Report of Baker County
Long-Range Planning
Conference for 1970
Foreword

Late in the fall of 1968, it was suggested by a number of local organizations and governmental groups that a long range planning conference should be organized within Baker County. Its purpose was to involve local people in a comprehensive study and evaluation of the county's resources, and to establish some guidelines for future growth and development.

The conference was divided into three broad areas of study — Human Resources, Natural Resources, and Commercial-Industrial Resources. Each of these divisions was broken down into subdivisions, with a committee selected for each. More than 200 persons from all areas of the County were involved.

The report includes an overview, giving a general picture of the entire County and some of the major conference recommendations. This is followed by a brief summary of findings for each of the three resource classifications. There follows, then, the complete report of each subcommittee. These report with more detail the study of specific resources or activities.

The report is believed factual as to conditions and problems and sound as to recommendations. It is published jointly by the Baker County and Oregon State University Cooperative Extension Service.

Introduction

Baker County, located in the northeastern port of Oregon, ranks tenth in size among the counties of Oregon. It is bordered on the north by the Wallowa Mountains, on the west and south by the Blue Mountains, and on the east by the Snake River on the Oregon-Idaho Boundary. Within the area encompassed by these mountains lie seven large, fertile, and widely dispersed valleys—traversed by mountain-originating streams—and surrounded by rangelands that vary in character from gently rolling grass covered hills to narrow, steep, rock and tortuous stream-channel canyons. Soil, moisture and climatic conditions vary greatly within the County and are closely related to elevation and proximity to the higher mountains.

Baker County was established September 22, 1862, when it was separated from the original Wasco County. It was named for Col. E. D. Baker, a U. S. Senator from Oregon, a close friend of President Lincoln, and the first member of Congress and Union officer to die in the Civil War. Union and Malheur Counties were taken from the original Baker County in 1884 and 1887, respectively.

Auburn, now extinct, was the first County Seat. Baker, incorporated in 1874 and the 17th oldest city in Oregon, became County Seat in June 1868. Baker is the largest city in the County and contains over half of the county's total population.

The Oregon Trail crosses the County. In 1861, gold was found and an estimated 6000 people were in Auburn during the winter of 1862-63. Agriculture and logging began soon after arrival of the miners and still remain as the most important contributors to the county economy. A brief summary of major facts for the county is given below.

POPULATION (1970) 16,710

AVERAGE TEMPERATURE:
   Summer 61.4
   Winter 28.7

AVERAGE TOTAL PRECIPITATION:
   14.36 inches

AREA: 3115 sq. miles

ELEVATION:
   Baker, 3,471 feet
   Hereford, 3,660 feet
   Huntington, 2,113 feet
   Richland, 2,213 feet
   Halfway, 2,660 feet
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The approximately 16,700 persons living in Baker County are fortunate in numerous ways. Let’s first look at the people themselves. Many are third or fourth generation descendants of pioneers of covered wagon days. Some are descendants of early day miners. Followers of Brigham Young emigrated from Utah to southern Idaho and eastern Oregon. They brought the influence of their Church. Scandinavians from the “pineries” of the Lakes States were attracted to woods work here. The British Isles and Western Europe contributed to Baker County population. The intermingling of pioneer and assorted blood has resulted in a sturdy, law abiding, semi-conservative citizenry. Sixty per cent of the County residents are Church members—double the state average. Good schools are wanted and have been provided. Yet the voters are tax-conscious and the county is largely on a pay-as-you-go basis.

Pollution of air and water is virtually unknown and racial problems are nil.

A wide variety of outdoor recreation is available and close at hand. It is only partially developed.

Many organizations for youth have been formed and continued. These include 4-H, F.F.A., Boy and Girl Scouting, Little League Baseball, school athletics, church programs, youth camps, trail rides, drum and bugle corps, Red Cross swimming and life saving, and others.

A complete and modern hospital was opened in 1970 in Baker. An attractive and adequate new library will be opened there shortly. The library, with its bookmobile, and the hospital are serving the entire County.

About one-third of the population live in seven widely scattered smaller towns and the rural areas tributary to them. Each community has its schools, churches, and its own social and community activities. In most instances various activities and meetings need to be held in a Grange Hall, school house or other “borrowed” spot. The small town of Unity built a community center that is an excellent example of a building to serve the various meeting needs of all the residents of the area.

