc. This total amounted to \$3.3 million into the other businesses and households in Grant County. The agricultural industry was broken into two sectors, those holding federal grazing permits and those without permits. The ranchers holding permits had a total income of \$3.7 million; the remaining portion of agriculture had a gross income of \$1.1 million. Both sectors of agricul-

ture spent more of each dollar earned in the local area than did forestry, 48 cents to 49 cents per dollar, respectively. However, the total income is lower in agriculture than in forestry, with agriculture supplying \$2.3 million of the county economy. Federal lands directly or indirectly contribute \$5.1 million income to all sectors of the Grant County economy, or 57 percent of local business and wages. This does not include the possible expenditures of recreationists or tourists drawn to utilize the federal land.

Possibilities relating to recreation have also been explored for alternative economic development of private lands. It is difficult to assess the long-range importance of recreational income because of its seasonality, the recreationist's attitude about such things as weather and transportation, and the availability of water impoundments and game.

Based on the above observations and the studies of local people, the following are recommendations to enhance the social and economic opportunities of Grant County:

1. Basic research is needed in timber management to maintain or increase the level of production and to improve the efficiency of timber utilization.
2. Full use and development of the timber resources will require a variety of outlets so that varied forest products can be processed most efficiently for that use for which they are best

<sup>†</sup>A recent study on Grant County is most useful in analyzing these economic relationships: D. M. Bromley, G. E. Blanch, and H. H. Stovener. **Effects of Selected Changes in Federal Land Use on a Rural Economy.** Oregon State University, Agricultural Experiment Station Bulletin 604, March 1968.

- suiting and for the highest value. Opportunities for secondary timber manufacture based on wood waste material, lodgepole pine, and small trees are worthy of study.
3. The county's water supply needs to be conserved and stabilized through flood control, watershed improvement, and increased storage facilities. Water should be made available to all irrigable lands and to lands now under cultivation where the present water supply is inadequate and where water can be provided on an economic basis. Additional water facilities are needed to serve ranches in the grazing areas; water underground recharge needs study.
  4. Improvement of carrying capacity of rangelands is needed for wildlife and domestic livestock, as is improved ranch management.
  5. The growth of the agricultural base could be obtained by more intensive use of existing agricultural lands, by additional water storage, by more efficient use of water, and by better land management. Orchard development appears to have a tremendous potential in the Kimberly and Monument areas and needs further study.
  6. The establishment of a group marketing, feeding, and genetic testing programs to increase the alternatives open for sale of Grant County cattle would increase the income of producers.
  7. Mineral development is considered unlikely at present price and freight rate levels.
  8. Provisions of additional operating capital for intensification of farming and for range and timber stand improvement is needed. Both private and public sources should be considered and encouraged.
  9. Increase in manufacturing other than lumber products and food and kindred products is unlikely because of the distance from markets.
  10. Educational opportunities are limited because of distances between home and school, variable curriculum opportunities, lack of adult education courses, and incomplete use of informal education channels.
  11. Human resource development is needed in the county. Youth find few, if any, employment opportunities. Counseling services as well as health facilities exist, but personnel is on a decline. Cultural and senior-citizen programs need to be developed as well as seasonal job opportunities for young people. The home extension program does offer informative teachings to county women.
  12. Recreational and tourist use of the public lands in the county is an important development opportunity and many private lands also offer opportunities for recreational development. The development of public and private recreation needs coordination to insure a complementary rather than a competitive situation.
  13. Improvement in public roads—state highways, county roads, Forest Service roads and private roads—is necessary. These improvements are necessary for the further development of all of the county's basic industries: timber, recreation, and agriculture.
  14. There is a need for development planning, establishment of zoning regulations, building, water, and sanitation codes.
  15. The economy of Grant County is entirely dependent on the coordinated development of all of the county's resources. Any one resource cannot be considered alone in planning for comprehensive economic development in the county.



# Introduction

Grant County, named after General Ulysses S. Grant, was established on October 14, 1864, from Wasco and Umatilla counties.

The gold rush began in 1862 and played an important role in the development of Grant County. The early homesteads, cattle industry, and small private sawmills also contributed to the progress, growth, and formation of the county.

County seat: Canyon City  
 Area of county: 4,533 square miles  
 2,899,840 acres  
 Population: 7,550  
 Elevations: 1,830 to 9,052 feet  
 " Canyon City: 3,194 feet

General land prices in area:

Grain land .....	\$ 75 to \$250/acre
Grazing land .....	5 to 50/acre
Meadow land .....	100 to 200/acre
Irrigated land .....	300 to 600/acre
Cattle ranches .....	300 to 500/acre

Assessed value for properties:

Appraised by County assessor .....	\$14,295,090
Tax commission .....	886,601
Total assessed .....	15,181,691
Value of total levies and assets .....	1,156,027

Average temperature:	Summer: 66.5° Winter: 35.8°
Precipitation:	14.74 inches (1968)
Largest city:	John Day (population: 1,616)
Representation in state government:	Senator (1) Representative (1)
Climate:	Semi-arid intermountain area with cold winters and warm summers
Topography:	Gently rolling hills to severely dissected land along the John Day River
Principal industries:	Livestock Lumbering Mining

Points of interest—Fossil beds; Picture Gorge; Joaquin House and Museum; Strawberry Mountain recreation area; Gold Ore dredge piles; John Day Valley; game refuge; City of Granite; City of Greenhorn; Lake Creek recreation area.

Source: County Extension annual reports and **Oregon Blue Book, 1965.**

# General Description

Grant County encompasses an area of 2,899,840 acres, which is 4.7 percent of the total area of Oregon and ranks seventh in size among the counties of Oregon.

The county is situated at the southern end of the Blue Mountains and encompasses practically the entire watershed of the John Day River. Most of the eastern boundary follows the crest of the Blue Mountains, which are the origin of the John Day River.

The climate of the area fluctuates from mild to extreme with an average summer temperature of 66 degrees and an average winter temperature of 36 degrees.

