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# Report of Deschutes County Long-Range Planning Conference for 1968

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Home Economics

Paul McCormick  
4-H Club Work, Agriculture

Thomas R. Bunch  
Area Range Agent



*Beef cattle graze on irrigated pasture in Deschutes County, with the Cascade Mountains in the background. (Photo by Child's Photographers, Redmond.)*

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## *Foreword*

In 1967 when the Deschutes County Advisory Council began to discuss plans for organizing the Long-Range Planning Conference for 1968, we could see a tremendous job ahead: the organization of committees, the selection of areas to study, the many meetings to attend, resource people to contact, information to gather from many sources on the progress and problems of our county, and finally the making of recommendations. With the concluding meeting held April 27th and with reports written and gone to press, we felt our job was done.

But the job has only begun, for what value are all of the studies and recommendations if they only stay on paper? ACTION is the next step.

Sincerely,

Mrs. Neil (Mary) Davis, Chairman  
Extension Advisory Council

# Facts About Deschutes County, Oregon

## LOCATION

Deschutes County occupies 1,937,280 acres in the center of Oregon. It is probably best known to nonresidents as a recreational area. The county's forests and high lava plains support deer and antelope. Many of its rapidly moving streams and numerous lakes are stocked with fish. Its snow-capped mountains provide winter and spring skiing.

## GEOGRAPHY

Geographically the county extends eastward from the summit of the Cascade Mountains to the rolling high plains in the southeastern section. The Deschutes River and its tributaries which flow from south to north divide the county and provide the source of water for agriculture. Most of the arable lands are located on the gently rolling lava plains between Bend and the north county line at Crooked River. There is considerable variation in elevation. Mountains in the western part average from 5,000 to 7,000 feet in elevation, with South Sister being the highest point at 10,354 feet. Arable lands average from 2,700 to 3,700 feet in elevation. The southeastern range areas average from 4,400 to 4,800 feet, with some points as high as 6,000 feet.

## CLIMATE

Deschutes County's climate is continental, although there are moderating effects from the Pacific Ocean. There is a high percentage of sunshine; and temperatures are generally comfortable, although there are occasional extremes. A short growing season and danger from morning frosts during the summer months are the most notable temperature conditions affecting agriculture. Only the most hardy types of crops can be grown. Precipitation varies from an estimated 70 inches or more on the Cascade Divide to as little as 5 to 6 inches on the basin floor. Near the foothill sections, rainfall will average from 10 to 15 inches; on most of the plateau, it amounts to approximately 10 inches, though there are local differences associated with topography. With the exception of a few

thousand acres of dry-land rye, all of the cultivated crops require irrigation. Rainfall is unpredictable and highly variable from year to year.

## OWNERSHIP AND LAND USE

The total land area of the county is 1,937,280 acres, of which 1,602,855 are under public ownership; 25,000 acres are considered urban; 3,307 acres are water areas; and 491,245 acres are privately-owned agricultural and forest lands.

Of the 1,602,855 acres in public ownership, 966,846 acres are administered by the United States Forest Service and 430,645 by the Bureau of Land Management. Smaller amounts are controlled by other federal and state agencies and the county.

There are 59,103 acres of cropland, of which 54,667 acres are under irrigation. About 968,990 acres are classed as forest land: 796,450 acres are in national forests; 137,000 acres in private ownership, and the balance in other public ownership. Approximately 961,423 acres are considered rangeland, including some 265,528 acres in private ownership; 264,257 acres managed by the United States Forest Service, and 431,628 by the Bureau of Land Management.

The county's population was listed at 27,600 in 1966. About two-thirds, 17,676, live in the three incorporated towns, 10% on farms, and 24% in rural residences. The county was ranked 16th of Oregon's 36 counties in population in 1966. The 1966 population of Bend was listed at 13,200; Redmond, 3,846; and Sisters, 630.

The population growth rate in the county was 17% from 1960 to 1965, which compares with a 12% growth rate for the state. Rural areas have grown more rapidly in population than the cities. Urban growth rate was about 11.4% from 1960 to 1966, while the rural rate increased by 37.4%. All of the growth rate in rural areas has been nonfarm, as the farm population has declined. Much of the population increase has come from the Willamette Valley of Oregon or from California. Immigrants are attracted by the dry, clear climate and the scenic and recreational advantages.

## INTRODUCTION TO THE REPORTS

The Deschutes County Extension Advisory Council, in cooperation with the Cooperative Extension Service of Oregon State University, sponsored the Deschutes County Long-Range Planning Conference for 1968, the fifth held in the county since 1924. The council selected three major areas for study: human resources, community development, and economic and natural resource development, and named some 200 county citizens to serve on eight committees.

The conference program was started with a meeting held at the Redmond Air Center auditorium December 4, 1967. With John D. Bauer, council member, presiding, background information on the purpose of the conference and on the major areas to be studied was presented by Gene M. Lear, director of the Oregon Cooperative Extension Service; Mrs. Roberta Fraser, Extension family life specialist, Oregon State University; Robert Peterson, Industrial Development Department, Pacific Power and Light Company; and Robert W. Chandler, editor, *The Bulletin*, Bend.

During the winter and spring of 1967-68 the citizen committees studied the present situation and made recommendations for the areas of human resource development, local government, land-use planning, rural domestic water and sanitation, agricultural production and marketing, industrial development, and recreational development. Committees added members, listened to authorities in the different areas of study, studied reports, made surveys, and spent many hours in discussion and in the preparation of reports. The results of their work were presented and adopted at an all-day public meeting held at the Bend Senior High School, April 27, 1968. Council Vice Chairman Bertil Nelson presided at this concluding meeting. Kessler Cannon, executive secretary of the Governor's Committee on Natural Resources, addressed the conference at the noon luncheon.

The committee reports follow.

# Land-Use Planning

Deschutes County has been experiencing a population growth in the recent past and has a potential of much greater growth in the near future. During this period, like most of the rural counties in Oregon, this county has been undergoing changes in almost all elements of its various communities. The county is vulnerable to development that could affect adversely the existing quality of living, waste its natural resources, and be detrimental to its vested interests because of the lack of development of guidelines and adequate means of land-use control.

At the outset, it was suggested that the committee explore three areas of study for land-use planning in the county: (1) identification of existing conditions; (2) determination of the problems (comparison of what is with what should be) and (3) determination of the causes of gaps. Recommendations would evolve out of discussions in these areas.

Outside speakers were invited to present information on policies and management of public lands, report on a prior study of county ordinances, report on findings of the County Road Committee, and explain the Sunriver planned community project.

The members of the committee did not reach unanimous agreement on all matters relating to water and sanitation, zoning regulations, methods of zoning and subdividing land, and the extent of administrative authority of the county. The discussions only briefly considered the effects of land uses on the community as a whole.

The committee was united in its concern about air and water pollution. It did recognize a major aspect of the county today, namely that much of the undeveloped portion of the county is in an interim period where directions are not clear and future land uses are not yet indicated.

The four months of bimonthly meetings were far too few to cover the assignment completely. More time and a more varied representation of community interests in its membership were needed to obtain adequate information, discussion, and understanding of all matters implied in the assignment and to review and discuss the findings of other committees. The accompanying text, recommendations, and exhibits represent the extent to which the members were able to accomplish their task.

## PROBLEMS

Matters of greatest concern were introduced by committee members for discussion. All of the items discussed in the sessions are grouped under the subjects listed below:

Environment; Government; Zoning; Subdivision; Building permits and building codes; Air, water and sanitation; Roads; Area problems; Public lands; Private lands; Assessments and forest receipts; Education; Planning program; Prior reports; Nuisances.

## ENVIRONMENTAL FACTORS

The physical environment of the county is a composite of people—their farms, industry, commerce, public facilities, residential areas, recreation; the land with its various soil

conditions; unique geological and ecological conditions; clean air and water; vast areas of open space that include forests, rangelands, rivers, and lakes; and the Cascade Range, which is part of the central Oregon scene.

The population is concentrated in two cities, 60% residing in Bend and Redmond, and 40% sparsely scattered throughout the remainder of the county.

Statistics show a significant segment of the population in the low-income brackets; another segment consists of retired people who have moved here to enjoy the environment and unhurried pace of central Oregon. There is still another segment who come here for the summer, many of whom have summer homes in the forested areas and along the rivers and streams, where the landscape is still in its wild state.

The county is situated at the hub of recreation areas in the Cascades and is accessible from all directions. Visitors are attracted from the region, the state, and all parts of the nation.

The committee recognizes the value of preserving the environment and submits its recommendations in this report.

## RECOMMENDATIONS

The goals and objectives of the committee's recommendations are to set up guidelines to allow the county to develop in such a way as to maintain, as nearly as possible, our present environment and to prevent the development of undesirable situations which threaten this objective.

The Land-Use Committee adopted the following recommendations by motion:

## PRESERVATION OF THE ENVIRONMENT

■ The present environment in central Oregon, including the pure air, water resources, forests, and other assets is now the major attraction of the area to most of its citizens and visitors, and is expected to be to future residents. Maintaining this environment against the pressure of increasing population and recreational and industrial demand is of vital concern to the committee.

■ All regulatory agencies, federal, state, county, and city, must pay particular attention to air and water pollution and noise control if our natural amenities are to be preserved.

■ At the present time there is no clearcut control which would prevent air pollution by fumes and odors from industrial plants, such as a kraft paper plant. Legislative authorization for central Oregon counties should be sought by legislators from the area which would establish an air-pollution authority in the area and enable ordinances to be adopted which would lead to prevention of air pollution.

■ The committee supports the proposal of a master plan of the Deschutes River and its tributaries, the lakes, and any other water bodies deemed to have recreational merit (see Exhibit D).



*A great increase in development of recreational subdivisions, such as the one shown above, has occurred in the county during the last 10 years. Exclusive of the townsite of LaPine and the Sunriver development, 5,423 recreational lots had been sold in the area from Lava Butte to the south county line by January 1, 1968. (Photo by H. Peter Wingle, Deschutes National Forest)*

## PUBLIC LANDS

- The committee concurs with the United States Forest Service policy of maintaining timber-producing lands in the national forests in perpetual timber production.
- The committee concurs with United States Forest Service policy of managing special areas of national forest lands adjoining highways, campgrounds, and similar recreational or scenic areas to maintain scenic beauty.
- The committee supports maintaining United States Forest Service administration of national forest lands in Deschutes County. The multiple-use principle, timber production for local lumber mills, grazing use for local livestock, and recreational use in the form of hunting, fishing, camping, etc., should be continued.
- The committee supports the Bureau of Land Management policy of multiple-use of public domain lands in the county.
- The committee recommends continuation of the land exchange program between the Bureau of Land Management and Deschutes County.

## TIMBER RECEIPTS REVENUE

- The committee recommends that consideration be given to a possible legislative change in the timber receipts ratio and supports the following ratio: 25% to schools, 25% to the county road fund, and 50% to be divided between the road and school funds in such amounts as the governing body of the county determines to be in the best interests of the county. Any amounts over 25% received by the school districts should not be deducted from the districts' allotment of basic school funds.

## HIGHWAYS

- The committee supports the program of the State Highway Commission in developing new nonaccess highways through scenic areas and recommends that this type of highway be developed, in time, between Redmond and Bend and south to LaPine in order to prevent encroachment of commercial enterprises and advertising along this scenic route.



## PLANNING

*The committee recommends:*

- That a professional planning firm be retained to work with the Planning Commission, professional county staff, and related agencies on the development of new subdivision and zoning ordinances.
- The possible joint use of a professional planner by the county and the cities and coordination of effort between cities and the county relating to planning.
- The establishment of a new planning commission of qualified persons. The composition of this commission should reflect a variety of backgrounds, and members should be selected so that every area of Deschutes County is represented.
- That all county agencies should assist and support the county court and the Planning Commission.
- That a committee on planning education be appointed by the county court; that a citizens' committee help determine the goals; and that an all-out educational program on planning be undertaken.

## COMPREHENSIVE PLAN

- The committee recommends the preparation of a comprehensive plan, developed by the planning firm in cooperation with local residents, and that such a plan will provide for designation of developed areas as they now are and transition areas for which future use is uncertain.

## ORDINANCES

*The committee recommends that:*

- No land-use ordinances (zoning or subdivision) be placed before the voters until such time as formal presentation of such ordinances has been made to the following: the city planning commissions, the Property Owners Association, the League of Women Voters, granges, the Congress for Community Progress, government agencies with jurisdiction in the county, and other citizen groups.
- Any land-use ordinances developed by the planning consultant firm, or by other methods, or any amendments chang-

ing the intent of the original ordinance be submitted by the county court for approval or disapproval of the people at an election after hearings have been held throughout the county on the proposed ordinances.

- The county not finance original construction of residential streets in a subdivision: reasonable minimum road standards should be set by the county and met by the subdivider.
- Any deed restrictions for a subdivision be filed with the preliminary plat.