Agriculture (largely livestock) and timber are the two chief basic resources. Both provide a fairly uniform income year after year and both are on a permanent, long-term basis. Processing of timber is the county’s largest commercial enterprise but the processing of lime-rock into cement, chemical lime and raw lime-rock for refining purposes also is important. A meat processing plant and a plant specializing in making metal ranch equipment, such as squeeze chutes, make important contributions. Two major power plants in the county are important assets.

Baker County has a stable, permanent type of economy. It has experienced no booms and no “busts”. It is located on U. S. 80 N. the east and west freeway between Portland and Chicago and on the main line of the Union Pacific Railroad. It has an airport and scheduled air service.

Considering all of these assets on the plus side, the citizens of the county could be pardoned if they were complacent. But being human they want more and bigger and better things. There follows, but not in order of priority, some of the recommendations that have been made and needs that are known.

• A Community Center in Baker. To provide ample auditorium, numerous conference or small meeting rooms, museum and exhibit space for mining, agriculture and industry. Most of the smaller towns in the county also need a Community Center adequate to serve the needs of the local people. A well-equipped building with modern heating would serve well to make for more activities and more pleasant life in the small communities.

• More vocational education public schools for students not headed for college trained careers, etc.

• A Community College, majoring in vocational work.

• More adult leadership is needed in many of the youth programs.

• Agricultural production could be stimulated by the storage of early run-off water, making supplemental water available in late summer and early fall or for dry lands not having irrigation water available.

• Group or area action is needed for better control of weeds, insects, disease and rodents. Production can be substantially increased.

• Increased timber production can chiefly come, through utilization of smaller trees, which in turn permits thinning of timber stands. Thinning also results in accelerated growth of remaining trees. Crude fiber is the most feasible product.

• Further development of recreational possibilities will bring more people to the county and add to the economy. The resources are waiting.

It is known that gold, silver, copper and other ores are present in Baker County. Many people are hopeful that mining will come back with new findings, new processes or changed economic factors.
What does Baker County have in the way of schools, churches, employment, housing, youth activities, recreation and health facilities? Prospective employers, business men and employees need to know. Present residents would do well to review the situation and think of improvements they might make.

The employment situation is relatively good. Work is diversified—including agricultural, wholesale and retail trade, government (all agencies), lumber and wood products, transportation, communication and utilities, and others in that order. There is little scarcity of labor, yet unemployment is low. Curtailments during winter weather, students and employable women account for a large part of such unemployment as there is. More available work should attract outside employees readily, because of the many advantages in the county. These include lack of congestion, lack of pollutions, and presence of excellent recreational features. More housing would be needed.

More vocational training of workers is needed to improve skills in present jobs and to qualify workers for better jobs. Sales people and employees who meet the public should be trained to improve their public image.

Baker County’s 21 public schools administered through four districts under an Intermediate Education District are rated excellent. For the most part they are well housed and well equipped. A fine corps of teachers is maintained and the system is well and economically managed. Further consolidations at any level are not justified due to great distances and geographical barriers.

There is need under present concept to provide a somewhat different education for those students who will not enter a career requiring a college education. Prevocational courses are the answer.

Baker County needs a community college which could be largely a vocational institution. It also could serve adults locally and students from neighboring counties which do not yet have such facilities.

Baker is an old town. Therefore there are many old houses. Building costs and financing problems have slowed up new construction. The aged houses have deteriorated and are hard to heat, and need repairs or improvements. Large, old houses have been converted to 2nd class apartments and mobile homes have been resorted to to accommodate young families and newcomers. There is good demand for good three and four bedroom houses. Accelerated building of such homes would release two bedroom houses. Accelerated building of such homes would release two bedroom houses for use of those in unsatisfactory housing. Unless building and finance situations improve materially and soon, low rent housing with government aid appears to be needed shortly. We have a substantial number of older people and people on retirement or welfare. Few of them are able to put more of their income into higher rent or improvement of owned houses. A special housing provision would need to be made for any sizable influx of permanently employed people.

Baker County is well supplied with ministers and churches. And about all denominations are represented. Sixty per cent of the residents are church members — a high. In view of this it appears that more people should take more part in community affairs, youth activities, alcohol and drug problems, counseling of all kinds of assistance to the disadvantaged, etc. Fortunately the county has almost a total lack of racial problems.