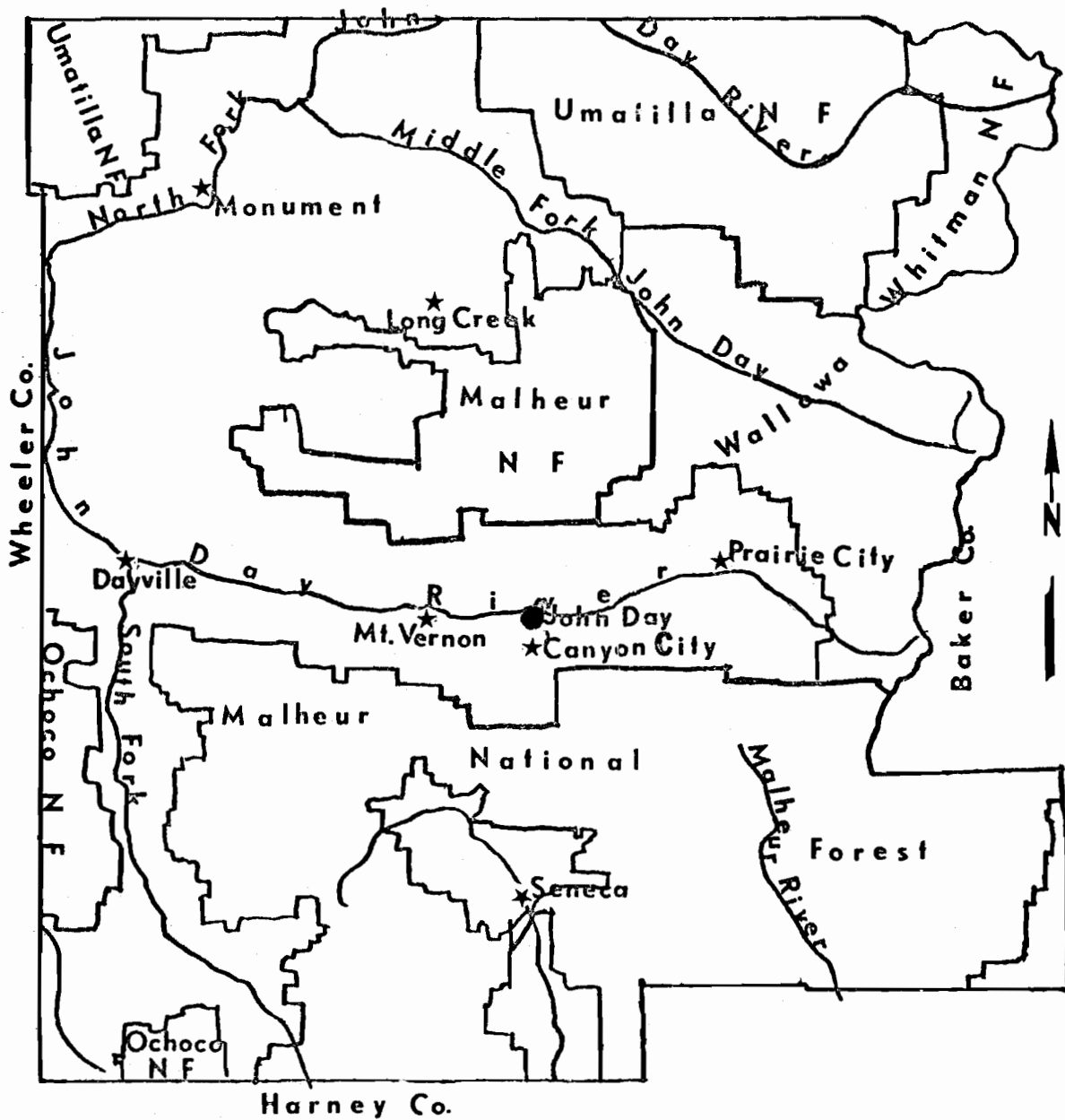
Grant County is located in the north-central part of Oregon. It is bounded on the east by Baker, Union, and Malheur counties; on the south by Harney; on the west by Wheeler and Crook; and on the north by Mor-

row and Umatilla counties. The county has a total area of 2.9 million acres, with 79 percent of this area being in the John Day River Basin. It is approximately 65 miles wide from east to west and 75 miles long from north to south.