## EXHIBITS ON FILE AT THE COUNTY EXTENSION OFFICE, REDMOND, OREGON

Exhibit A—Major Recommendations— from Report by Lay Committee to Investigate Deschutes County Subdivision and Zoning Ordinances.  
Endorsed.

An additional recommendation in the text was endorsed: (1) A Recreational Water Master Plan, under Preservation of Natural Features, pages 28 through 30. Included in Exhibit D.

Exhibit B—Consensus on County Planning—League of Women Voters of Bend.

Not endorsed in toto.

The nine consensus points were discussed and all but two were endorsed. Point No. 6 on zoning was deleted, but a paragraph concerning zoning, set forth in Section Two—"Recommendations," under ORDINANCES (2), page 7, was substituted. Point No. 7 was deleted for lack of agreement on the proposals for water supply and the sanitarian's signature on final plats.

Exhibit C—Subdivision plats recorded since 1956.

Exhibit D—Statement regarding a Recreational Water Master Plan. Endorsed.

Exhibit E—Minutes of the Meetings.

Exhibit F—Proposed Zoning and Subdivision Ordinances— by Property Owners' Association.

### LAND-USE PLANNING COMMITTEE MEMBERS

Glenn Anderson, chairman,  
LaPine

George Cook, Bend

Neil Davis, Bend

William Eskew, Terrebonne

Mrs. Bob Greenlee, recorder,  
Bend

Dan Heierman, Redmond

Ted Thorson, Redmond

John Hodecker, Redmond

Paul Kortge, Redmond

Chet Myers, Bend

Paul Ramsey, Bend

A'leen Runkle, Bend

William Schuckel, Bend

Jess Yardley, Bend

# Rural Domestic Water Development and Sanitation

The Rural Domestic Water Development Committee was formed in 1965 at the suggestion of the Extension Advisory Council. They completed their study and issued a report in April, 1966. At that time the county court asked them to serve on a standby basis to advise on rural domestic water development.

At the start of the Long-Range Planning Conference, the Advisory Council asked the committee to review the rural domestic water situation and to study sanitation problems in the county.

A source of good-quality domestic water has long been a problem in rural areas of Deschutes County. There still are an estimated 2,000 rural residents in the county and the parts of Crook County served by the Central Oregon Irrigation District using irrigation water for domestic purposes. This water is stored in cisterns and for the most part is not filtered or chlorinated. Tests show that a large proportion is not suitable for human consumption without adequate disinfection.

As the rural areas are developed for rural residences and subdivisions, distribution of the irrigation water for both domestic and irrigation use to small tracts has become a serious problem to the irrigation districts. Winter runs for domestic purposes are costly to the districts and often are delayed because of weather or repair programs on the ditches. Hauling of water is common. No sanitation inspection is required for hauled water.

As homes have been built in rural areas, many wells have been drilled to supply a source of domestic water. Wells vary in depth from 25 to over 600 feet. Equipped with pressure systems, the cost of wells will run from \$1,500 to over \$3,000. In some instances wells will supply more than one residence, and there are several small, private systems selling water to rural residents. Residents of the areas adjacent to Bend and Redmond outside of the city limits can usually buy water from the city systems. In most instances this type of service is unplanned, and as the number of residents grows, existing pipelines become inadequate, and problems result. Annexation to the city is generally encouraged.

## WATER SUPPLY

Adequate supplies of water exist to meet the needs of an increasing population in the rural areas. The irrigation districts are now providing water for domestic uses to many rural users, and as the number of rural residences increases and the amount of land under irrigation decreases, the available supply for domestic purposes should prove adequate. Saving water losses in irrigation ditches can also provide additional supplies for domestic use when needed.

Reports to the committee from the state engineer's office indicate large supplies of underground water in Deschutes

County at varying depths. There are instances of failure to reach water at depths to 700 feet. While in many cases water is expensive for individual home owners to reach, large-scale industrial and irrigation development using deep wells has provided large supplies of water from underground sources in a few instances.

Reports made to the City of Bend by an engineering firm indicate underground water supplies as a prime source for the city in future years, although there is no certainty in getting water at any given location.

## POSSIBILITIES OF RURAL DISTRIBUTION SYSTEMS

The normal procedure in most rural areas is to provide public water distribution systems as the number of residences increases. Heavy rock formations at the depth needed to prevent winter freezing make the establishment of this type of system in Deschutes County very expensive. The committee feels that engineering studies are needed to get cost figures for delivery systems on a user basis for comparison with the cost of drilling individual wells.

Several methods of organizing water distribution systems have been considered. Irrigation districts, which now provide domestic water to many rural users, are already organized and could establish underground pipeline systems in heavily settled rural areas to supply domestic water as well as irrigation water. Communities in need of domestic water could organize districts under Oregon law and buy water from irrigation districts or possibly from some of the cities if they were adjacent, or such district could establish centrally located wells as a source of supply. A county-wide district or water department as a part of the county government has been considered as a method of organizing for rural water distribution.

## FINANCING RURAL WATER DISTRIBUTION SYSTEMS

Establishing community water systems in Deschutes County is going to be very expensive, and federal aid in financing will be needed. The Farmers Home Administration is the government agency designated to assist rural areas in establishing public water systems. A unit of local government or a legally established water users' association will need to work with the FHA.



## COMMITTEE RECOMMENDATIONS

- It is the recommendation of the committee that the Deschutes County Court make further study of domestic water development possibilities in rural areas of the county, contracting with competent engineering firms. Such studies should show areas feasible for water systems, the most practical water source, the cost of distribution systems, and methods of financing and repayment. Aid from federal and state agencies available for such studies should be used.
- Efforts should be made to organize rural water users' districts on a county-wide basis, including the Powell Butte area of Crook County, or to establish a water department as a part of county government. In order to reduce overhead costs, this method is felt to be more desirable than organizing many small districts scattered throughout the county.

## SOLID-WASTE DISPOSAL

Prior to 1967 garbage had been dumped in open pits and as much as possible had been burned. The county maintained the refuse pits. This method caused air pollution, was a breeding place for rodents and flies, caused an extreme fire hazard, and led to promiscuous dumping. In 1967 the sanitary landfill method of solid-waste disposal was started in the county under County Health Department supervision using County Road Department equipment.

Six landfill sites and one sanitary landfill have been established and placed in operation in the county. Refuse is compacted and covered with earth as necessary, eliminating disadvantages of the open refuse pits.

The committee considers the landfill method of solid-waste disposal far superior to the operation of refuse pits. It is the most satisfactory method of solid-waste disposal at the present time.

## RECOMMENDATIONS

The committee recommends that the county court, through the Tri-County Health Department, continue to operate the present landfill program of solid-waste disposal. Efforts should be made in the Bend area to develop a program in cooperation with private garbage collectors in Bend and the City of Bend in order to increase the use of the landfill method and thus reduce the county costs.

Similar cooperation with the Redmond and Sisters city governments is recommended for use of the solid-waste disposal landfill sites set up in the northern part of the county.

As long as the present critical ad valorem tax situation exists in the county, the committee feels it is advisable to continue financing the present solid-waste disposal program with Road Department funds, if at all possible.

The committee feels that the general public will support the present landfill method of solid-waste disposal if they are provided information on the advantages of this method and made aware of the disadvantages of former methods of using

refuse pits. An educational program stressing the values of solid-waste disposal to the development of the recreational possibilities of the area should be a part of the educational effort. Developing cooperative landfill programs with the incorporated cities in the county will gain support from city residents. The committee feels that if county residents are informed of the advantages of the landfill program they will give support through a special levy. The committee therefore recommends that, if present methods of financing the program cannot be continued, voters be asked to support the program by special levy.

## SEWAGE DISPOSAL

With the exception of a small sewer system in part of Bend, sewage is disposed of through individual septic tanks draining through holes drilled in the earth's surface. The geology of the county has led to the use of drill holes rather than drain fields for disposal of septic tank effluent in most of the county.

The Oregon State Board of Health and the Tri-County Health Department disapprove of this method of disposing of septic tank effluent because of possibilities of polluting the underground water supply which is being used in increasing amounts from wells.

At the present time in Deschutes County, prevention of the use of drill holes has been limited to public establishments, such as trailer courts, motels, and similar businesses, and subdivisions over which the county court and the health department have control through licensing or approval of plats. This practice has made for inequitable enforcement of the use of drain fields rather than drill holes for disposal.

State officials indicate that the State Sanitary Code at present is not specific enough to prevent the use of drill holes and to enforce the use of drain fields and that adoption of a county sanitary ordinance using the state codes as a basis is desirable.

Licensing and bonding of all sewage cesspool workers and a requirement that notification be given to the county sanitarian before construction of any sewage disposal systems should be part of any county enforcement program.

## RECOMMENDATIONS

The committee recommends that the Tri-County Health Department and the Deschutes County Court request a legal interpretation from the district attorney and the attorney general, if necessary, regarding the enforcement of state regulations in Deschutes County relating to sewage disposal systems in both incorporated and unincorporated sections of the county.

If it is determined by legal authority that present regulations of the State of Oregon relating to sewage disposal systems can be enforced, the Tri-County Health Department and the district attorney should then enforce these regulations equitably throughout the county.

## DISTRIBUTION OF IRRIGATION WATER TO SMALL TRACTS

Distribution problems of irrigation water for domestic purposes were discussed earlier in the committee's report. Similar problems exist for the distribution of water used for irrigation. The six irrigation districts operating in the county do not have uniform policies with respect to the delivery of water to small tracts.

Present state regulations relating to the development of subdivisions require the signature of irrigation district officials on subdivision plats located within the boundaries of irrigation districts. Transfer of water rights requires a month or more of delay in the state engineer's office, often working a handicap upon subdividers. In addition, many small tracts are sold by landowners without consulting the irrigation districts about plans for water delivery to these tracts. Districts will deliver water to one point on a 40-acre tract; the landowner must develop plans for rotating the water to the different parts of the tract.

Uniform policies of the districts for distribution of irrigation water to small tracts are needed.

## RECOMMENDATIONS

The committee recommends that irrigation districts operating in the county meet with this committee to develop uniform policies for irrigation-water distribution to small tracts. The situation should be studied and efforts made to arrive at a decision which will lead to action that will solve present problems.

## AIR POLLUTION

Many county residents are concerned about measures that can be taken to protect the pure air of the county against contamination from potential industrial development or from other sources.

Oregon statues which set up regional air-quality control authorities prohibit adoption of air-pollution ordinances by cities or counties after January 1, 1968, and limit areas where such authorities can be organized to populations of 130,000 or more. Deschutes, Crook, Harney, Jefferson, Klamath, Lake, Sherman, and Wasco counties have this population; however, conditions in Deschutes County differ to the extent that regional authority would not be much more effective than a state-wide authority.

It is the opinion of the assistant attorney general assigned to the State Sanitary Authority that air-pollution ordinances could be established in counties with a charter form of government.

The committee urges study that would lead to eventual adoption of means to control air pollution in the county by local units of government and interested citizens.

### RURAL DOMESTIC WATER DEVELOPMENT AND SANITATION COMMITTEE MEMBERS

E. G. Mansfield, chairman, Redmond	R. E. Huckfeldt, Redmond
Robert H. Sterling, recorder, Redmond	G. W. McCann, Bend
Mrs. Betty Ahern, LaPine	Lloyd Satterlee, Bend
Bob Anderson, Redmond	Fred Shepard, Bend
Ron Anderson, Bend	Jon Thompson, Bend
Kent Ashbaker, Bend	Mrs. Grace Trachsel, Redmond
Morgan Elliott, Bend	Nolan Turner, Bend
Oswald Hanson, Bend	Ted Thorson, Redmond



*Development of underground sources of water for irrigation has taken place in the Lower Bridge area of the county during the last two years. Six wells, delivering 10,400 gallons of water per minute, are now in use. Depth varies from 140 to 300 feet and the amount of water delivered from 500 to 3,500 gallons per minute. About 1,800 acres of land have been brought under irrigation and supplemental water has been furnished for 700 acres. (Photo by M. L. Myrick, Redmond Spokesman)*

# Human Resources

Tapping of the vast field of human resources in Deschutes County has only recently begun with enthusiasm. Even now, the enthusiasm is somewhat restrained as far as the general public is concerned, even though several different groups are undertaking community development studies. Agencies and organizations working in public service have expressed concern over the lack of public awareness in human-resource areas. A monthly newsletter published by the Royal Bank of Canada in July 1963 quoted Alfred North Whitehead as follows: "The conditions of our lives have been basically more altered in the past fifty years than they were in the previous two thousand—I might say three thousand." The newsletter continues, "The mobility given us by science in space, on land, and in work, has brought with it mobility of thought and desire, with consequent fragility of assurance and loss of safe anchorage."

*Focus*, the 1966 publication of the Home Economics Subcommittee of the Extension Committee on Organization and Policy, states that "Shifts in national concerns reveal broad recognition of need for human development and recognition of the interrelationships and interdependency of economic, human, and social development.