Individual citizens and organizations are doing much in fields of art, music, drama and preservation of history. These efforts would be stimulated and more productive if a suitable central building were available. It could well provide meeting and study rooms and museum space.

A county Judge and two commissioners manage the county business, while cities operate under a council-mayor system. Baker employs a city manager. Ad valorem taxes are less than $15 per $1000 valuation, one of the lowest rates in the state. Utilities pay 42 percent of the tax. Telephone and electric service is available county-wide. A natural gas line crosses the county and serves Baker and Huntington. The main line of U. P. Railroad crosses the county. Baker has a municipal airport. Interstate 80N provides speedway to Portland and to Boise and points east.

Baker is zoned now and under state law the entire county will be in the process soon.

The youth situation in the county is rated as good. There are many active programs, including 4-H, F.F.A., Boy Scouts, Little League baseball, school athletics, church
activities, skiing, swimming and more than usual opportunities for outdoor recreation. A fair share of students find employment in summer or part time work during other seasons. Yet it appears that some youth are not finding good use for their time and energy. The element of cost is a factor in some cases. The big need is more involvement on the part of parents and adults generally. Guidance, counseling, direction, communication, and leadership are needed. With this and our natural opportunities the youth rating could be raised to excellent.

Baker County is blessed with a multitude of organizations. For convenience they are classified as follows:

- 13 Service organizations
- 11 Health organizations
- 24 Church organizations
- 12 Fraternal organizations
- 19 Commodity and agricultural agencies
- 6 Veterans organizations

**Natural Resources**

What does Baker County offer in the way of natural resources? Prospective new comers, whether investors employers or employees want to know. Present residents have a general idea, but a review might add to their appreciation of what they have.

This is a whopping big county — 1,933,668 acres. This can be visualized by the statement that 65 miles of 80N freeway spans the county, generally north and south, while the county’s eastern extremity on the Snake River and western extremity atop the Blue Mountains are 82 miles apart as the crow flies.

Agricultural crop land accounts for 191,455 acres, or just under 10 percent. The other 90 percent is rolling to real rough mountain land, producing forage and timber. The gross agricultural income in 1969 was $10,674,000. Of this 86.9 percent was from livestock (73 percent from beef cattle). Livestock are essential to utilize the extensive range lands and much of the crop land is suitable for and needed to provide fall pasture and winter feed for livestock. With the exception of wheat most of the grain and hay produced is fed right in the county. Potatoes, sugar beets, and a few specialty crops are grown and should increase as markets improve and more irrigation water is developed. Increased production and higher net profits can be obtained by better weed, insect, disease and rodent control, more use of fertilizer, crop rotation and proper irrigation.

Two quite outstanding examples of marketing farm products are found here. The Baker County Livestock Association for several years has conducted special feeder sales (3 to 5 per year) and the Tri-County Wool Pool has gotten competition from larger buyers through pooled selling. One or more community bull sales have been arranged annually. Otherwise sales have been to order buyers or through a weekly auction sale where any kind of livestock can be turned to cash.

Where natural stream flow is the source of irrigation water, supplemental water is needed in late summer and early fall. No water is available now for some fertile and cultivable land. In early spring much water escapes to the ocean due to heavy rains or snow melt on the foothills. Many more small dams and reservoirs would hold back this water, making stored water available when and where needed. Studies should be made to determine costs, feasibility, drainage problems and possible financing.

Many thousands of acres of rangeland are chiefly valuable for production of grass and shrubs. They are too rough or too dry or at too high altitudes to grow farm crops and some is too dry to produce timber. They do provide needed forage for domestic stock in spring and summer and for game animals year long. Portions have recreational use and much is important as watershed. The early range is especially valuable, as it shortens the winter feeding period and is usable before irrigated pastures can be grazed. Increased production can be achieved by shrub and weed control, replanting to improved grasses, planned grazing and other range management practices.

Commercial forest acreage in Baker County is figured as 604,700 acres. Logging and sawmilling have been done since early days. Some areas have been logged the second time while mature timber is still found, some inaccessible. Until about 15 years ago yellow or Ponderosa pine was practically the only species merchantable. Now, red or Douglas-fir, Tamarack, spruce, White fir and even Lodgepole pine is cut and marketed. Plywood has come prominently into the picture.