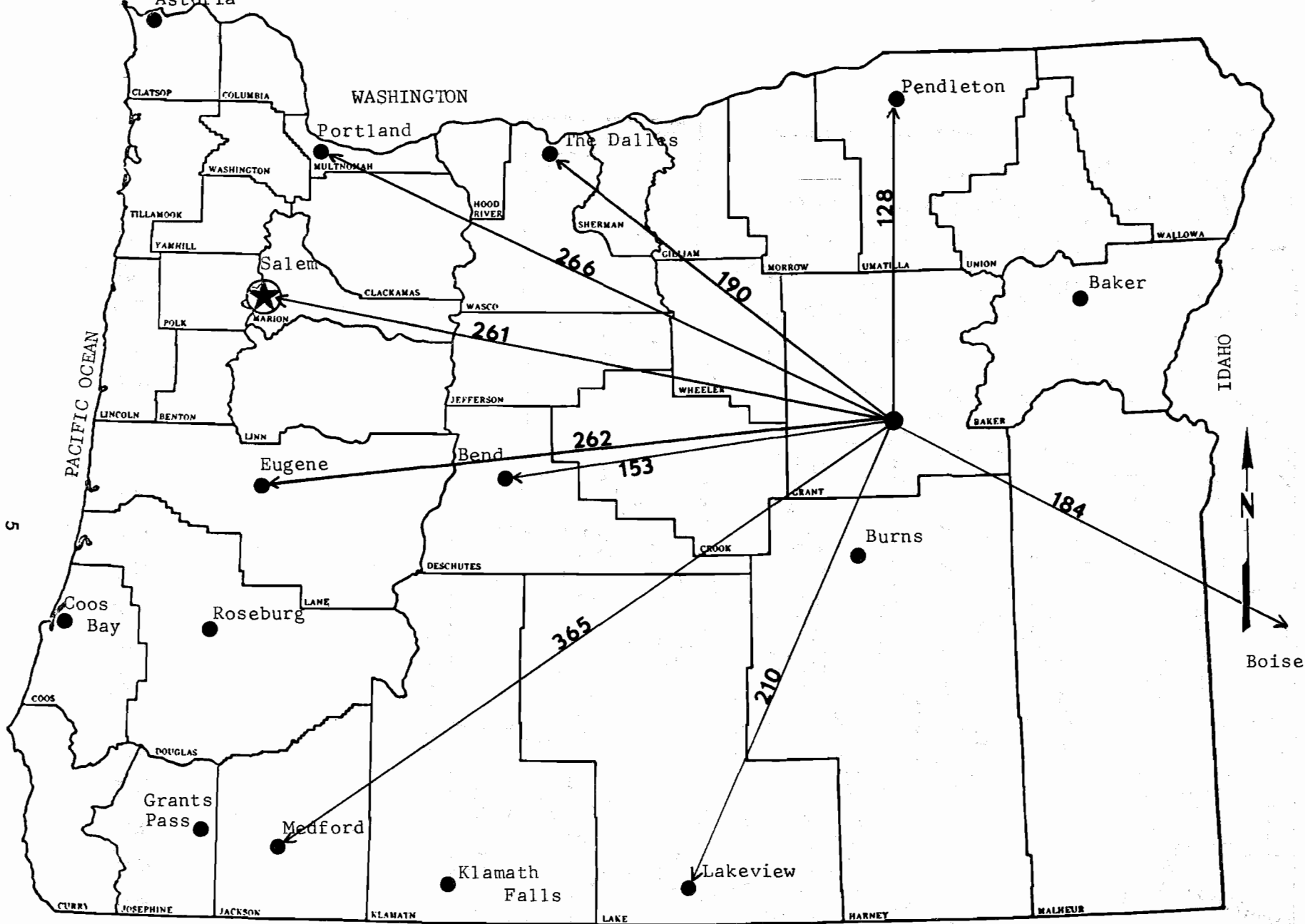
## Mileage Chart

From	To	Distance (miles)
John Day (Grant County)	Boise, Idaho .....	184
	Portland, Oregon .....	266
	Pendleton, Oregon .....	128
	Prineville, Oregon .....	117
	Salem, Oregon .....	261

Source: Oregon State Highway Department



# GRANT COUNTY, OREGON



LOCATION MAP -- GRANT COUNTY

# Land Use Report

Lumbering, agriculture, mining, and recreation are the major landuses in Grant County. Intensified agriculture is found in the valleys, especially along the John Day River and its tributaries. The major method of irrigation is by flood irrigation. There is very little dryland farming. The uplands are forested and are utilized for summer grazing as well as timber production. Recreational opportunities are available county-wide. Examples of such opportunities are hunting, fishing, and geology.

## PROBLEMS

**Irrigation on farmland:** This land is used to produce winter forage for livestock. Production is seriously hampered by uncertain water supply and overuse of water by the flood method of irrigation.

**Dryland farming area:** Only a small percentage of land is in this category. If water supply were available some of this land could be irrigated.

**Grazing:** A major portion of the private land area is classified as grazing land; however, many additional acres within the national forest hold the key to a successful grazing program. Most of the grazing land is in need of rehabilitation.

**Zoning:** The towns are expanding outward onto the farmlands and flood plains of the rivers. The forests are multipurpose, with timberland, grazing, mining operations, recreational sites and other activities in close proximity to one another.

## RECOMMENDATIONS

The method of irrigation should be changed to one that conserves the water supply.

Water storage would make more certain a year-long water supply for presently irrigated lands and would provide water to irrigate some land that is presently in dryland farming.

Range rehabilitation by thinning in the forests, spraying of sagebrush, juniper eradication, and reseeding of certain lands would provide twice the grazing capacity at present.

Land-use planning and zoning is needed to stabilize the land use of the county.

# Industry Report

## Timber

Grant County covers 2,899,840 acres; 56 percent, or 1,624,533 acres, of the land area of the county is in commercial timber production. Ponderosa pine occupies 55 percent of the commercial timber area. During the last decade most of the old growth pine has been removed. The emphasis has now changed, and presently cutting is about 50 percent pine and 50 percent assorted species. Associated species include Douglas-fir, Engelmann spruce, lodgepole pine, western larch, and western white pine. This has resulted in the liquidation of seven pine mills, but the total production has been absorbed by the five existing mills.

Much of the cutover land has been restocked with trees that are now up to 11 inches across. Since much of this new growth is overstocked, growth is well below the maximum attainable. Disease and pests are more predominant in these overstocked areas.

In 1958 there were 12 sawmills in the region, and in 1969 there were 5 sawmills and 1 planer mill. The trend is to larger mills that can perform a variety of operations for better utilization of logs. Liquidation and expansion of the mills in Grant County were due to changes in available timber supply, modern manufacturing, new distribution methods, and acceptance of associated species as a marketable product.

### PROBLEMS

**Public timber harvest:** In 1953-58 less than 42 percent of the harvested timber was from public land. In 1968 more than 75 percent of the timber harvest was from public land.

**Outside timber buyers:** Outside buyers regularly purchase timber within Grant County, bring in their own crews, and process the logs outside the county. Such practices detract from the county's timber and mill economy.

**Overcut:** An overcut of ponderosa pine in the last 15 years has led to less marketable pine and a relative increase in the amount of associated species.

**Inefficient utilization:** Much of our timber is wasted when all slash, wood trimmings, chips, and sawdust are disposed of by burning.

**Overstocking areas:** The forest areas of the county are overstocked. This condition increases snow evaporation, presents grazing problems, and hinders forest fire prevention.

### RECOMMENDATIONS

The growth rate on both public and private lands should be increased to improve the quantity and quality of timber available by thinning overstocked areas and by fertilization where applicable.

Grant County should aim toward more diversified production, better utilization of raw material, and the improvement of roads and transportation facilities. The efficiency of timber utilization in existing or new mills should be increased to maintain employment and improve the ability to compete with other areas. The diversification of products should be emphasized.

The accessibility of timber in areas that are undeveloped should be implemented, as well as methods of logging needed to harvest steep slopes and other restrictive areas.

Research in marketing and utilization of timber from the associated species should be encouraged and assisted.

The possibilities of establishing one or more plants to utilize wood that is currently wasted should be considered.

Develop more efficient means to thin timber. Study the relationship of timber management practices to other resources.

Coordinate timber management with the production of livestock, wildlife, watershed management, and the use of the land for recreation.

Investigate more efficient forest and range fire control and prevention.





A stagnated timber thicket before thinning: 2800 stems per acre, 192 pounds of grass, 2 pounds bitterbrush



Same area 5 years after thinning: 125 trees per acre (5 times the annual tree production); 550 pounds grass, 50 pounds bitterbrush



Thicket with crooked trees



Thicket in the background, grass and trees in the foreground

# Agriculture and Range Report

The population of the Pacific Northwest is expected to increase 13 percent more than the expected increase for the United States. The population explosion of the area will cause an increased demand for food and recreation, both important to Grant County's economy. Increased demand for livestock products will put more emphasis on livestock production in the county. Currently Grant County has about 450,000 AUM's (animal-unit-month, the amount of forage needed to feed one mature cow for one month) of forage being produced. Improvement of range resources could result in an increase of approximately 700,000 AUM's of forage. The cost of improvement is estimated at \$36 million, but annual gross income from the forage would be \$4.4 million, and there would be other substantial benefits.