"Education for family and community living has come to the forefront in the delineation of educational needs of the populace," continues *Focus*.

Consideration of human resources of Deschutes County centered around the family-life cycle. This cycle considers the family from the time that a new family is founded by marriage, through child bearing, child rearing, child launching, the middle years, retirement, and widowhood.

## POPULATION

A few background facts regarding Deschutes County show that the population has steadily increased since the turn of the century. In the period of 1960 to 1966, there was a 19.5% increase in population over the previous 10-year period. Based on the 1960 Census, the population percentages by age are as follows:

Birth to 12 years . . . . .	26.2
13-19 . . . . .	12.6
20-24 . . . . .	4.5
25-44 . . . . .	23.9
45-64 . . . . .	22.3
65 and over . . . . .	10.5

## LABOR

A look at the labor force shows that 2,968 women 14 years and older were employed in 1960. Of these, 1,020 were between the ages of 14 and 31. It can be quite safely assumed, then, that a number of small children were involved in these homes with young working mothers.

## FAMILY STABILITY

Figures regarding family stability are somewhat limited—but for the past year, the number of divorces filed was about equal to the number of marriage-license applications. The ages of those filing ranged from the teens and early twenties to those who had reached the "empty-nest" stage.

Another factor related to family stability is the number of illegitimate births. In 1960, the rate was 36.5 illegitimate births per 1,000 live births.

## INCOME

Income statistics for Deschutes County as of 1960 show that of a total of 6,216 families, 1,129 families had an income of less than \$3,000. This is 18.1% of the families. Rural farm families with under \$3,000 income number 496; while 194 families are rural nonfarm.

## HOUSING

There is concern regarding housing facilities in Deschutes County. Of the 6,665 houses, 1,807 are in a deteriorating or dilapidated condition. Many of the less adequate homes provide housing, because of financial necessity, for low-income families and senior citizens.

## HIGH-SCHOOL DROPOUTS

Deschutes County ranks 9th in the state for percent of high-school dropouts. This does not include the number of students who drop from school during the summer. The 3.9% dropout figure in Department of Education tables refers only to students in the 10th through 12th grades.

## THE FUTURE

The human-resource committee also utilized some projections or assumptions regarding national trends and which appear to be logical assumptions for the central Oregon area as well. These assumptions are as follows: central Oregon will continue to increase in population; much of the population increase will be in the retirement age bracket; all people will have more leisure time; the percent of working women will increase; the population is becoming increasingly mobile—central Oregon will continue to see more of this as the area is developed economically. There will be an increased need for more technical professional training; the percent of blue-collar workers will decrease because of mechanization; the need for retraining for reemployment will increase; the nature of work and the relationship of the worker to his job will change; with population, leisure, and mobility changes, the need for knowledge and sensitivity to people of other cultures will increase; there will be continuing changes in family and community relationships; there will be a continuing and growing need to solve the problems of human relations.

## RECOMMENDATIONS

*The committee recommends:*

- That a Day-Care Center be established in Deschutes County.

The objective of a day-care center is to provide good physical care and constructive growth experiences under responsible supervision for children, usually of preschool age, who for various reasons are cared for away from their families during part of the day.

A survey of low-skilled employees in the Bend area indicates that child care is the major problem facing these work-

ers. The average cost for child care is \$20 per child per week. Firms engaged in interstate commerce pay a minimum of \$1.60 per hour, but after deductions the average take-home pay is only \$200 or less. In a fatherless home this leaves the working mother only a little more than \$100 to maintain a home. Firms not engaged in interstate commerce pay a minimum wage of \$1.25 per hour. Mothers also noted problems of too permissive or undependable baby-sitters. It can be assumed that a day-care center would be important to the community and to the working mother for several reasons.

Psychologists tell us that the psychological makeup of children is set during preschool years. An impoverished or hurried working mother, depending on a succession of untrained baby sitters, is not always able to provide her children with the necessary growth experiences which they need in order to develop fully. Therefore, a social problem may arise and remain a continuing problem to the community and to society.

Many capable workers may avoid work because of inadequate day-care facilities. This in turn may hinder future development of business and industry in central Oregon. Good day-care facilities would give peace of mind and motivation to working mothers so that they could do a better day's work.

Adequate child-care facilities would allow more welfare mothers the opportunity to return to the job force. A center could help reduce the welfare roles as well as provide more positive experiences for children brought up on welfare and cared for by other welfare recipients when the mother is away, thus cutting off this portion of the welfare circle.

A day-care center does not provide free baby-sitting or child care, but rather, each person using the service pays for it according to ability. Child care in a center would offer full day care as opposed to only partial day care as is generally offered by nursery schools, kindergartens, and Head Start.

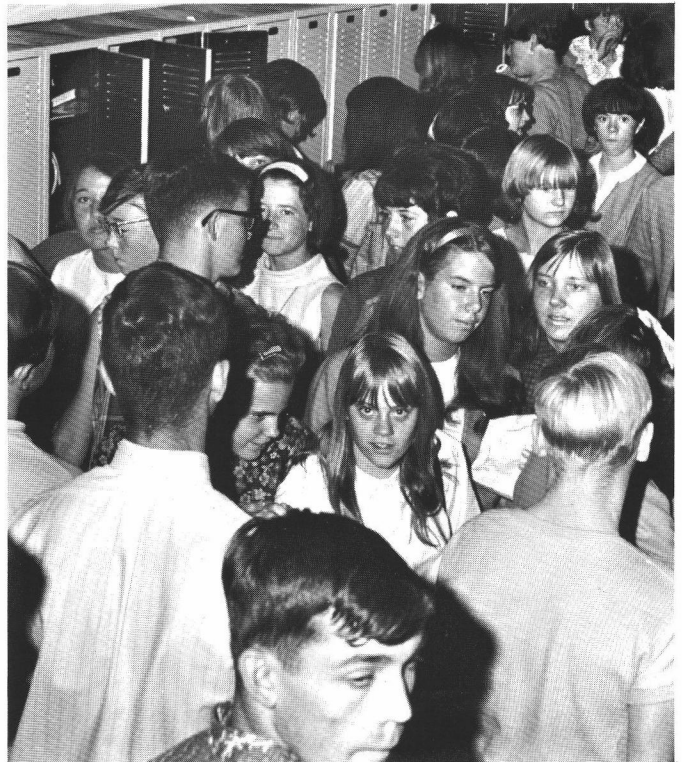
An effective day-care center operates about 10 hours a day. It employs trained preschool educators, aides, and a cook. It is desirable that a social worker be involved with the program to offer counseling to families. Possibly, some of the aides or volunteers working with the program could be senior citizens acting in the capacity of foster grandparents.

■ *That a county committee be established to explore and expand the possibility of a day-care center.*

In order to involve the public, a county committee should be formed. This committee should include representatives from the press, radio, ministerial associations, schools, the welfare department, the chamber of commerce, industry, the United Fund, the health department, service organizations, and working mothers. The success of the program will depend on the total involvement of the community. The Deschutes Cooperative Extension Service is suggested as the body to initiate action on the formation of a committee. However, if any other community group considers the formation of a day-care center, it is urged that consideration be given to the suggested method of involving people.

■ *That active support be given to Operation Total Involvement.*

Because of an upsurge of vandalism, in Deschutes County, or at least to the publicity given it, a concern for the problem began to develop in Bend at the same time that the human-resource committee was formed. To avoid duplication in study, this committee did not pursue the problem, but does support the vandalism committee, which has become known



*Overcrowding shown in the above picture of a Redmond High School hallway during a between-classes break is the result of a 22% increase in school enrollment between 1960 and 1968 in the Redmond school system. Enrollment in Bend schools of 4,538 in 1968 is predicted to increase by 4.8% by 1972. Redmond school system enrollment totaled 2,426 in 1968, 2% above the predicted enrollment for 1970 made in 1965. In September, 1968, the Redmond district voted a \$3,900,000 bond issue for construction of a new high school, conversion of the present high school for the middle grades and improvements to seven grade schools. (Redmond Spokesman Photo)*

as Operation Total Involvement. OTI refers to a total involvement of both youth and adults in a constructive positive program. Basically, there are two steps involved in OTI. The first is to take an inventory of the present resources available for people and working with people. The second step is to involve people. Other recommendations by the human resource committee will lend further support to Operation Total Improvement.

■ *That support be given to the study and development of a local "Vista" type of program.*

There has been discussion of the development of a "Vista" type of program which would involve local high-school and college youth on a volunteer basis. There is a need for people to work with low-income families and senior citizens in and around their homes, to provide transportation, and to provide companionship.

■ *That support be given to development of youth farm homes.*

In Deschutes there is a lack of available foster homes for the teenage youth who lives in an unwholesome home situation. A delinquent youth either faces a correctional institution

or remains where he is. Some type of farm home which will provide a home atmosphere with care and discipline is needed for both boys and girls.

■ (1) *That the public be made aware of the differences between the two types of foster homes and of the requirements of the two types; (2) That an educational program be developed and conducted for potential foster parents.*

A foster home is considered a substitute home—a home wherein a child can be placed temporarily with the hope that the child can be replaced in his original home when the detrimental situation can be improved. Two types of youth foster homes exist in Deschutes County. One is administered through the County Juvenile Department and is involved with the placing of delinquent youths. The other is conducted through the Welfare Department. Children placed by the latter come from families who are unable to properly care for their own children. The Juvenile Department has indicated difficulty in securing foster homes for delinquent youths. Welfare officials indicate that it is not difficult to obtain homes for young children but that it is difficult to place teen-age youth.

■ *That more effort be made to coordinate efforts of all groups working on youth and other human-resource problems.*

At the current time, four separate groups are studying the problems of youth in the Bend area of Deschutes County alone. These include the human-resource committee, Operation Total Involvement, the Governor's Committee on Children and Youth, and the Bend Environmental Study Group. All groups would be more effective with coordination and less duplication.

■ *That the psychiatric social worker in the Bend elementary schools be retained and that the program and personnel be expanded; (2) that a psychiatric social-work program be developed in the Redmond School District; (3) that a program be incorporated to develop better communication and understanding between parents, teachers and students; (4) that study group and/or group counseling programs be developed through the schools.*

Very limited counseling facilities are available through the schools of Deschutes County. For the entire Bend school system, there is only one psychiatric social worker. This person services only the elementary schools and still must divide work time among nine schools. There are counselors in both the junior and senior high schools at Bend and at the senior high in Redmond. No one is available in the junior and senior high schools to handle serious emotional problems. As a family-life preparation course, Bend High School offers a senior elective course in family relations.

■ (1) *That a full-time psychiatrist be obtained to work in the tri-county area; (2) that there be an increase in the personnel and service of the Tri-County Family Counseling Clinic.*

The Tri-County Family Counseling Clinic has two full-time professional workers who serve the needs of the entire tri-county area. A part-time psychiatrist comes to this area twice a month to give individual and group therapy. Two marriage counselors work once a week.

■ *That educational programs be developed to create a public awareness of mental health problems.*

■ *That when funds are available, Deschutes County take advantage of the Extension aide program in order to work more effectively with lower income families.*

Experiences of Cooperative Extension Service programs throughout the state and in Deschutes County show that to achieve a working relation with disadvantaged families, much personal contact is required. For example, two extension aides working for three months called upon about 200 different families. Repeat visits were made—sometimes five to eight visits to a family. Only after repeated visits were any of the mothers of these families willing or interested in attending meetings designed to help them with their home management skills. Even after the repeated visits, only 60 of the 200 people responded. However, other programs operating without the benefit of the personal visits yielded an interest from only two to five people.

■ *That central Oregonians be urged to take more advantage of Central Oregon Community College as a basis for all types of adult education.*

Current educational reports indicate that adult education will be taking many new forms in order to be in step with changes in society. Some of these trends are as follows: (1) education is needed for professional advancement; (2) technical and vocational changes require education; (3) the family in a changing society must seek education for a better understanding of family life; (4) in order for a community to progress, its people must become involved; therefore, education is needed in citizenship and public responsibility; (5) our society is no longer a single, isolated segment of the world—but is instead, a part of a whole international society; therefore, education to create better international understanding is needed; (6) exploding populations force immediate changes on community urban life; therefore, broad and informed understanding of causes and alternatives is essential; (7) as the society becomes more varied in its technical, social, and cultural resources, there is a need for education to develop taste, discrimination, and judgment.

■ *That available facilities for adult education be expanded so that education can be taken to the people rather than forcing the people to come to education; (2) that methods of training be varied and expanded to better meet the needs of all people; (3) that adult education be developed for daytime classes so that specific groups, such as senior citizens, can more easily avail themselves of the service; (4) that groups within the community make their needs known so that educational resources can be developed.*

■ *That a county-wide committee be established to investigate the problems of the senior citizens.*

In order to involve the total community, it is suggested that representatives from the following groups be included on the committee: The ministerial association; the bar association; Central Oregon Community College; the nursing homes; the motel owners association; the chamber of commerce; the Senior Citizens' Council; the Golden Age Club; press; radio; realtors; social and service organizations; the welfare department; the health department; and the United Fund. Representatives should come from all areas of the county. The Deschutes Cooperative Extension Service is suggested as the group to initiate action on the formation of a committee.