Currently there is a big urge for more timber production. The one way to get it is through utilization of smaller sized sticks. In other words, thinning. This would put to use the suppressed trees which, if left, would eventually die, fall down, and rot. The thinning also causes greatly accelerated growth of the remaining stand, due to more sunlight, soil moisture, and plant food. Timber thinning also greatly increases forage and water production on lands suited for production of both wood and forage. The most
likely use of this material is for crude fiber (not paper), and new machinery to log, transport, and process economically will need to be made available. Sustained yield must not be forgotten, but the big emphasis is going to be on wood material, rather than on boards as it has been until now.

Gold was discovered in Baker County in 1861. A mining boom ensued and the County has been gold-minded ever since. One half of all the gold and silver mined in Oregon has come from mines in Baker County. Peak production from lode or hard rock mines was reached in 1915, when 63,936 ounces of gold and 105,584 ounces of silver were produced. Dredging was big business by 1940 but almost ceased in 1942 due to a War Production Board order. It has never come back due to fixed price of gold and higher cost of labor, explosives, electricity, transportation, and all other items.

Since World War II limestone has been a better product than gold. The Portland Cement Company of Lime, Oregon, has been producing cement since the 1920's. The Chemical Lime Company of Baker has provided high grade lime to a wide range of industries. Now temporarily shut down, it has contributed millions to Baker's economy. A third plant ships raw, crushed lime rock for use in industry. Split rock (perlite) is produced for building veneer. Quantities of sand, gravel, and crushed rock are used in highway construction and building. A wide variety of ore, including copper, is known to exist in the county, and it is possible that something will be found in paying quantities.

Mother Nature was unusually generous to Baker County in providing the basic requirements for recreational activities. There are mountains to 10,000 feet, with dry, powder snow, rivers, creeks big and little, lakes and man made reservoirs of various sizes. Climate includes four distinct seasons, with long periods of snow and cold at the higher elevations. Native to the area are elk, mule deer and black bear, upland game birds, and both year long and migrant ducks and geese. China pheasants and chuckars have been introduced and have flourished. There are unimproved wilderness areas high in the National Forest, and good accessibility elsewhere with state highways, county, Forest Service and logging roads. Highways, the railroad, and airplanes bring in non residents to enjoy our recreation features.

Prominent now are big game hunting, bird hunting, fishing, skiing, swimming, boating, snowmobiling, visiting historic mines and dredges, mining camps and towns, hiking, horseback riding and camping. Ice skating is about the only sport not available, as ice gets snow covered, or is short lived.

There are extensive developments now, built by public and private capital more or less as the demand required. Future development is almost limitless. Imagination, leadership, finances, and organized support could multiply the present activity. The basic requirements are present and waiting.

### Commercial-Industrial Resources

In recent years Baker County's economy has been based largely on agriculture and lumbering. Manufacturing, recreation, tourism, mining and secondary industries also are important sources of income.

Agriculture contributes to the economy of the County by providing income to farmers and ranchers and to workers employed for harvest, processing, transportation, storage, handling and selling. In 1969 the gross farm sales of agricultural products in the County was $10,674,000. The beef industry accounts for about 73 percent of this total. Economists agree that the economic contribution is greater than this figure when handling, transportation, processing and all steps in marketing are added. Latest available figures show that of the County's work force, 1,295 are employed in agriculture. The number employed in agriculture is declining in Baker County as elsewhere.

Commercial forest land makes up nearly one-third of the land area of Baker County. About one-fifth of the forest area is privately owned. Ponderosa pine is the predominant species and occupies two-thirds of the forest area. The annual allowable cut of all species on National forest lands is estimated at 60 million board feet, from Bureau of Land Management holdings 2.4 million, and from private lands about 20 million. Since timber is a renewable resource, and most of the forest area is handled on a sustained yield basis, the county can count on a perpetual timber operation.

On the average there are 12 to 14 logging operations in the County with an annual payroll, including trucking, of about $1,500,000. There are three sawmills, one plant with kilns, planer and finishing machinery, and one plywood plant. These employ about 440 persons, with an annual payroll of some $4,000,000. The sale value of processed wood products produced annually approaches $11,000,000. The local mills process nearly all logs harvested in the County, with a small portion being hauled to Union County mills. The chief opportunity for increased wood-products revenue lies in the use of thinning slash when markets and economic removal permit.