The present depleted state of the range is the result of a long history of overuse which started in 1864, with the passage of the Homestead acts, other land dispersal methods, and the beginning of the livestock industry in Eastern Oregon. Large herds of cattle, sheep, and wild horses—far exceeding the proper carrying capacity of the range—were grazed on much of the land in Grant County. To help alleviate the situation, groups of ranchers rounded up and drove the large herds of wild horses to market in 1904. The formation of the United States Forest Service and the Taylor Grazing Act brought about the first regulation of the numbers of animals allowed on public ranges. Most of these efforts were limited because of a large buildup of big game in the 1930's, which further depleted the range.

Overgrazing destroyed the grass cover, which in turn left an opening for tree thickets, juniper, and sagebrush invasion. As the competitive vegetation increased in size, more and more of the existing forage was crowded out. These same areas are now showing widespread erosion resulting from the removal of the grass.

## PROBLEMS

**Rangeland improvement:** All range improvement is very costly. Brushland and grassland improvements are least expensive at \$4 to \$20 per acre respectively, while timber and juniper lands cost \$18 or more per acre to improve.

**Weed control:** Grant County has a weed-control district which enforces noxious weed control within the county. Medusa head rye, an annual grass-weed, is rapidly invading ranges in poor condition. Medusa head rye is not a designated noxious weed; therefore controls cannot be enforced.

**Range-management practices:** Past range-management practices have led to poor distribution of cattle over much of the rangeland of the county.

**Game management:** Deer and elk have contributed to the depletion of grass on big game wintering areas.

**Range improvement:** When improvements or alterations are made on any range, they not only affect the forage, but the balance of all the resources is changed.

## RECOMMENDATIONS

Since grassland and brushland return the most per dollar invested, they should have top priority for improvement. Timberland has many added benefits besides forage, so it too is profitable. Juniper areas are badly eroded and returns are very poor; therefore these areas should have last priority for improvement.

The weed-control district should be continued to control Grant County's noxious weeds. A special program to control Medusa head rye is needed to check the invasion of this grass-weed.

Improved distribution of cattle can usually be accomplished by fencing, developing water, salting, riding, and using different classes of livestock within a range.

Management of wildlife numbers in relation to the amount of forage is important now and will become more so as range improvements are made.

Interagency and rancher-agency cooperation is necessary for maximum use of and improvements of the resources.

**Research** is needed to find:

The interrelationship of resources to arrive at total cost benefit ratios; more efficient and less expensive methods of juniper removal, timber thinning, slash disposal, and Medusa head rye control; total benefits to society from watershed improvement; and what effects range improvements would have on the economic and social values to the county.



**TABLE 1.**  
**TOTALS FOR THE COUNTY—RANGE PRODUCTION AND POTENTIAL**  
**BY VEGETATIVE TYPES**

Vegetative type	Present Production in AUM's*	Potential Production in AUM's*	Possible Increase in AUM's*	Cost of Improvements*	Gross yearly return from added AUM's*
Grass lands .....	112,481	310,225	197,744	\$ 613,781	\$1,186,464
Brush lands .....	67,970	272,394	204,424	1,363,823	1,226,544
Timbered lands ..	187,597	373,169	185,572	29,960,777	1,113,432
Juniper lands ....	49,655	198,519	148,864	4,112,317	893,184
<b>TOTALS .....</b>	<b>417,703</b>	<b>1,154,307</b>	<b>736,604</b>	<b>\$36,050,698</b>	<b>\$4,419,624</b>

\*This is a summary of range vegetative types and corresponding production, expressed as animal unit months of feed.

The present and potential production and the increases needed to bring production to full potential are shown. The corresponding costs for improvements and the gross income return to be expected from improvements are also shown.



A good timber and forage picture



Big Ponderosa trees and grass

# Water Committee Report

Stream flow records show a picture of high spring flows and low summer flows which present problems at both times. The steepness of some of the country and the lack of vegetative cover on other parts are causes of the rapid spring runoff. This rapid runoff leaves little water for summer irrigation, recreation, and other water needs.

Impoundments to store the excess water of the spring flow are needed in order to level off the two extreme flows. If the impoundments were high enough they would lend themselves quite well to more efficient irrigation methods and other water uses. One problem of storage at high elevations is the lack of large storage reservoir sites.

Watershed conditions vary, but much improvement can be made with brush, timber thinning, and juniper control followed by grass reseeding to stabilize the soil. The higher areas have about 750,000 acres that could be improved by thinning the timber stands and thus provide a more even runoff.

## PROBLEMS

**Irrigation diversions:** With few exceptions, irrigation diversions are bulldozed up each year from gravel in the river beds. These dams stop the fish passage, create an unstable channel, and create dry areas below each diversion.

**Irrigation canals:** Generally, irrigation canals need renovation. Water leakage and resultant wet areas are predominant. Water users toward the end of the ditches do not have enough water, while those at the head of the ditches tend to overirrigate. Overirrigation reduces crop yields and wastes urgently needed water.

**Dense timber stands:** The dense stand of timber holds much of the snowfall up in the trees and prevents it from reaching the ground (evaporation losses).

**Sheet erosion:** Sheet erosion is a serious problem, especially on areas where cover is inadequate. Gully erosion is a problem on these same areas.

**Erodible sterile soils:** The John Day Formation has some unstable areas of soils over serpentine. These areas have very erodible soils and when improperly used by livestock and logging can be extremely detrimental.

**Community water supplies:** Some community water supplies have questionable health standards. Domestic water is supplied by shallow wells and springs.

## RECOMMENDATIONS

Permanent concrete diversion structures with an overflow and a fish bypass like that of the Blue Mountain Ditch are needed.

A well-designed sprinkler system would alleviate most of the problems caused by the present use of flood irrigation. The lining of present ditches would prevent leakage, and the leveling of flood-irrigated fields would prevent some of the overirrigation.

Timber thinning would increase the growth rate, provide more forage, and increase water-yield capabilities.

Cover improvement will provide additional forage as well as improve the watershed. In some areas only reseeding is needed, while in others brush and juniper removal need to come before reseeding.

Land-use planning is especially necessary on these unstable areas. Some use may be possible if precautionary measures are taken.

Unincorporated towns should consider incorporating or forming a water district, and rural homeowners should test their water supply for bacteriological contamination.



# Recreation and Tourism Report

Grant County offers a wide variety of recreational opportunities with its diverse landscape and geology. Because most of the land (65 percent) is publicly owned, it is readily available to the tourist. Most of these lands are forested and contain rivers, streams, lakes, semiprecious stones, and an abundance of deer and elk.