This committee should take advantage of the information available from the family life specialist and the home and family education coordinator through the Extension service at Oregon State University.

At the present time, very little attention is given to the needs of the senior citizen. There are six nursing homes in the county; four of these are in Bend, two are in Redmond. Bend has a Golden Age Club which is a social and service organization for senior citizens. Because many people who could be good and active members do not accept their senior citizenship, membership is a problem. There is also a Senior Citizens' Volunteer Council which does volunteer work at the nursing homes and for some private senior citizens. There are not enough volunteers for the council. However, the council also has noted that there are many people who should be receiving some of the services of the council (such as a regular call to make sure that all is well) but who again will not accept the services.

■ *That housing be designed and developed for the senior citizen no longer wanting to or able to care completely for himself but who is not ready to live in a nursing home.*

The committee noted that several types of housing are available in Oregon for senior citizens. Some have been developed through federal, community, or church finances. Some areas have used existing structures, including motels, while others have built new facilities. To be of adequate service to the community and to senior citizens, the housing must provide for some low rentals; must be near a shopping center; must include safety features; must have a recreation room and an area for small group meetings and/or counseling; should include kitchenettes with each apartment; and should provide one hot group meal per day. There should also be someone available to handle emergencies.

■ *That a catering program be developed to serve one daily hot meal to senior citizens.*

Many of the senior citizens, particularly those in a lower income bracket, do not eat an adequate nutritious diet. Reasons may vary from low income to loneliness to the difficulty of preparing food in such small quantities. To be effective, a catering service would have to take the food to the people and both food and service would have to be a nominal price. As a side benefit, this would serve as a daily check on people living alone.

■ *That a senior citizen's counseling service be established in Deschutes County.*

It is difficult for many senior citizens, particularly those with low incomes, to obtain adequate legal aid and general financial advice. A free or low-cost counseling service operating at specific publicized times could offer questions, answers, and interpretations on such topics as wills, investments, financing, taxes, and property. In addition, it could offer help with budgeting and homemaking for two or one. People servicing this type of council could represent various public agencies and businesses such as the health department, the welfare department, the Extension service, banking, and attorneys.

■ *That a public educational program be designed for senior citizens.*

Senior citizens may be faced with extra leisure time, no background in hobbies, and changing and limited abilities. In addition, they are all faced with a changing society and technology. Classes need to be developed and presented just to the senior citizen so that his specific needs are kept in mind. Some topics which might be included are drivers' education



*Counselor works with student from Central Oregon Opportunity Center at 4-H Club summer camp. Pupils were guests of 4-H members attending in 1967.*



and reeducation, budgeting, gun use and safety, water safety, pedestrian safety, and emergency training. Existing organizations which may be able to fill this need include the local school systems, Central Oregon Community College, the Co-operative Extension Service, and the Division of Continuing Education.

■ *That an outlet be arranged for the selling of items made by senior citizens.*

The senior citizens need a "store" which they can manage and stock. This must have a low overhead. Individuals should keep profits from the sales.

■ *That this committee be on record as being in complete support of the Bend Senior Citizens' Volunteer Council and the volunteer work which it is doing for senior citizens.*

■ *That if a day care center is established, the possibility of senior citizens working in the capacity of foster grandparents be considered.*

(See section on Day Care Center for further information.)

■ *That programs which have been developed for study by home economics extension units be extended into other areas of the community.*

Many programs studied by extension units should be of general interest to the public.

Arrangements and publicity should be expanded so that awareness, enthusiasm, and responsibility can be developed.

■ *That a community action panel be initiated in Deschutes County.*

Many federal programs are available through the Office of Economic Opportunity. In order to take advantage of these programs, a community must first be aware of the programs, must be able to educate its people to the value of the program, and must have someone who is able either to administer the new programs or who is able to delegate the programs to responsible agencies or organizations.

■ *That the study of human resources in Deschutes County be continued; that a committee which will be an ongoing study-and-idea committee be organized.*

A few questions which the 1968 committee touched upon but did not pursue are as follows: (1) Is there a need for offering parenthood classes for prospective parents? (2) What resources are available to Deschutes County citizens? How do citizens become aware of these resources? (3) What is being done to expand recreation for youth and for adults in the community? (4) Is there more to be done in youth employment? (5) Have the possibilities for youth counseling service outside the school been explored?

In a 1967 study of the Pacific Northwest, the Battelle Memorial Institute noted that the biggest problem facing communities is that of involving people. Ideas and action which will lead to community development must come from the bottom rather than from the top. The challenge facing communities is to develop awareness.

#### HUMAN RESOURCES COMMITTEE MEMBERS

Mrs. Bertil Nelson, chairman, Bend  
Mrs. John Stenkamp, recorder, Bend  
Harold Black, Bend  
Mrs. Jim Bussard, Bend  
Mrs. Neil Davis, Bend  
Mr. and Mrs. Barney Duberow, Bend  
Mr. and Mrs. Ben Graffenberger, Bend  
Mrs. Ramona Harms, Redmond  
Mrs. Charles Houston, Redmond  
Miss Hiltje Hubbard, Bend  
Howard "Buck" Kauffman, Redmond  
Mrs. Karl Kiesow, Bend  
Mrs. Edith Kirk, Bend  
Ralph Netter, Bend  
Miss Hildur Niskanen, Bend  
Wright Noel, Bend  
Mrs. Randall Reid, Bend  
Frank Sells, Redmond  
Mrs. F. A. Starkey, Bend  
Mrs. Lenor Thornton, Redmond  
Mrs. Nolan Turner, Bend  
Mrs. Larry Valley, Bend  
Mrs. D. J. Ward, Bend  
Mrs. Nell Wescott, Bend

# Agricultural Production and Marketing

Deschutes County's agriculture is based on the 54,667 acres (1)\* of irrigated land and approximately 938,817 acres (2)\* of publicly and privately owned rangeland in the county.

The 1966 Conservation Use Survey lists 47,273 acres in rotation hay and pasture, 1,000 acres in potatoes, 4,200 acres in meadow hay, and 1,580 acres temporarily idle, making a total of 59,073 acres in tillage rotation in the county.

Estimated gross cash farm income for Deschutes County in 1967 was \$6,057,000 (3)\*. Livestock and livestock products accounted for \$4,776,000 of this total and crop sales \$1,281,000. Important income producers are cattle and calves, with \$1,887,000; dairy products, \$1,606,000; poultry and eggs, \$1,044,000; potatoes, \$629,000; and hay crops sold, \$520,000.

Livestock population in the county is estimated to include 9,000 beef cows, 3,400 dairy cows, 5,500 ewes, 50,000 laying hens, and around 190,000 turkeys.

The 1964 agricultural census shows 775 farms in the county, a decrease of 20 since 1959. The number of farms providing the entire family living has been declining at a more rapid rate, however, and the number of part-time farms, retirement farms, and rural residences has been increasing. The 1964 census showed 62 farms with value of farm sales \$20,000 or more.

\*(1) Conservation Needs Survey, 1966

\*(2) USFA, BLM

\*(3) OSU Cooperative Extension Service



*Production of certified Netted Gem seed potatoes is the highest income producing crop presently being grown in commercial quantities in Deschutes county. Use of sprinkler irrigation, as shown in this 150-acre field, has increased yield by giving better control of irrigation water.*

## FARM MANAGEMENT

### TRANSITION FROM COMMERCIAL TO PART-TIME FARMING AND RURAL RESIDENCES

The irrigated portions of Deschutes County within a radius of about five miles from both Bend and Redmond are now mostly composed of rural residences and part-time farms. This type of land use has also increased in all parts of the irrigated farming areas of the county intermixed with commercial farms.

The committee considers that the Arnold and Deschutes Reclamation and Irrigation Company (Swalley), most of the Tumalo district, and the parts of the Central Oregon Irrigation District between Bend and Redmond and adjacent to Redmond are, with the exception of Grade A dairies and possibly a few specialized poultry farms, going to develop within the next 10 years into almost exclusive areas of rural residences and small part-time farms. Areas expected to remain in predominantly commercial agriculture include the Squaw Creek Irrigation District, the community northeast of Redmond, much of the Terrebonne community, and the Alfalfa community.

### AGRICULTURAL PROBLEMS OF PART-TIME FARMS

#### WATER MANAGEMENT

As irrigated farms are broken up into tracts of five acres or less, distribution of irrigation water becomes difficult without incurring proportionately high costs. The committee suggests that subdividers developing tracts of this type install pipeline systems for delivery of irrigation water from a central reservoir. When this type of installation is not made, formation of water-user groups among the tract owners to enable installation of irrigation-water distribution systems should be undertaken.

#### PEST CONTROL

Development of part-time farms and small agricultural tracts has compounded the control of noxious weeds and such rodent pests as ground squirrels and gophers. The tracts of which no productive use is being made produce weeds that not only spread to other tracts and farms in the area but become eyesores. Little knowledge of pest controls exists among owners of these lands, and most do not have the equipment necessary for weed-control measures.

The committee recommends educational programs as the means of solving this problem. The Extension Service should hold continuing educational programs to acquaint part-time farmers and others with the problem and with the approved methods of pest control.

### PROFITABLE USE OF PART-TIME FARMS

It is the opinion of the committee that most part-time farms in the county are unprofitable. It is a common saying that part-time farm owners must have a good income in order to support the farm. Reasons for this situation include high land costs and high taxation, lack of farming skills on the part of the owner, high cost of owning farm equipment, and lack of financing.

Many owners of part-time farms are willing and able to pay the costs of ownership because of the advantages of rural living and the expectancy of profiting from increasing land values. Others, particularly those coming into the county as semi-retired persons or persons with little knowledge of the demands for successful agricultural production, are disappointed and in some cases suffer financial loss.

Many part-time farmers desire to use their farmland for pasture for cattle or horses. Suggestions for improving pasture production are given elsewhere in the report. While other uses are limited, the committee suggests production of adapted shrubs and ground-cover plants and ornamental trees on some farms as a one-crop possibility. Some part-time farmers have been successful in producing and selling small fruits such as raspberries and strawberries. The retired person with experience in crop production has in some instances added to income by growing adapted crops for which there was a local market.

### HOME INDUSTRY FOR PART-TIME FARMERS

The committee suggests development of home industry or services by the part-time farmer to supplement income. Woodworking, crafts, machine repair, contract assembling of machinery, and similar activities are suggested. Enterprises associated with the tourist industry, such as rock shops, offer some possibility for the semi-retired rural residents or the part-time farm family.

### FARM FINANCING

The well-established, successful farmer is generally adequately financed in the county. Some criticism of inconsistent agricultural loan policies on the part of chain banks, primarily

due to changes adopted by the bank's central office, was mentioned as a problem by the committee.

The farmer new to agriculture or new to the county has more difficulty in getting adequate financing, particularly for machinery and livestock purchase. Farmers with inadequate capital to make them eligible for either production credit association or bank loans in some instances find loans available through the Farmers Home Administration inadequate to develop commercial size enterprises.

### TAXATION

Taxes on farm property are one of the major costs of production. The committee feels that farmland owners are paying a greater proportion of taxes to support schools and government services than other segments of the economy. They consider taxes on personal property as basically unfair. As an example, the livestock owner is taxed on a higher proportion of his investment than other types of farmers. In the county it is not uncommon for the taxes paid on some farms, including personal property, to exceed the net income.

The farmer has one major disadvantage in paying taxes compared to other owners of income-producing property. He cannot add the cost of his taxes to the price of the product he sells as can public utility, manufacturers, rental-property owners, or the retailers.

The committee is agreed on the necessity of shifting the tax burden from agricultural property. In some areas of the county the farm-use assessment method may bring about some needed equalization. The need to broaden the tax base in the state and to set constitutional limits on property taxation is recognized.

### FARM BUSINESS MANAGEMENT

Many farm operators do not keep adequate records of their farm business in order to measure the profitableness of different enterprises and operations. The committee feels these farmers will have to improve their record keeping and farm-business analysis in order to stay in business. The use of one of the numerous electronic record keeping systems available is suggested.

The committee feels that the key to improvement in agricultural prosperity is improvement of marketing. The committee also feels that the development of bargaining associations controlled by the producer offers opportunity for improvement of prices received for farm commodities.

## DAIRYING

It is the opinion of the committee that dairy farming offers greater opportunities for making profit than other types of livestock farming in central Oregon. There are no apparent reasons why the industry should not expand.

High-quality alfalfa hay is available in central Oregon at prices lower than for similar quality in Willamette Valley points. Grain prices are comparable with most valley points.

Property taxes, while high, are lower than in most valley counties. Markets and services for dairymen are generally good. The area is less populous and is an attractive place to live and raise a family.