Baker County is not thought of as a manufacturing county except for lumber and wood products. Nevertheless it does have two small plants in other lines that are distinct assets. Commercial Welding Co., from a small start, has become widely known for its metal cattle and calf chutes, cattle guards, steel gates, irrigation equipment, stock trailers and other fabricated metal items. It has established six branch plants in other states. It employs 38 men in Baker, and its products annually manufactured in Baker approach 1 million dollars in value. It illustrates what can be done with a small start. Eastern Oregon Meat Co., processes about 4,000 beef animals per year, plus other livestock. It delivers choice dressed beef in its own refrigerated trucks as far away as Seattle and at times has marketed dressed beef in Alaska. The Company employs

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11 skilled men and markets quality meat valued at well over 1 million dollars annually.

Minerals and mining have contributed significantly to the economy of Baker County since the discovery of gold in 1861. In addition to gold, silver was produced in substantial quantities and many other metals were mined. Today the utilization of the large lime deposits, production of crushed stone, sand and gravel exceeds in value the annual production of gold and silver for years when records are available. During the five years 1963-1967 the annual average value of those products was $5,582,000. In 1966 the value reached a high of 6,499,000.

In recent years there have been two corporations in the County using the limestone deposits to produce lime and cement and supplying industries of the Northwest with various other products. Large quantities of crushed stone, sand, and gravel are produced to meet demands for building highway, roads, and buildings. Employment in these operations varies considerably but, on an annual basis, usually involves some 250 workers and a payroll of some $500,000.

Recreation and tourist trade are difficult to evaluate for an individual county; however, some estimates are possible by using available data. In 1965, visitors to 19 lakes, streams and reservoirs in Baker County numbered 277,000. A survey by Oregon State Parks and Recreation Division in 1964 indicates that the average expenditure per day for each visiting car was $19.98; for each camper it was $11.27 per day. These data do not include visitors to other areas; to hotels, motels, ski resorts and snowmobile activities. These can, however, indicate that substantial sums are contributed to the County economy by both local and outside recreationists and tourists. With this industry continuing to grow in the State and in the Northwest, the attractions in Baker County are sure to bring larger numbers to the County. There are opportunities for further development of natural attractions and accommodations for greater numbers. This is one of the few fields that has not yet approached its maximum. The possibilities are large.

Latest figures available (1963) indicate that the volume of retail business in Baker County was $20,667,000, through 204 outlets. The City of Baker, through 155 outlets, did 85 percent of the total retail business in the County. Wholesale trade within the County in 1963 totaled $9,299,000. These figures no doubt are low for conditions at present, due to increased activity and inflated prices in all categories. Service establishments, in the same year, grossed $1,887,000. These include hotels, motels, laundries, all repair and amusement services. It does not include professional service, i.e., doctors, lawyers, and teachers.

Public service organizations, such as transportation, communication (including telephone, newspapers, radios and television), electrical, gas, water, library and sewage disposal contribute to employment and to the County's economy. Detailed figures of this value are not available.

Baker County never has been a "boom time" county, with the possible exception of the early gold rush days. It has a stable and permanent type of economy, as evidenced by the fact that there never has been a bank failure in the County.
Subjects of concern identified for study by this committee included governmental units, taxation, utilities, planning and zoning, and law enforcement.

**Governmental Units**

The overall governmental unit of the county is the Baker County Court. Members of the Court include a judge and two commissioners, elected on a rotational basis by voters of the entire county. Terms of the judge and commissioners run for six and four years, respectively. The Court operates under State statutes that grant and impose limitations upon its powers and controls.

Five of the incorporated cities within Baker County (Sumpter, Richland, Haines, Halfway and Huntington) employ a council-mayor system of government. Baker operates under a council-mayor-manager system. State law covering charters and ordinances under which these operate permits, in some instances, powers and controls greater than those granted to the County Court.

Other governmental units within the County include seven school districts, three irrigation districts, three cemetery districts, and two fire-protection districts.

**Taxation**

All of the aforementioned entities of government are authorized by law to levy taxes, within limitations, for support of services and facilities offered to people in the County.

Ad valorem property taxes for the year ending June 30, 1970, for all purposes, amounted to $2,991,919. Special assessments for the same year brought the total net levy to $3,139,512.

Ad valorem taxes, for the 1969-70 year, were distributed over taxable property with a total assessed valuation of $200,422,302. Real property accounted for 46.4 percent of the total, personal property for 11.2 percent, and utilities for 42.4 percent.