At the present time recreational use of the county is not sufficient to contribute much to the economy. However, some potential exists, and with development the county could become an important recreational and tourist area.

The county is within 250 miles of population centers in Oregon and Idaho. With present recreational trends, these will become excellent sources of tourists.

"A Crossroads of Geology" best describes the ancient history of the area. The fossil beds near Dayville are a main tourist attraction and have recently been declared a national landmark. The county also contains a "sunken mountain" and several extinct volcanoes.

Recreation and tourism also depend on the tourist finding a means of travel and lodging within the county. Grant County is served by two state highways, 26 and 395, which cross through the heart of the county. It also has 13 motels, many camping areas, and rest areas.

## PROBLEMS

Overlook parking areas and foot trails have been established in some of the fossil bed sites, but an interpretive program for scientific resources has not been developed.

**Rockhounds and geologists:** Grant County has materials of interest to rockhounds and geologists. At the present time there is little information regarding locations of these deposits of agates, quartz, petrified wood, and other semiprecious stones.

**Hunting:** Hunting in Grant County is some of the finest in Eastern Oregon. It is presently the greatest single recreational attraction in the county; however, more could be done to attract hunters.

**History:** The county is blessed with a rich history stemming from the gold boom in 1862. There are the ghost towns of Greenhorn, Granite, and Susanville. Old gold mines are everywhere. The old Dalles military road crosses through the county.

**Water sports:** Water sports are practically nonexistent except for 700 miles of fishable streams. The few lakes are too small for boating or water skiing. Grant County has sufficient water supplies to support several reservoirs.

**Wilderness areas:** The Strawberry Mountain wilderness area lies within Grant County. The area has some developed trails. Some areas next to the wilderness area have poor access.

## RECOMMENDATIONS

A need exists for more public facilities and access and for informative signs, etc., explaining the geological formations.

The John Day Fossil Beds are of national significance and should come under the management of the National Park Service as a National Monument with full interpretive programs and services.

Brouchures should be published showing information regarding types and locations of material of interest to rockhounds and geologists. Signs and direction finders near the sites and other points of interest should be erected.

By advertising, the area can be made more attractive to hunters. Ranchers should be encouraged to open their ranches to these hunters and even provide line-in hunter services.

The development of a ghost town and the reopening of one of the readily accessible gold mines should be considered.

Explanatory signs or monuments should be constructed along the old military road to give the sightseer an opportunity to become acquainted with the county's history.

Hall Hill and Monument Dam sites should be developed and the shorelines zoned to a depth of 300 feet as recreation areas. Development of the Canyon Meadows Dam would provide a summer-long reservoir. More fishing activities should be encouraged as well as properly planned recreational home sites and other related recreational facilities.

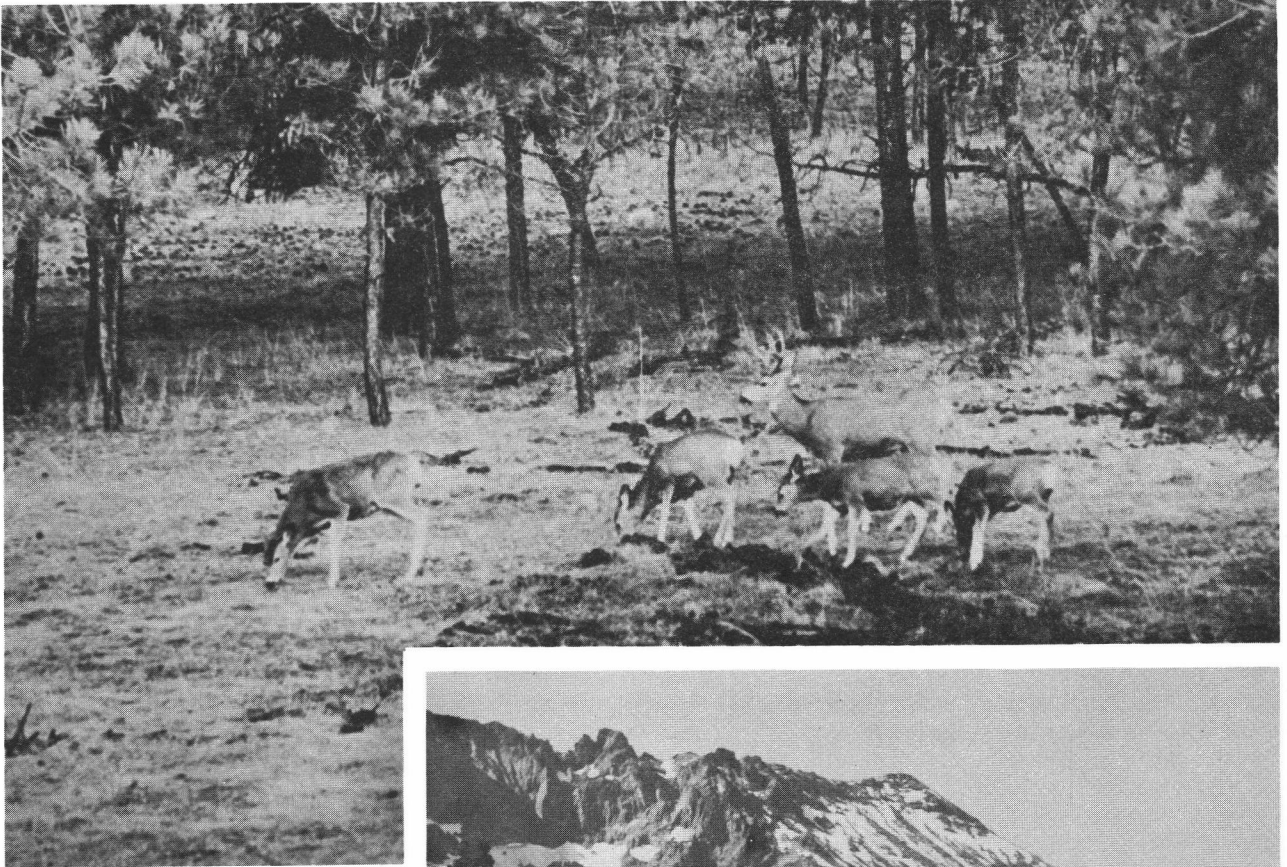
The Strawberry Mountain wilderness area should be expanded to include these outside areas where there are poor, if any, roads. The trails within the wilderness area should be expanded and improved, and directional signs to the wilderness area constructed. The improved area should be well advertised.