Some disadvantages include a milk-hauling rate for most milk produced in the area that is higher than the average in Oregon. Some milk is processed and sold in central Oregon, but the major portion is shipped to Eugene. Some machinery and equipment parts are slow to obtain because they are not stocked in the area.

### ADVANTAGES AND DISADVANTAGES OF DAIRY FARMING

Central Oregon's dry, moderate climate is suited to dairy farming. Cows are left out all year, but dairymen should plan on housing for the milking herd. Young stock can find shelter among the juniper trees found on most farms.

## SIZE OF DAIRY FARMS

Thirty cows is considered about the minimum size for a family dairy; the average is higher. The smaller herds of high-producing cows, averaging 400,000 pounds of milk per dairyman annually, have been profitable. The large, dry-lot type of dairy is also considered to be adapted to the area, although new dairies of this type coming into the area would have to have their milk hauled to Willamette Valley points.

## AVAILABLE SERVICES AND SUGGESTED IMPROVEMENTS

### DAIRY MARKETING SERVICES

Dairy marketing services in the area are adequate, with two large cooperatives offering opportunities for markets. Several local processors, some of them producer-distributors, also provide a market for some producers. Consolidation of cooperative marketing firms might have advantages for producer members, but the milk still would have to be hauled to points of consumption 130 miles to 150 miles away, as local production exceeds consumption.

### OTHER SERVICES TO DAIRYMEN

Excellent veterinary services are available to dairymen in the area, as are artificial-breeding services at competitive prices. The committee expressed the opinion that service for maintenance of milking equipment is generally inadequate.

## EDUCATIONAL OFFERINGS TO DAIRYMEN

The committee feels that educational programs offered for dairy farmers are adequate. The problem is to get farmer participation.

### DAIRY LABOR

Dairy labor with adequate training or experience is not readily available in central Oregon. The committee feels that until there is a greater demand for such labor resulting from expansion of the dairy industry not a great deal can be done to improve the local dairy labor situation.

### DAIRY-PRODUCT ADVERTISING

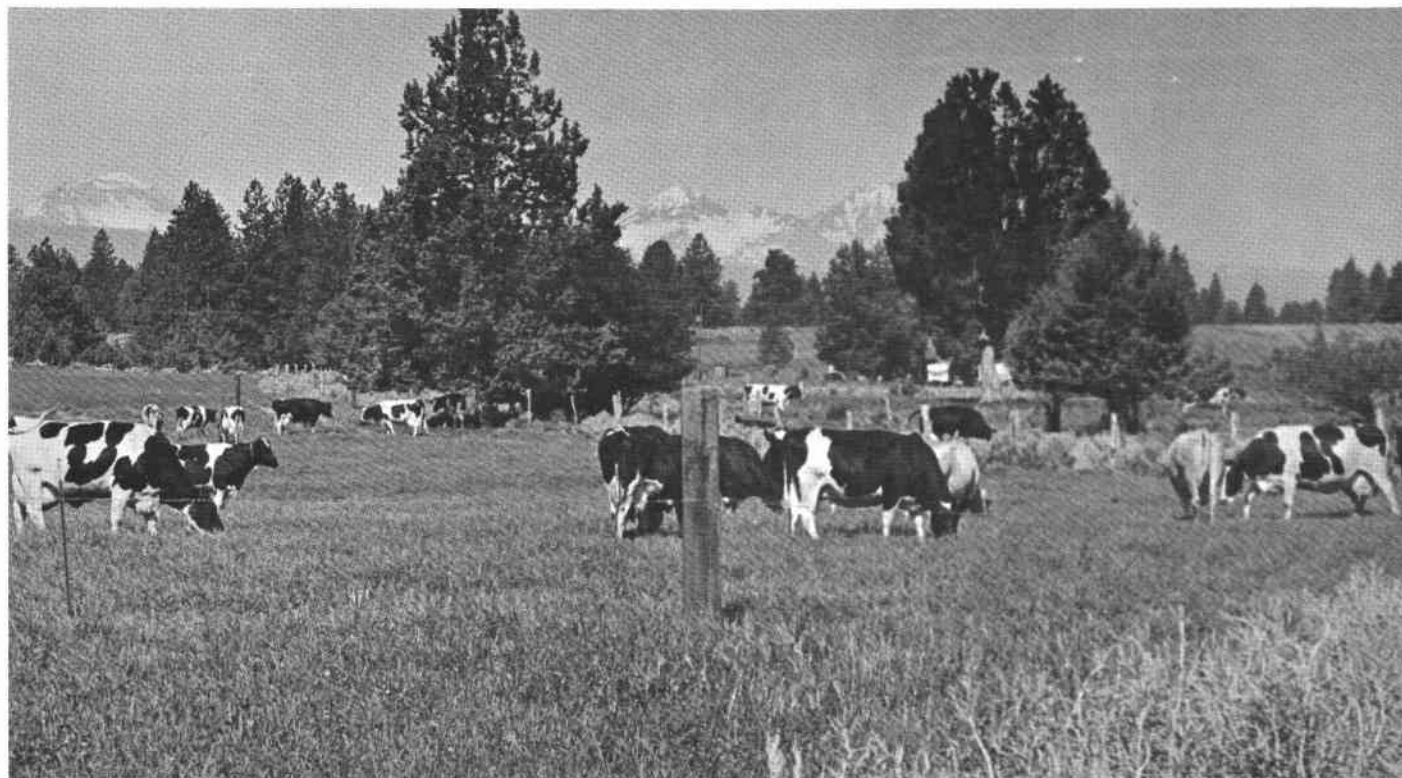
The dairy industry should increase expenditures for dairy-product advertising. The objective should be to increase per capita consumption of milk and other dairy products in competition with other beverages and competing products. Present programs of the Oregon Dairy Products Commission and the American Dairy Association should be expanded.

### DAIRY-PRODUCT RESEARCH

Research that will lead to development of new products that will increase consumption of milk should be carried out by the industry at both publicly and privately owned research centers.

### FEDERAL MARKETING ORDER

The committee favors the development of a federal milk marketing order for Oregon and urges continuation of the steps being taken by certain dairy-marketing groups to secure such an order. The committee recommends that the federal order be patterned after the present milk marketing act in effect in Oregon.



*Dairy farming offers greater opportunities for making profit than other types of livestock farming in Central Oregon. There are no apparent reasons why the industry should not expand.*

# CROPS

## HAY

Most of the 25,000 acres in hay production in the county is alfalfa, or alfalfa-and-grass mixtures. When all costs are considered, including return to investment and labor, the major portion of the hay acreage does not return cost of production. At prices received for hay in recent years, production in excess of four tons per acre is needed to meet costs. A number of commercial farmers growing potatoes consider that they break even on production of alfalfa hay, which is needed in a potato rotation.

Improvements in production practices on land suitable for alfalfa and alfalfa-grass mixtures are needed to make hay growing profitable. These include improved land preparation for seeding, fertilization, irrigation, and harvesting.

## PASTURE

About 40% of the irrigated cropland is in pasture. Seventy-five percent of the irrigated pastures could be improved by use of better varieties, fertilization, irrigation, and livestock management. With improvement in pastures, numbers of livestock raised could be increased. The committee feels that from 2 to 2½ animal units per acre could be carried for five months with good management practices. This carrying capacity would bring in greater returns than hay production.

On many part-time farms the most profitable use of all cropland would be for pasture production. Investment in machinery for harvesting hay on small acreages makes a high per acre cost.

## GRAIN

Deschutes County is not considered a grain-growing area. Grain, mostly winter wheat and oats, is grown in the potato-grain-alfalfa rotation or is used on farms where potatoes are not grown at the time pasture or alfalfa is plowed. Yields in excess of 80 bushels per acre are needed for profitable winter wheat production.

## POTATOES

Potato production offers the best opportunity for high return per acre of any crop grown presently in the county. The majority of growers who have stayed in potato production for a number of years grow certified seed, particularly in the areas with the shorter growing season. Yields for most growers are limited by the growing season rather than by agricultural practices.

Solid set sprinkler systems have shown promise of increasing production by extending the growing season and providing uniform water application. If this method of sprinkler irrigation can be successfully adopted, the increased tuber size and total production will allow local growers to better compete on the commercial market.

The reputation of central Oregon seed potatoes needs to be improved and the marketing area expanded. Most of the seed potatoes produced in Deschutes County are now marketed in Jefferson County, leaving the grower no alternate outlet for his seed. The commercial grower has shown preference

in some cases for Montana-produced seed. Some of this preference is based on more uniformity in size and higher quality of seed shipped in from outside the area. In some instances local growers have indicated a need to upgrade the quality of seed offered. Consistent production of high-quality seed potatoes by central Oregon growers, coupled with a vigorous sales campaign among commercial growers, both in central Oregon and in other commercial growing areas, is recommended.

## SEED POTATO CERTIFICATION

The committee recommends the formation of a seed certification association to administer the seed potato certification program in place of the present program administered by the Extension service of Oregon State University. Such an association, similar to the crop improvement associations in neighboring states, could handle certification of all crops as well as of seed potatoes. The committee feels that such an organization would provide greater opportunity for selection of qualified seed-certification staff and more efficient service to the grower. An association of this type would work closely with Oregon State University in a crop improvement program.

## NEW CROPS FOR THE COUNTY

Climate limits the kinds of crops that can be grown successfully in the county. Only hardy crops that will survive the frosts in June and September can be grown.

Mint production for both certified roots and oil may offer the greatest opportunity of crops new to the county. Jefferson County, which is the largest commercial mint-producing county in the United States, can no longer grow certified mint roots. Deschutes County growers could supply the need for clean roots in this area as well as in the Willamette Valley and out of state.

Garlic, onions, carrots, other root crops, and cole crops can be grown successfully in the county. Markets for these crops need to be developed. Distance from large consuming centers handicaps market development.

## WEED CONTROL

Noxious weeds are not being controlled on many farms and on city lots in the county. Quackgrass is particularly a problem.

## PROMOTION OF AGRICULTURAL DEVELOPMENT

Permanent farm committees should work with chambers of commerce, service clubs, and other urban groups to develop market outlets, including processing plants, for crops that can be grown in the county. Such committees can promote general agricultural interests. Farmers often cannot produce a crop successfully and market it as well. Growers need to work with processors or marketing agencies in development of markets for new crops that can be grown here.

115  
\$8.96

## LIVESTOCK

Inexpensive feed and better marketing practices are the major needs of the livestock industry in Deschutes County.

### SUGGESTIONS AND RECOMMENDATIONS

■ Beef-cattle raisers should plan their operations with the assumption that beef-cattle prices will not reach higher levels than have been prevalent during the past five years. That a gradual increase in the production of beef and competition from other meats will keep prices from moving higher is the opinion of the committee.

■ Development of a consignment feeder-cattle sale at Redmond for several central Oregon counties has possibilities of attracting buyers from out-of-state points and eventually bringing a higher price for feeder calves and yearlings. The Deschutes County Cattlemen's Association, which is contemplating sponsorship of such a sale to be held at the Redmond auction yard, should be encouraged to survey cattlemen in the five- or six-county area to determine if interest can be developed in such a sale.

■ The committee supports efforts of the Oregon Beef Council in advertising beef and encourages all forms of advertising of meat to encourage increased consumption.

■ The greatest opportunity Deschutes County stockmen have to cheapen cost of feed is by more intensive management and development of pastures and ranges.

■ Increasing size of the beef enterprise is needed on many commercial cattle ranches and irrigated farms specializing in beef raising. With present high land costs and difficulty in getting adequate financing, increasing size is difficult and usually economically unfeasible because of high capital repayment requirements. The organization of grazing associations, such as the Hampton Butte Grazing Association, to buy range properties offers possibilities and should be investigated by cattlemen's organizations, the Extension service, and the Farmers Home Administration.

■ Retarding the formation of additional grazing associations in range areas is the high price of rangeland, which makes animal-unit month grazing costs excessively high. There are possibilities of organizing grazing associations to purchase and operate irrigated farms that can be used for pastures. Steps should be taken by the agencies mentioned above and by qualified individuals to organize this type of cooperative where feasible.

■ A suggested beef enterprise for the commercial irrigated farm or part-time farm would be purchasing feeder calves in the fall, wintering them on hay and some grain, and pasturing

them on the farm during the grazing season. Purchasing hay is suggested for part-time farmers, rather than attempting to raise both hay and pasture. A budget for this enterprise, using prices prevalent during the past few years and daily gains the committee members felt they could get, is shown below:

400-lb. steer calf @ 28c . . . . .	\$112.00
One ton alfalfa-grass hay @ \$27 . . . . .	27.00
One hundred eighty pounds of grain @ \$3.50 . . . . .	6.30
Four yearling months pasture @ \$7/AUM (estimated cost of production) . . . . .	21.00
Overhead cost (hauling, vaccination, machine use, interest) . . . . .	12.00
Death loss (2% average value) . . . . .	3.06
<b>Total . . . . .</b>	<b>\$181.36</b>

Winter period gain, 1¼ lbs. day,  
180 days = 225 lbs.

Summer period gain, 2½ lbs./day,  
120 days = 300 lbs.

Purchase weight . . . . . = 400 lbs.

925 lbs.

925 lbs. @ 21c . . . . . \$194.25

Net Return for Labor and Management . . \$ 12.89

■ The committee feels that using good management practices an experienced cattleman could feed to a slaughter grade on pasture and increase the net return per animal from \$10 to \$15. Feeding of grain would need to be done the last 90 days of the pasture season, and a slaughter grade of Good should be reached.

■ During years thin beef cows are available in the late winter or spring, profitable gains have been made by pasturing to a slaughter grade of Utility or Standard. Some farmers also maintain a profitable beef enterprise by keeping a few milk cows to raise calves. These calves are sold mostly as feeders. One thousand pounds of beef can be raised per cow per year.

■ Sheep raising offers possibilities for profit on the part-time farm, or as a supplemental enterprise on a commercial farm. Good management resulting in 125% or more lambs sold at slaughter grade per ewe is essential for profit.

■ The only opportunities for profitable hog raising in Deschutes County, in the opinion of the committee, are for those with garbage contracts, or in a few instances the raising of superior quality weaner pigs for contract feeder market. Grain costs are considered to be too high for hog raisers to compete with hogs raised in areas where feed costs are materially lower.

## POULTRY

The number of egg producers in Deschutes County has declined drastically within the last five years. Turkey production has increased with the addition of one large, integrated turkey-raising business. Other turkey raisers have stopped production.

At the present time, there are two poultry farms selling market eggs in the county. One of these is an enterprise of about 1,500 hens; the other, 15,000 layers. Sales from both of these poultry farms are made mostly in Redmond and the

surrounding area. There are a few small farm flocks scattered throughout the county producing eggs that are sold to neighbors and a few others. Most farms and part-time farms in the county do not keep a laying flock.

Six poultry farms are now raising hatching eggs, all but one for production of broiler chicks. These range in size from approximately 1,500 to 6,000 birds.

The turkey business, located near Redmond, produces approximately 200,000 turkeys per year.



Most of the market eggs sold in the county are supplied through one handler in Bend or through chain stores. Eggs are mostly produced at large integrated poultry farms in California or in the Willamette Valley.

## MARKET-EGG FLOCKS

The reduction in the number of poultry farmers producing market eggs for local sale is due primarily to high feed costs in central Oregon, compared with California and Willamette Valley points. Per ton cost of feed in the central valley of California will be approximately \$65 per ton, compared with \$80 to \$85 a ton in central Oregon. Feed costs in the Willamette Valley for laying mash will be \$4 to \$5 lower than in central Oregon.

Large-scale market-egg producers with lower costs can ship eggs into central Oregon to sell at current egg prices and continue to make money, whereas local producers find their returns lower than their cost of production.

Local market-egg producers feel that to meet this competition they need to be particularly efficient and probably should be mixing their own feeds if this will reduce costs of feed. High production must be maintained and costs be kept as low as possible if they are to stay in business under present market conditions.

## HATCHING-EGG PRODUCTION

The production of hatching eggs mostly for broiler chicks had been expanded in Deschutes County until the past year or two, when production declined. The county is considered a desirable area for the production of hatching-eggs with a 5% to 7% higher hatchability claimed for eggs produced in central Oregon compared with western Oregon production.

At the present time hatching-eggs are produced by a few farmers under verbal contract to hatcheries in western Oregon. The enterprise is generally a supplemental one, even though as many as 5,000 birds are kept on some farms. Although the margin of profit per bird is small, the enterprise has kept some small farmers in business.

The committee feels that because of the desirable climatic conditions for the production of hatching-eggs, production could increase in central Oregon probably as a part-time enterprise of 1,500 to 5,000 or more birds per unit. There apparently is no demand for large-scale production of hatching-eggs at the present time.

## TURKEY PRODUCTION

In the past, turkeys were produced on many farms in Deschutes County, but production had declined till only one farm was producing turkeys up until 1966, when a large integrated turkey-production firm moved into the county. The firm was reorganized in 1967, two large broiler houses were built, and the production of approximately 200,000 birds was achieved in 1967. Climatic conditions in central Oregon are considered to be desirable for turkey production. These conditions may attract further expansion on an integrated basis.

Low prices have discouraged production of turkeys as a side-line enterprise, since the margin of profit is too small.

The committee sees some disadvantages in large-scale integrated turkey production in the county, mainly because of the distances from processing plants and from feed-producing areas. All feed used by the turkey enterprise is hauled in from out of the county.

Possibilities of expanding turkey production in the county, either by the single firm now in business or by additional firms, which would enable the construction of a processing plant, would add to the county's industrial capacity and to local employment.

## POULTRY MARKETING

Producers of market eggs, particularly in the county, are interested in investigating possibilities of market quotas for poultry producers in the United States. They recommend study by competent authorities to determine whether this type of marketing procedure could be established.

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### AGRICULTURAL PRODUCTION AND MARKETING COMMITTEE MEMBERS

George Hostetler, chairman, Redmond

John Eberhard, recorder, Redmond

#### *Crops Subcommittee*

Jim Klukkert, chairman, Redmond

Bob Beesley, Bend	Archie Masterson, Redmond
Lee Goodrich, Redmond	Adrian Ruth, Redmond
Malcolm Johnson, Redmond	Ted Thorson, Redmond
Jack Ledbetter, Redmond	Paul Kortge, Redmond

#### *Livestock Subcommittee*

Al Wallace, chairman, Bend

Jim Gardner, Redmond	Frank Phillips, Redmond
Clyde Penhollow, Redmond	Farris Spaulding, Redmond

#### *Farm Management Subcommittee*

Frank Nolan, chairman, Redmond

Lawrence Allen, Bend	Willard Cyrus, Sisters
Glenn Barnes, Redmond	B. L. Fleck, Redmond
Eugene Brink, Bend	Meade Pedersen, Bend

#### *Dairy Subcommittee*

Kenneth Huddle, chairman, Redmond

Roy Burk, Redmond	Oswald Hanson, Bend
Leslie Carlsen, Redmond	George Hostetler, Redmond
Wallace Crawford, Bend	Bertil Nelson, Bend
John Eberhard, Redmond	

#### *Poultry Subcommittee*

Jim Swift, Terrebonne	Leonard Rank, Terrebonne
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# Industrial Development

## BASIC CONSIDERATIONS

Deschutes County has only one natural geographic boundary, to the west. The majority of the county lies within the area known as central Oregon and shares common geographic features and advantages with Crook County to the north and east and with Jefferson County to the north.

Central Oregon is small in size and well developed in interarea roads, with a common development throughout the area of the tourist, wood-products, and agricultural industries; consequently, any activity which benefits or damages one part of central Oregon has a direct and immediate effect on the rest of the area.

For these and other reasons, the committee feels that all of central Oregon shares a common future, and any attempt to plan or project the industrial development of any portion of the area must include consideration of the entire area.

At the present time there is often duplication of effort in the promotion of industrial development by the chambers of commerce of the four major cities in the area. The committee feels that the presently organized Central Oregon Chamber of Commerce is a possible vehicle for coordinating necessary industrial promotion activities and minimizing such duplication. The committee also feels that there is no place for vestiges of intercity or intercounty rivalry which may exist and could be damaging to orderly industrial development.

## INDUSTRIAL CLIMATE

Physically, Deschutes County has many advantages for industrial development. There is ample land available, with specific areas of considerable size dedicated to this purpose. The county lies near the center of the state, with good year-round access to all other parts of Oregon. The climate is moderate, with only rare extremes of heat or cold. All parts of the county are well connected with roads for personal and industrial transportation.

Deschutes County enjoys an active private program to aid industrial development. The chambers of commerce in Bend and Redmond are very active, with special committees directed toward the encouragement and assistance of industry in the area. Each city has a specific land area dedicated to industrial development. The Bend Industrial Development Corporation actively promotes and assists industry in the Bend area, and Redmond has a like organization which could become equally active. With the exception of specialized engineering services, such as electronics and hydraulics, the county has excellent professional services for industrial clients. The three banking institutions in the county offer competitive and aggressive assistance to anyone interested in industrial development. Private individuals throughout the county have always been active in encouraging industrial development.

Governmental assistance at the state level exists through the Economic Development Division of the Oregon Department of Commerce for promotion and assistance in industrial development at the county level; however, the committee recommends that the main promotional activity remain the responsibility of the chambers of commerce.

## LABOR SITUATION

After thorough consideration, the committee concludes that the availability of labor in Deschutes County is adequate for any projected industries that might locate here. There may be a shortage in a very few skilled trades, but the high level of general education in the county would allow any potential industry to quickly train the necessary labor force. Too, Central Oregon Community College has developed programs with the flexibility and capacity to provide intensive training in any field. Because of the high "livability" rating for all of central Oregon, it would not be difficult to attract specially skilled laborers required for any industry. In addition, there is a constant influx of skilled and semiskilled laborers who are unable to find employment in their specialties in central Oregon, and who find it necessary to move on to areas which are less desirable from the standpoint of living, but which offer them employment.

There is at present no unfulfilled demand for labor within Deschutes County. All demands have been met within a reasonable time, often through the local offices of the State Department of Employment. The committee feels that a plentiful supply of laborers of all types could be provided upon relatively short notice if the demand existed, and that the industrial development of Deschutes County is not hindered in any way by the present labor situation.

The committee also recognizes that wage levels in Deschutes County are low in comparison with industrialized areas in the neighboring states of Washington and California. Any substantial industrialization in central Oregon would require a general increase in wage levels. Also the basic cost of living (food, housing, clothing) in Deschutes County is high in relation to the prevailing wage level. The lower cost of recreation does provide some saving in this area.

In summary, the committee feels that the labor situation in Deschutes County is excellent for the future industrial development of the county when viewed in the traditional context of supply and demand.

## TRENDS IN INDUSTRIAL DEVELOPMENT

Historically, industrial development in Deschutes County has been associated with available natural resources and materials, particularly in the wood-products field. There has also been some quite successful development in specialized industries by small companies.

The committee recognizes that historical development also forecasts future trends. The forested half of the county provides the logical raw-material base for further expansion of the wood-products industries. Future development should logically include (1) more intensive forestry management practices to greatly increase production of usable wood; (2) more complete utilization of such presently little-used species as lodgepole pine; and (3) further development in remanufacturing.



*About 968,990 acres in Deschutes County are classed as forest land. The forested half of the county provides the logical raw material base for further expansion of the wood products industry. (Photo by H. Peter Wingle, Deschutes National Forest)*

Presently, much of the total productivity of our forests is wasted on trees that fail to reach usable size. Less than half of the total wood ends up as usable material that is hauled to the mill. Two approaches to eliminating this waste are possible, one seeking to utilize smaller trees and the other aiming to concentrate wood production on fewer, larger trees. Greatest progress might be achieved with a two-pronged attack.

The development of new machinery and new techniques for handling small logs efficiently, both at the mill and in the woods, are the main requirements for the utilization of smaller trees. Recent progress in this direction has started utilization of a part of the wood in our lodgepole pine forests.

Reducing the number of trees at any early age, by thinning to the point where all can reach salable size, substantially increases usable wood production and increases the growth rate of remaining trees. Later thinnings are required to salvage low-vigor trees and provide enough space for continued rapid growth of the remaining trees to yield usable products and an immediate profit. A thinning program in precommercial-sized pine stands is getting under way in the county. Acreage involved is beginning to be significant, and substantial progress has been made in reducing costs. This program needs

to be further expanded, and benefits need to be emphasized if they are to reflect increased allowable cuts.

Other opportunities for increasing productivity of our forests also exist. Benefits from fertilization, irrigation, better insect and disease control, and improved tree varieties could all be substantial. All of these avenues to increased production should be explored.

The committee accepts as an economic fact that the greatest potential industrial development of the county lies in further and more productive use of its substantial forest resource. The committee feels that all elements within Deschutes County that are concerned with industrial development in the area should institute a close working relationship with all parties now concerned with industrial development of the county's wood-product industries, both public and private, in order to promote a coordinated and responsible maximum use of this vast resource.

The committee recognizes the desire within the area to limit the development of such wood products-related industries as pulp and kraft mills, primarily because such plants as presently operated detract from the livability of the area. However, the committee recommends a coordinated study of the feasibility of the construction of pulp and paper facilities

in central Oregon, towards the end that if such facilities should exist they be located and operated in such a way as to have no detrimental effect on livability.

The committee recognizes the importance of the tourist and recreational industries in Deschutes County. These attractions are a very desirable form of industrial development, and the continuation of such interest in the area is essential to the future of these industries. The committee also feels that central Oregon has not yet reached its potential as a winter recreation area, and that the promotion of the area as a year-round playground should continue.

Aside from the tourist and forest-products industries, the committee feels that the industrial development of Deschutes County and all of central Oregon within the next 10 years will be one in which individual industries locate here because of the wish on the part of management to locate in such a desirable area.