**Recreational dollar:** The recreational dollar spent per day in Grant County is below average, probably because the visitor can find no place to spend his time and money.

**Tourist opportunities:** A larger, wealthier public will demand and pay for more recreational and tourist opportunities. How can this attention be focused on Grant County?

An all-night service station, a late-hour restaurant, and evening shopping facilities are needed. The possibilities of a convention-type resort should be explored.

A tourist center and attractive, informative signs and car pull-offs at strategic points should be established. An advertising campaign should stress the scenic and recreational opportunities in the county.



Deer abound in the area, with excellent hunting to be found in Grant County.



Recreation—Strawberry Lake basin and mountain range

# Minerals and Manufacturing Report

There is a wide variety of minerals in the county, but since the deposits are not large and generally low grade the chances of development are slim. These deposits include gold, silver, quicksilver, uranium, antimony, chromium, cobalt, copper, and nickel. Asbestos, diatomite and welded tuff are also found in some quantity. Several mines have been active in the past decade, but at present only one small gold mine is being worked.

Manufacturing is generally orientated to agriculture and timber; others employ less than 1 percent of the labor force. No expansion is forecast in the near future.

## Education Committee Report

Grant County's 6 school districts serve 1,791 students, taught by 115 teachers and administrators in 11 buildings. Distances between homes and schools cause concern throughout the county.

Indications are that nearly 25 percent of the children enrolled in the county's schools have serious reading problems. Those most capable of learning by standard methods do not remain in the county after graduation from high school, partly because of the lack of economic opportunity.

Teacher turnover rates (some years as high as 47 percent), variable curriculum offerings, and no public kindergartens are other factors to be considered in evaluating the county school system. Adult education and graduate courses are limited because of self-supporting requirements. Informal education channels are not fully utilized.

School facilities are commonly used as community activity centers, and their organized sports programs are a basis for the small community's sense of identity and strong local pride.

The Intermediate Education District Board has been the major source of communication and cooperation between the 6 school districts, the school administrators, personnel, and students.

### PROBLEMS

**Enrollment:** Four of the county's school districts enroll less than 50 students each. These high schools, widely separated by distance, have faculties of four to six teachers each.

**Curricula:** With no study of curricula available, it can be said that course offerings are limited in small schools; i.e., teachers must teach outside their major field, equipment is limited by lack of funds, and vocational courses are limited, as are courses geared to Grant County's environment.

**Teacher recruitment:** The high rate of teacher turnover and the recruitment of quality teachers is a problem.

**Kindergartens:** Until the legislature make changes in school financing, public kindergartens are unlikely in the county. Existing private kindergartens operate at tuition costs of \$10 to \$15 a month. These costs eliminate up to 50 percent of the county's children—often the ones who could benefit most from kindergartens.

### RECOMMENDATIONS

Extensive studies need to be made of school-district unification proposals to determine the optimum economic and qualitative organization.

Until decisions for unification are made, cooperation between districts is needed in sharing specialized teachers and equipment, in setting up conservation tours and camps, and in fully utilizing local industries and resource personnel in classroom experiences.

The advantages of living in Grant County need full publicity to prospective teachers.

A concerted effort should be made to develop mutual good will and respect between educators and the communities.

Combining into larger districts may provide a climate for the personal professional development of teachers that would find teachers remaining longer within a district.

The value of kindergartens should continue to be made known to the community, and every effort should be made to make kindergartens a part of the public school system. Until that time, private kindergartens should receive strong community support.

**Adult education:** Individuals responsible for the beginnings of adult education in the county are to be commended. Responsibilities for initiating programs of adult basic, vocational, lower division and graduate areas have not been clearly defined in the county, since the area is geographically separated from existing community, private, or state colleges.

**Educational television:** Educational television is not available because of heavy expense involved in long-distance transmission facilities and/or videotape and related resources for schools.

**Commercial television:** Commercial T.V. originating in Boise, Idaho, does not fully meet the needs of the county because the stations are in a different time zone so that programs such as network news are aired at 4 p.m.; and coverage of the political and legislative problems of Oregon is extremely limited.

**Public library:** The county's public library fills an important informal educational need. It rates third highest in Oregon in the ratio of money allocated according to population. However, this well-facilitated and well-operated service is limited in services to outlying areas, for the bookmobile visits schools only, because of past lack of interest in community visits. The library is operated by one librarian, an assistant, a clerk, and a five-man board of directors.

**Leadership development:** Home Extension, church and related ecumenical groups, and youth groups are searching for ways to educate their own members in leadership development and informal education.

**Advisory boards:** The chief source of communication and cooperation between districts and the IED board could be lost with the proposed changes in the state IED organization.

**School lunch programs:** School lunch programs operate in six of the county's eleven school buildings, with a hot soup program in one other.

After the responsibility for initiating the various types of continuing education is accepted by appropriate agencies, the lines of communication between administrators and potential students need strengthening so that course offerings more closely meet the real desires and needs of students.

The concept that all continuing education be self-supporting in all areas of the state needs revision if the state is to discharge its obligation to wide areas of eastern Oregon.

IED and educational television sources have discussed costs and possibilities for use but cannot consider services until practical transmission facility cost is financed.

A group of volunteers is needed to publicize library offerings as a means of extending services. In view of the evidence that Grant County children are faced with reading problems, more effort needs to be made to encourage children to use the library or the bookmobile.

Leadership development and informal education within these groups would further our grass-roots education. Communication between these groups could provide better educational opportunities in the development of leadership.

Establishment of an advisory board to seek out problems of county districts and to provide communication between IED area representatives, school board members, faculties, and the public is needed. Responsibility for the establishment of the board could come through the IED board or from the county court.

#### **Suggested Changes**

Until such decisions for unification are made, cooperation between districts is needed in sharing specialized teachers (music, speech correction, driver's education, language, counseling, vocational, and others) and equipment (driver's training, language laboratories, video tape recorders, teaching machines, and vocational equipment) in setting up conservation tours and camps and fully utilizing local industries and resource personnel in classroom experiences.

Hot lunch programs should be extended to all schools where the number of students eating at school is sufficient to make such programs economically feasible. Communication and cooperation between the county's school lunch personnel are needed to provide guidelines in balanced meal planning, bulk buying, and other facets of efficient lunchroom management to achieve the optimum quality meals within budgetary limitations.

# Public Utilities Report

## WATER

Springs are the predominant source of water for human consumption in the mountains, and shallow wells are the major source in the larger river valleys. The supply of water is generally adequate except during the late summer and early fall months, when shortages occur in many locations. These shortages are caused by inadequate storage and distribution facilities, by an insufficient water supply at the source, or by a combination of both. In many cases these shortages could be alleviated by enlarging the facilities and developing new sources of water. Ground water or springs seem to be available for development of all cities having shortages.