## TRANSPORTATION

The committee views transportation as one of the vital factors in the industrial development of Deschutes County.

Motor-freight transportation is excellent at present and is in a position to grow and support any future demand. Rail-freight transportation is also excellent.

The major transportation problem in Deschutes County is in air transportation. Although there is no great demand at present for air-freight service, such a demand will probably arise in the future, particularly if highly technical industrial development requires supply deliveries or moves specialty products out by air.

The committee recognizes the invaluable asset to all of central Oregon represented by the airport at Redmond, sec-

ond largest in the state and one of the only two east of the Cascades having jet fuel available, and discourages any attempt to develop a second commercial airport in the Bend vicinity.

The committee also recommends the maximum development of the airport at Redmond as the single and coordinated commercial airport facility for all of central Oregon. Facilities for individual private planes now exist in the other central Oregon communities; they should be fully developed.

The Redmond Airport and its adjoining land is the logical location for development of a central warehousing facility for subdistribution throughout central Oregon and perhaps all of eastern Oregon. The committee feels that maximization of the airport's potential cannot be realized under the present restrictions of the Federal Airport Act of 1946, under which the airport was acquired by the City of Redmond, and encourages present efforts on the part of the Redmond Airport Commission to correct this status.

### INDUSTRIAL COMMITTEE MEMBERS

Chuck Austin, Bend	Carl Degner, Redmond
Dave Berger, Bend	Ed Kelsay, Redmond
Gary Child, Redmond	R. G. McFarland, Bend
R. B. Coyner, Redmond	Leonard Nord, Redmond
Walter Dahms, Bend	Bob Whittier, Redmond
Dike Dame, Bend	G. E. Wiley, Bend

### ADVISORY MEMBERS

Sam Johnson, State Representative, Redmond  
William Jossy, Trans Western Express, Redmond  
Bob Leavengood, U. S. Forest Service, Bend  
G. E. McCann, county commissioner, Bend  
Clark Price, manager, Oregon Employment Service, Bend  
R. H. Sterling, county extension agent, recorder, Redmond

# Range

Deschutes County is 1,937,280 acres in size, with the federal government administering 72.4% (1,411,690 acres) of the land. Essentially, 100% of the federal land is grazed by wildlife. Domestic livestock graze on approximately 65% of the federal lands. Other rangelands grazed by domestic livestock and wildlife total approximately 200,000 acres.

## SUGGESTIONS

■ Domestic livestock numbers can be increased significantly through management and improvement practices such as water development, brush control, seeding, and fencing. Forage production may be increased two-to tenfold through these proven practices or combinations thereof where feasible.

■ Over 600,000 acres are infested with undesirable brush and would respond to a control program. Brush control would increase the available forage for both wildlife and domestic livestock. The committee recommends that all brush control sites be examined for possible detrimental effects and that the multiple-use concept be considered in all programs. The committee agrees that no detrimental effects have been observed from previous brush-control programs.

■ Seeding of desirable forage species is a constant need for both domestic livestock and wildlife. The committee encour-

ages seeding and recommends immediate action be taken by the responsible persons or agencies in the event of range fires to rehabilitate the damaged area. The committee is aware of the fine job that has been done in recent years in this respect by federal agencies and duly commends them.

■ Deschutes County owns considerable land that is leased for grazing purposes. The committee compliments the members of the County Court for their interest in range improvement and their participation in working out a reasonable program with the lessee when he is active in range improvement on county lands.

■ There are some "wild" horses in Deschutes County. The committee holds the opinion that because of range needs for wildlife and domestic livestock and the dispersion of private and public lands, no suitable area now exists in Deschutes County for the maintenance of "wild" horses. It is recommended that persons owning horses running uncontrolled on any rangeland be requested to bring them in.

■ Predators have been a problem to both managers of wildlife and livestock. The committee recommends that the predator program be continued with the support of the county court.

■ Lack of moisture is a problem on rangelands as well as other lands within the county. Encouragement should be given

to those working on the possibilities of increased precipitation.

■ The Cascade Mountains supply grazing for both wildlife and domestic livestock along with timber production and recreation. The committee recommends that the United States Forest Service administer those lands in Deschutes County rather than developing a national park as proposed for certain parts of the Cascades. The continuation of the multiple-use principle is recommended.

■ The committee is aware of the problems of the landowner with regard to public access and feels that efforts should be continued to establish better cooperation in order to keep land open for those seeking recreation. Vandalism and other lawless acts have reduced the lands available for public use. Sportsmen policing themselves, rewards, conviction publicity, and removal of hunting licenses were areas suggested as possible means to help solve this problem.

#### RANGE COMMITTEE MEMBERS

Charles Trachsel, Redmond, chairman  
Francis Stokesberry, Bend  
Omar Moffitt, Brothers  
Barry O'Conner, Bend  
Don Williams, Terrebonne  
John Manning, Redmond  
Harry Hegardt, Redmond

Dwight Conley, Bureau of Land Management, Prineville  
Paul Bonn, Oregon State Game Commission, Bend  
C. R. May, Bureau of Land Management, Prineville  
Derald Walker, recorder, Oregon State Game Commission,  
Prineville

Andy Ryan, Bureau of Land Management, Prineville  
Harold Winegar, Oregon State Game Commission, Prineville  
Milt Griffith, U. S. Forest Service, Bend



*Domestic livestock graze on approximately 918,000 acres of federal government-administered lands and 200,000 acres of privately-owned land in the county. The numbers of domestic livestock grazed can be increased significantly through management and improvement practices, such as water development, brush control, seeding and fencing. (Photo by Child's Photographers, Redmond)*

# Recreation

Recreation in Deschutes County is closely allied to the recreational development of the central Oregon area. The region is one of the most abundant areas of natural attractions in the Pacific Northwest. The resource which is least developed and which promises the greatest improvement to the economic growth of Deschutes County and the region is recreation and the industries which support it. The resources upon which recreation depends—scenic and other outdoor attractions—are not subject to depletion when properly managed.

The demand for recreational areas and facilities is expected to increase threefold by 1985 and ninefold by 2010. The Northwest is relatively uncrowded. Compared to the nation's population density of 54 persons per square mile, the Northwest has only 21 persons per square mile, and Deschutes County has only 9.2 persons per square mile. The ownership pattern in Deschutes County, however, is different from that of other areas in the Northwest. Eighty-two percent of the land is in public ownership, and 18% in private ownership.

The improvement in per capita income, the increase in leisure time, and mobility, due to gains in productivity and technology, together with expanding population and a changing style of living, are the primary factors responsible for rapid growth in recreational requirements.

Tourism has had several effects on the central Oregon economy. The first is the direct expenditures by tourists. The second is the introduction of visitors to the desirable living environment here. These visitors may be influenced enough to fill job opportunities in the area or perhaps invest in business in the region.

The greatest demand for recreation will be in heavy-use activities such as picnicking, swimming, and winter sports, where the important factor is not the number of acres available but how they are developed and used. It is possible by the turn of the century that tourism alone, in terms of employment, will be the largest basic industry in the Pacific Northwest as well as in Deschutes County.

## PLANNING FOR THE FUTURE

The future of central Oregon as a recreational area depends upon the thoroughness of planning for future recreational development and the wise management of present developments. The major government agencies dealing in recreation development, the United States Forest Service, the State Highway Department, and the Bureau of Land Management, have developed comprehensive recreational plans and inventories of their lands.

The committee recommends that a collection of public-agency recreational inventories be made and that these be coordinated, as well as an inventory of the *private* recreation lands and their potential. These should be made in each county by the county planner or similar agent or group. The recreational program should entail a systematic updating process made by the planning commission. A central Oregon or regional recreational development corporation should be formed that will use the results of this committee and function as an action committee to promote, encourage, and guide

the future recreational development in the central Oregon area. This committee should work closely with individual county courts and planning commissions.

The committee recommends that a recreational cost study be made to obtain specific returns by the various tourists—the skier, the fisherman, the camper, the traveler and others—to obtain a price for the total industry. These facts need to be specified to enthruse people about the recreation industry (the businesses associated with recreational activities; i.e.: resorts, a convention center, motels, pack outfits, and like.) This may also help to identify other *compatible* types of commercial industry for the area. These steps are necessary for progress toward a complete recreation plan for the region.

The future development of the road and highway system in the Central Oregon Area will affect the travel patterns of tourists in and out of the region. The most significant highway developments to be completed by 1988 include: a two-lane paved road from Camp Sherman to Lake Billy Chinook, ten months' use; a three-month road from Sisters to the Cascade Lakes Highway; the completion of the Cascade Lakes Highway from Crane Prairie through to Highway 58 near Crescent; a paved road from Highway 58 past the east side of Waldo Lake, and through to the Cascade Lakes Highway; a highway from Crescent Lake to Diamond Lake, as an extension of the Cascade Lakes Highway; and the Cascade Lakes Highway-Benham Falls-Lava Butte loop to tie together the Bend area recreational complex of attractions.

The identification of areas of potential recreational development lies in recreation planning. The forest service is now making a survey to determine the resort potential of individual commercial development sites and to determine what public-service facilities are needed. During the next 10 years expected developments on national forest lands are in the following areas: (1) The Bachelor Butte Ski Area, which will need additional parking facilities, day lodges, chair lifts, and restaurant facilities on the Cascade Lakes Highway. The use and developments around this area are projected to triple during the next 10-year period. (2) Another ski area which may develop within 10 years near Willamette Pass and on in to the Mt. Jefferson area. (3) Resorts which should develop near Suttle Lake, (4) Elk Lake, (5) Crane Prairie, (6) Newberry Crater, and (7) Crescent Lake. These may be new developments or expanded facilities of those in existence. These projections are based upon needs, potential, and present recreational use.

Private developments on national forest land are allowed under terms of special-use permits. This policy allows development of facilities needed by the public, or in the public interest, in exchange for the use of the land. The recreational facilities are varied on national forest land. Some facilities are old and able to provide minimal services, even though demand may be great. In some cases, present owners have neither capital nor managerial ability to develop the facilities to the needed size and scope. There are, however, a number of establishments which are serving the public with needed services and with planned foresight. The awareness of the individual operator of the implications of his function for the prosperity of the state as a whole is necessary. Successful operators willingly make additional investments in planned facility-improvement programs.



## EDUCATION

All residents of central Oregon should recognize recreation as an important industry and educate themselves as salesmen for the area. There are a number of ways which the region can help to promote central Oregon. Tourist schools have been held by the Bend and Redmond chambers of commerce. The committee wishes to encourage the organization of and participation in such schools.

To create an awareness in young people, the committee recommends that a "Know Your Central Oregon Region" series be held in American Government or similar classes in the high schools of the area. Local knowledgeable persons from throughout the region might be persuaded to acquaint young people with the attraction of the area. The formation of a speakers' bureau on recreational development for use in the schools and local service clubs is also a recommendation of the committee.

At this time a great deal of printed material about central Oregon is available from the chambers of commerce, the United States Forest Service, state parks, and the Bureau of Land Management. Businesses are encouraged to have this material available for tourist interest.

## RECREATIONAL NEEDS

That recreational needs in the central Oregon region are many, varied and are exemplified by use of state parks in the area. During the 1967 tourist season, one out of six visitors was turned away because of the lack of space.

In addition to expanded facilities, the committee has identified a number of other areas of need in recreational development:

- Closer cooperation between the local school boards and city councils concerning planning, acquisition, and development of school-park areas is necessary. Such cooperation would provide considerable savings to the taxpayers and the involved organizations.
- Further acquisition of lands with Bend and Redmond for future park development is needed.
- Cooperation between the City of Bend, Deschutes County, and the State Highway Department is necessary to establish standards of development and maintenance plans for Pilot Butte as a recreation area.
- A need is evident for additional resort facilities of the "high-quality" type which encourage longer visits and higher expenditures per visitor to complement the low-cost, low-yield public recreational facilities which are now provided by several public agencies.
- Private development should be encouraged on both private and public lands to provide needed recreational services.
- All recreational facilities should be broadened to provide year-round activity. To provide a sound economic base for our recreation industry, there is a definite need to extend the season of use.

Some specific needs identified by the committee are the following: convention center; year-round swimming facilities; and ice-skating facilities, which would expand our potential as a complete winter-resort area and would also open up two new sport activities to old and young alike, hockey and figure skating.

More facilities for adult recreation are desirable, such as tennis courts, handball courts, and public golf courses. A

tour agency to bring tourists to central Oregon and arrange "package" vacations in the central Oregon region; luxury vacation facilities; and sportsmen's accommodations would enhance this region for recreational enjoyment.

The committee recommends that some summer activity be encouraged, such as the summer theater already started in the Bend area, or a regional art show. Activities of this type must be backed by central Oregon residents to guarantee success.

## LAND-USE REGULATION

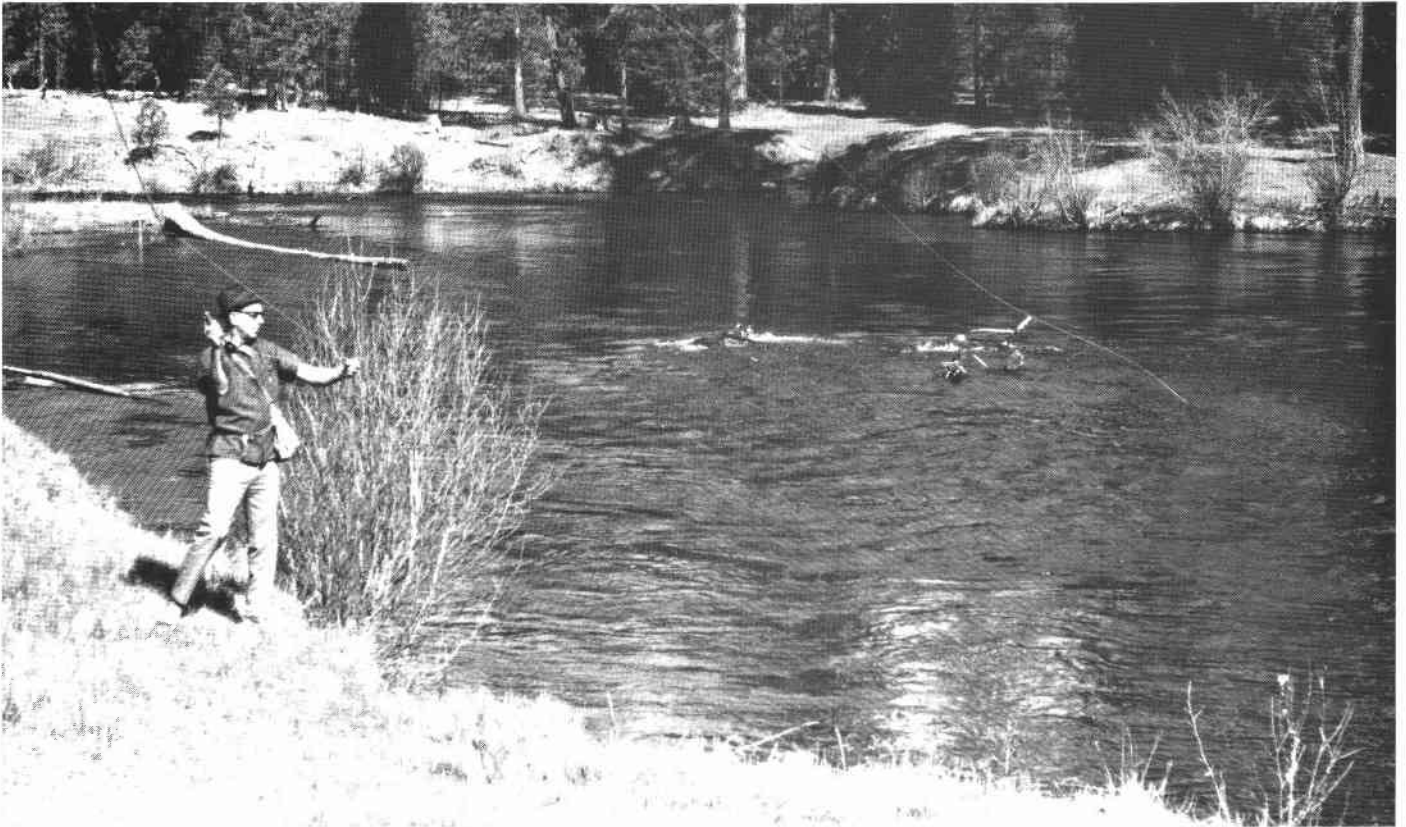
Land-use regulation is a necessary step toward the preservation of the value of the central Oregon area as a prime recreation area. The committee strongly recommends the enactment of zoning regulations to preserve the attractiveness of central Oregon. The desirable physical assets of an area can be accentuated by intelligent planning, sound regulation, and proper enforcement which will provide for a balanced use of the scenic and recreational opportunities of the area.

To preserve the natural atmosphere in the region, the committee recommends that ordinances be adopted at the county or regional level which will assure that there will be no air or water pollution to destroy recreational desirability in central Oregon.

The role of subdivision as it pertains to recreational development is critical in the area. The committee recommends that lands be set aside in subdivisions for recreational purposes. Lands which have been set aside, however, or dedicated by subdividers or landowners for recreational development by a public agency, should be maintained or developed in a reasonable time or revert to the original owner. Maintenance of lands used by the public is necessary to maintain land value and usefulness. Development of park areas is necessary in subdivided plots to maintain an environment of high quality.

The committee recommends that county lands of potential recreational value should be preserved as recreational sites.

A list of reference material considered to be of value to those concerned with recreational planning includes the following:



*Deschutes County is in one of the most abundant areas of natural resource attractions in the Pacific Northwest. The demand for recreational areas and facilities is expected to increase threefold by 1985 and ninefold by 2010. (Photo by H. Peter Wingle, Deschutes National Forest)*

*The Pacific Northwest*, a study of economic growth in a quality environment.  
 Battelle Memorial Institute  
 Columbus Laboratories, Columbus, Ohio  
 December, 1967.

*Background For Planning*, Deschutes County, Oregon  
 Deschutes County Planning Commission  
 May, 1966.

*Guidelines to Planning, Developing & Managing Rural Recreation Enterprises*,  
 Virginia, Cooperative Extension Service,  
 Bulletin 301,  
 September, 1966.

*Oregon Outdoor Recreation*, Third Edition,  
 Oregon State Highway Department  
 February, 1967.

*Skiing Trends and Opportunities in the Western States*,  
 Intermountain Forest & Range Experiment  
 Station, Ogden, Utah  
 USDA, 1967.

*Pacific Northwest Economic Base Study for Power Markets—RECREATION*,  
 Volume II, Part 9, U. S. D. I. Bonneville  
 Power Administration, 1967.

*Outdoor Recreation Space Standards*,  
 U. S. D. I. Bureau of Outdoor Recreation,  
 April, 1967.

RECREATION COMMITTEE MEMBERS

- |                                     |                             |
|-------------------------------------|-----------------------------|
| Mrs. Shirley Ray, recorder,<br>Bend | G. W. McCann, Bend          |
| Ray Bennett, Bend                   | Alice McCormick,<br>Redmond |
| Phil Delucchi, Bend                 | Bob Moore, Prineville       |
| Al Eppenbaugh, Redmond              | Ray Poncy, Bend             |
| Mrs. Helen Evans, LaPine            | George Ray, Bend            |
| Vince Genna, Bend                   | Robert Rea, Bend            |
| Jim Griggs, Bend                    | Pete Staton, Redmond        |
| Chuck Kee, Redmond                  | Ted Thorson, Redmond        |
| Paul Kortge, Redmond                | Pete Wingle, Bend           |

# Local Government

The local government complex in Deschutes County is made up of the county government, the city governments of Bend, Redmond, Sisters, the communities throughout the county, school boards, and special taxing districts.

The county government at this time is made up of three full-time county commissioners and the offices of assessor, sheriff, treasurer, county clerk, surveyor, and district attorney as elective positions. This form of government has worked as a satisfactory body up to this time. The structure, however, leads to a number of separate "kingdoms" within the county government. At this time the court has administrative jurisdiction over the road department and the civil-defense and abundant-food programs only.

The City of Bend is successfully organized under a city-manager form of government with a seven-member commission as the governing body. Through the years since the initiation of this form, the city has developed into a well-organized and functioning body. This is primarily a reflection of the quality of the staff which has built up under this administration.

The City of Redmond functions under a mayor-council form of government, with a full time superintendent of public works and a superintendent of public safety, who are the administrators of their respective departments and are directly responsible to the city council.

## PROBLEMS AND RECOMMENDATIONS

### GOVERNMENT FORMS

The committee considered home rule as a form of government as opposed to the general-law system now in effect. Home rule is a form of government based on a local charter instead of the traditional general law of the state. Home rule permits local people to determine for themselves, through adoption of a charter, how their local government should be organized and what functions it should perform.

Compared to the present system in Deschutes County, county home rule suggests more self-determination, more local control, and more local responsibility in the way the county's government is now organized and operated. It also can mean greater opportunity to determine the rules and public services in each county. For better or for worse, home rule tends to transfer management of county affairs from the state legislature to the county.

The consensus of Local Government Committee was that the charter form would provide a more effective form of government for Deschutes County. The committee recommends that the commissioners to be elected under the charter should be partisan and that the county court should appoint a committee to formulate a charter for consideration by county residents.

### LAND-USE REGULATIONS

Deschutes County now has an abundance of natural physical attractions. The committee recognizes the potential of central Oregon as a recreational area and that recreation may well be the primary industry of our county. Realization of this assumption will require adequate planning. The com-

mittee recommends that land-use regulations should be enacted in this county with close cooperation between the planning commissions of the cities and the county. To facilitate this, the committee recommends that from the seven representative districts in the county on the County Planning Commission, the two from the cities of Bend and Redmond should serve from the planning commissions in their respective cities. Sisters should be considered equally if, at some time in the future, it develops a planning commission. The cities should also contribute to the cost of the proposed planner and, therefore should use the professional guidance for city-county coordination of planning.

To complement the land-use regulations, the committee recommends that the regulations include a building code to preserve public health, safety, and welfare for residential and industrial buildings, and the registration of all other new buildings. The conclusion of the committee is that some sort of regulation is necessary for public protection, in spite of the inconveniences or unpleasantness sometimes involved.

The present sanitary landfill system is an improvement over open burning in the county disposal system. The committee recommends that necessary steps be taken by all local governments within the county to prevent air and water pollution. The committee also recommends that antilitter signs be posted on roads within the county and that law enforcement officials and the district attorney should actively enforce litter laws. Citizens have a definite responsibility to assist in the enforcement of these laws.

The potential use of subsurface water in Deschutes County is great. However, the possible sanitation problems arising from the dumping of effluent into dry holes throughout central Oregon are also great. The present sewage-disposal systems for most rural homes, linked with the present methods of acquiring domestic water, presents many problems. The committee wishes to encourage any efforts made by the government or private bodies to develop potential water sources for domestic and agricultural uses.

### PUBLIC SPENDING

In an effort to reduce costs and spending, yet recognizing the need for expanded facilities with the increasing demand for government services, the committee has made several recommendations in the area of building, construction, and buying.

The major builder in the county is the school system. The committee recommends that consideration be given by local school boards to standardized plans, to be developed at the state level, for public building construction within the county. In order to reduce cost, public bodies should review building plans in greater depth; for instance, a local committee of technically qualified people such as contractors, building-law-enforcement officials, and tradesmen should review new building plans.

Operating budgets constitute a manageable portion of the government budgets. The committee recommends that wherever possible the tax-supported bodies in Deschutes County should cooperate in joint bidding. It is hoped that this would result in economies not now in effect.

## LAW ENFORCEMENT

Law enforcement, particularly in the rural areas of the county, was identified as a great need in Deschutes County. The county has shown a rural crime growth rate of 37% in the past seven years. This and the problem of obtaining police assistance after twelve o'clock midnight establishes a platform for increasing problems in the unincorporated areas of the county. The committee recommends that more law enforcement personnel, more evenly distributed throughout the county, are needed. This problem may be partially solved through the establishment of a county sheriff's posse to aid in times of disaster and need.

## MISCELLANEOUS

Apathy toward local government operations is evident throughout the area. Too many uninformed people often cast

votes and make comments without full knowledge of a situation or circumstance.

The committee has identified many needs of the county and cities through months of study. It is very difficult to locate areas of duplication or waste that would result in significant savings to the taxpayer. It was definitely agreed that a decision must be made between decreased services or increased taxes.

To facilitate increased communication between the public and governmental bodies, the committee recommended that the state legislature should prescribe for local government more modern methods of informing the public about matters of public concern. This refers primarily to the legal notices which must be posted in newspapers notifying the public of official transactions. These are often not understandable to the public as a whole and do not aid the government body in communicating to the public.

### LOCAL GOVERNMENT COMMITTEE MEMBERS

Don Hinman, chairman,  
Redmond  
Mrs. Dianne Frichtl,  
recorder, Bend  
Bob Beesley, Bend  
Gordon Bentson, Redmond  
Glenn Cushman, Bend  
Bill Ellis, Bend  
Henry Greening, Bend  
Bob Gordon, Bend  
John Harbison, Bend

Glen Hayes, Bend  
Dale Lawrence, Bend  
John Poppino, Sisters  
C. J. Rice, Bend  
Jack Staton, LaPine  
John Stenkamp, Bend  
Mrs. Martha Stranahan,  
Redmond  
George Trout, Redmond  
Mrs. Floyd Vike, Bend



*Central Oregon Community College, located in Bend, offers two years of junior college courses, transferable to other institutions, plus vocational and technical training and adult courses. Students from the large area education district attend. (Aerial photo by Joe Van Wormer, Bend)*

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