In some more densely settled areas, shallow wells are frequently contaminated bacterially by irrigation seepage and septic tank effluents. In these situations deep wells or pure springs should be developed and community systems established.

Water used for municipal purposes is generally of good quality and in many cases does not receive any treatment. Several towns use chlorination only.

Most of the communities are able to solve their water shortage problems or are at least aware of them and have plans for solving them. No significant increase in the quantity of water for human consumption is needed, and any new sources of water will be developed mainly to alleviate existing water shortages and quality problems.

## SEWAGE

In 1960, two communities, John Day and Prairie City, had sewer systems with secondary treatment. The Oregon State Sanitary Authority has made recommendations of sewer extension with replacements or improvements, new treatment plants, or connection to another sewer system or treatment plant for Bates, Canyon City, Long Creek, Seneca, and Mt. Vernon. If these proposed sewerage projects are undertaken and completed, both the existing and foreseeable future sanitary needs within the county will have been satisfied. A comprehensive study to determine sewage and water needs is underway.

## POWER

The California Pacific Utilities Company and REA serve all communities within the county. There are problems relative to power supply, including transmission affecting isolated communities. These problems are the investment it takes to build these lines and maintain them, mostly because of the distance of transmission and the terrain over which the lines must travel. The region is adequately served in terms of both existing and future needs.

## TELEPHONE SERVICE

Two telephone companies, Pacific Northwest Bell and Oregon Telephone Company, provide service throughout the county. The nature and extent of telephone service provided is adequate for both present and future needs.

# Transportation Report

Highway transportation and modern roads are a key to the economic future of Grant County.

Most of the 7,000 miles of existing roads in Grant County are sub-standard. They do not adequately serve existing traffic. Poor roads stifle the movement of products in, out, and through the county. The development of recreation is hindered by the lack of modern, safe highways. There is an absolute necessity for adequate, multipurpose highways in order to assure the growth of Grant County.

Poor state highways are presently forcing travelers to use other county roads which are better even though they may take longer. Approximately 40 miles of county roads are paved, the rest are unimproved, graded and drained, or have a gravel surface. Private roads within the county consist of logging, ranch, and other access type of roads. These account for some 30 percent of the roads in the county and are in an unimproved condition.

The Bureau of Land Management owns many miles of roads that are in strategic locations and are often the main access roads to many of the areas of great interest. The United States Forest Service has the largest inventory of roads. These roads are usually built to meet only present forest service needs and are often substandard when recreation and other values are considered.

Due to high cost factors in rail freight costs for wood products, Grant County and the local economy is in an uncompetitive position to ship wood products by rail to other than the middle west, eastern, or southern markets.

## PROBLEMS

**Timber transport:** Rail tariff rates effectively eliminate Grant County from competition in the California wood products market.

Improved roads for timber products are needed to the north, east, and west of Grant County.

**Recreational access:** Present highways do not adequately serve the recreational resources.

**Cattle transporting:** Roads to the east and south need improvements for transportation of "feeder" cattle.

**Comparative costs:** Due to substandard road conditions the cost for tires, fuel, and repairs over county highways is approximately 25 percent above such costs in most areas in the state. This is reflected in the tariff rates and contract and private hauling costs, thereby jeopardizing our competitive market position.

## RECOMMENDATIONS

Work should continue on seeking more favorable tariffs to allow Grant County operation to enter this highly important rail market.

Roads must be improved, since they are the key to the economic feasibility of processing and marketing products.

Roads need improvement to encourage tourists to travel into and through Grant County. As more tourists travel into the county to visit improved developments, the pressures for further development of state highways will be even greater.

As range improvement continues, much more transportation will be needed for cattle exporting. This means improvement of highways.

Since the total economy of Grant County is dependent on trucks moving products over the highways, highways warrant major improvements by increasing money allocations by both the state highway department and the county governments.

## SUMMARY

From studies made and highway comparisons, it follows that if the money is spent on roads that have high traffic counts, the traffic counts tend to increase. The transportation committee therefore makes the following summary and recommendations:

1. The ownership of roads should be studied by an outside firm because of the high volumes expected. Construction costs could also be obtained at this time.

2. Problem areas that are outside of the county but still affect traffic into the county will need help from neighboring counties to present a united effort. The formation of a Highway 26 association similar to the Highway 20 may be the answer.

3. All possible future and potential uses of roads should be considered in planning future highway and other road development.



# Human Resources

## Older County Youth

While the youth of any county can be a valuable asset to county-wide economics, activities and industries, surveys have shown that very few youth remain in Grant County after high-school graduation. Many go on to pursue some form of higher education but upon completion still do not return to the county. Youth groups (such as scouting, Camp Fire Girls, and 4-H) are available to youngsters, but recreational outlets are limited.

### PROBLEMS

**Employment:** Because of lack of employment opportunities for young people, they move away from Grant County upon completion of high school. Many who seek some form of higher education also do not return to the county.

**Recreational opportunities:** There are a limited number of recreational facilities for young people in each community. As young people reach high-school age they tend to drop out of these programs. Adults display little enthusiasm for such programs.

### RECOMMENDATIONS

The Human Resource Development Committee recommends that a subcommittee be set up to study the permanent employment possibilities for youth in Grant County. Concrete action plans should be developed in order to offer youth reasons to return to the county.

A subcommittee should also be formed to study the recreational facilities for county youth. Adults and young people should form this group so that needs and interests of all the county may be considered.

## Marriage Counseling

In 1965 there were 38 marriages and 18 divorces in Grant County. This is a divorce-marriage ratio of 47.4 percent. Counseling services available in other areas have been studied.

### PROBLEMS

**Counseling:** There are no formal marriage counseling services available in the county.

### RECOMMENDATIONS

The committee recommends that an action group of ministers and attorneys in Grant County be set up in order to devise a plan to meet the needs of county citizens.

## Health Facilities

Health facilities available to Grant County residents are one hospital, two nursing homes, one doctor, two dentists, one optometrist, three drug stores (none of which have Sunday hours), one county health nurse, two company nurses (employed by Hines), and one veterinarian.

### PROBLEMS

**Medical facilities:** People from outlying districts often travel great distances for use of out-of-county medical facilities.

### RECOMMENDATIONS

Appeals needs to be made to professional areas for adequate medical personnel.

The committee feels that an extension program of emergency and home survival care would be of great benefit to all citizens of Grant County. This would enable people to start treatment if necessary in times of crisis. The civil defense program has worked with Medical Self Help in the high schools. This is the type of training that every adult needs to have.

# Home Extension Program

The home Extension program is presently reaching only 13 percent of the 2,300 women in Grant County. Thirty percent of the county women work, and 45 percent of those over 18 do not possess high school diplomas. Effective teaching methods and communication media are needed.

## Program planning

Interest in program planning has decreased, and frequent turnover in the home agent position has left little opportunity for creative thinking and planning by the agent. Little information has been given to women outside home Extension units.

### PROBLEMS

**Qualified leadership:** Women prefer trained teachers in presentation of lessons.

**Skills:** Crafts, cooking, and sewing are the skills requested by homemakers.

**Participant involvement:** The climate of learning must be one where everyone is accepted.

### RECOMMENDATIONS

The home agent is this trained teacher and must train other leaders.

Specialized programs should be provided for special groups (such as record keeping for ranch wives).

Units and home agents must plan programs together. By planning their programs, units may meet their own needs.

## Developing leadership

Leadership training is built into home Extension through the use of project leaders. Trend from action to lecture-type programs created fewer leaders to present lessons. Agent turnover contributed to lack of leadership development in home Extension organization.

### PROBLEMS

**Unit leaders:** Unit groups lack trained and capable leaders.

**Programs:** Types of programs offered are too often of the lecture type which are repelled by home Extension units.

**Information distribution:** Necessity for others than the home agent in teaching and distributing information is obvious because of geographical distances.

**Need for trained leaders:** Requests for community rather than area programs also necessitate additional trained people to present information.

### RECOMMENDATIONS

Groups must work to develop leadership potential.

Unit program choices should be made by units and home agent with focus on flexibility and leadership training.

Agent training with motivating techniques for project leaders may offer possibilities for more rapid and thorough teaching techniques.

## Teaching methods

Lessons of the lecture and discussion variety have been on the increase. Project leaders have not been trained in effective teaching. Many lessons have not been rewritten or adapted to this county before being presented.

### PROBLEMS

**New methods:** Teaching methods which involve action are not fully utilized, and other methods are not accepted. The needs of the county women have not been stressed and therefore have not been met.

### RECOMMENDATIONS

All lessons must be applicable to the people and their needs. In order to gain knowledge and interest in programs, the learner must use as many of her six senses as possible, must hear words she understands, must apply learning in a practical manner, and must have something to whet the appetite for future learning.

## *Corrections and Additions*

### **Goals**

The long-range goal of home economics Extension in Grant County is to educate youth and adults. The purpose of this educational process is to create an incentive for people of all ages and walks of life to improve themselves and thus to improve their heritage.

In order to reach this goal, strong adult leadership and community responsiveness must be developed. People are not willing to extend beyond themselves until they accept themselves as worthy individuals. Therefore, goals for the present and near future are toward the development of youth and adults who can accept themselves to the point of reaching beyond that which they already possess.

## **Home Extension Program**

A. The figure mentioned top of page 20 of those county women not possessing high school diplomas is incorrect. The percentage is considerably less than the 45% mentioned.

B. Special emphasis is being placed on leadership development for unit groups.

C. In the past, homemakers have been chiefly interested in crafts, cooking, and sewing. However, trends are changing with more emphasis now being placed on management, finance, child development and other related areas.

## **4-H and Other Youth**

There are approximately 1,000 boys and girls from 9 to 19 years old in the county. Organized group activity includes 4-H Club work, Boy Scouts, Girl Scouts, Camp Fire Girls, DeMolay, Rainbow, and various church organizations. Of the six high schools, only two have home economics programs. There are no Future Farmers of America programs.

With the basis of few organized activities, the 4-H program does not have a problem of interesting youth, but rather of uninterested adults. Enthusiasm and interest are shown by the present leaders; however, these leaders cannot handle the number of youth wanting to become an active part of 4-H.

### **PROBLEMS**

**Volunteer Leaders:** There is a great lack of interested adults willing to accept leadership in youth work.

**Older Youth Activities:** There are no activities to hold the interest of older 4-H members and other youth.

### **RECOMMENDATIONS**

Confidence and interest needs to be built in adults as to what 4-H and similar organizations can do for the county youth.

Efforts must be kept up to maintain a teenage club for youths and also to establish a youth council to study and meet the needs of teenagers.

## **Other Problem Areas**

The Human Resource Development Committee has discussed possible future exploration into the following areas of concern:

Credit practices and bankruptcy

Cultural programs

Seasonal job opportunities for young people

Juvenile problems

Senior citizen programs

It is recommended that a committee of professionals and lay people be set up not only to study these areas but also to formulate a plan of action to change existing conditions, providing a change is found to be both needed and desired by the people involved.

# Future Employment, Population, and Projections

Predictions are that the employment and population of Grant County will increase little, or may even decline, in the future. The economy is based on natural resources, forestry, and agriculture. Markets for products are virtually nonexistent in the county itself. Mill operation will either remain steady or decline slightly.

There is some potential for increased crop production through development of water resources and for improved carrying capacity of range land but these increases are not likely to have an effect on employment levels.

Mining employment is quite small at the present time and shows no appropriate growth prospects.

It is unlikely that secondary industries will show an increase in employment. There might possibly be increases in the government and education categories and the service field, but this will depend on population growth, on growth of the area as an recreational region, and on governmental expansion within the region.

The future population of Grant County is difficult to predict because of the nature of the industries upon which the population is dependent for a living, and because there is such a small population involved.

The overall population trend since 1870 has been on the rise in Grant County. A population projection based on this long-term trend could yield an estimated population of 8,100 in 1980. The trend since 1950, however, has been down. A population projection based on the trend since 1950 might reach as low as the vicinity of 5,800 by 1980.

Barring unexpected events, the actual population in 1980 will likely fall between these two estimates. As population declines, it will eventually reach a point where the rate of decline will be less or might cease altogether. For example the 1968 population might be considered the low point, to be maintained until 1980. This would result in a population of 7,090 in 1980, the same as 1968.

## GRANT COUNTY POPULATION PROJECTIONS

Population level	1950	1960	1968	1975	1980
High Level† .....	8,329	7,726	7,090	8,005	8,100
Medium Level‡ .....	8,329	7,726	7,090	7,090	7,090
Low Level§ .....	8,329	7,726	7,090	6,330	5,800

†Projection based on long-term trend, 1870-1968

‡Projection based on 1968 population continuing

§Projection based on 1950-1968 trend