The combined ad valorem levies averaged a little less than $15.00 per $1000 of taxable value in 1969. This is one of the lowest rates in the state. The amount of revenues provided for local use averaged close to $180 per county resident—moderately below the state average.

Disbursement of property tax funds during the 1969-70 fiscal year was as follows: Schools 67.5 percent, County and library 18.8 percent, towns and cities 13.1 percent, and special districts 0.6 percent.

Current statement of taxes and summary of assessment rolls for Baker County are available upon request at the County Assessors office in the County courthouse.

**Population**

Of the total County population, estimated for 1968 to be 16,710, more than 50 percent are resident within the City of Baker. About 10 percent are distributed in five other incorporated cities, and the remainder are distributed on farms and ranches throughout the more than 3,000 square miles of County area. There have been short term fluctuations in total population numbers, with the highest point between 1900 and 1910 when it reached a total of 18,076 persons. Since that period, only in 1905 has the number of county residents been lower than at present.

**Utilities**

All areas of the County are served by telephone and electric service. The El Paso Natural Gas pipeline traverses the County, with commercial service available to the cities of Baker and Huntington. The main line of Union Pacific Railroad crosses the County from north to south, as does Interstate Highway 80N. Commercial airline facilities are available at the Baker City Municipal Airport.

**Law Enforcement**

County law enforcement is provided currently by an elected sheriff and two appointed deputies. The City of Baker is served by a Police Chief and 16 police officers. Other incorporated cities have enforcement officers commensurate with their population. A district headquarters office of the Oregon State Police with a staff of 4 officers and a patrol station with 17 officers also are located within the City of Baker.

**Zoning**

The only zoning ordinance now in effect within the County is in the City of Baker. Its adoption in August 1968 followed a comprehensive study by an outside engineering and planning firm. The regulations provide for seven residential, commercial, and industrial zone classifications within the city and are administered by a planning commission appointed by the Baker City Council.

Enabling acts of the Oregon Legislature give counties of the State authority for the planning and zoning of areas outside the limits of incorporated cities. A commission was created some years ago by the County Court for this purpose, and the commission has directed its attention primarily toward preparation of an interim zoning ordinance.
that would provide a degree of control during the period required for adoption of more detailed county zoning regulations.

RECOMMENDATIONS

- In order to protect the planning and zoning work done by the City of Baker, and maintain local control of zoning throughout the County, it is recommended that all areas outside of incorporated communities be brought under an interim zoning ordinance immediately and that work then be expedited toward planning, preparation, consideration, and adoption of a comprehensive zoning ordinance that will promote desirable, full and orderly development throughout the County.

- Since Baker County has one of the lowest property tax rates within the State, it is recommended that all citizens be kept informed on local tax matters and that this comparatively favorable tax position be used as an attraction to new economy—strengthening developments within the County.

- Since law enforcement is becoming increasingly difficult and is receiving considerable national attention, it is recommended that programs be initiated to promote a sense of public responsibility and to encourage citizen assistance to official law enforcement personnel.

Labor

A monthly breakdown for the civilian labor force in Baker County for 1967, the most recent figures for a completed year at this time, is shown in the following table. Based on this report, employment in lumbering and logging varies from a low of 70 percent of average in January to a high of 121 percent of average in September. Wholesale and retail employment ranges from a low of 93 percent of average in January and February to 108 percent of average in July and August. Other industries show similar variations in their employment patterns.

The above points out that the low employment in most industries is found during the winter months, with high employment during August and September. Generally speaking, the employees are permanent residents of the area, which means that during the low employment months they remain in the area and have few opportunities to secure other work.

The population for the year 1967 was estimated at 15,800 on July 1, and this figure increased to an estimated 16,710 on July 1, 1968. A large part of this increase was due to Paramount Pictures locating in Baker for production of a film. Baker, the county seat of Baker County, has an estimated population of 9,500, and of the remaining five towns, Huntington is the largest with 630.

The labor force for the area before 1968 showed little change from year to year. Chronic shortages of qualified workers are in the service classifications at peak periods during the summers. Other seasonal shortages appear in automotive service and transportation. The bulk of the shortages are not in occupations requiring highly skilled workers; however, skilled mechanics—both automobile and heavy duty, and body and fender men—are in fairly constant demand. These latter shortages are found throughout the nation and are not just a local situation.

The agriculture industry is constantly seeking qualified applicants for year-round employment, as well as workers during the seasonal periods. Each year the situation seems to worsen as workers are more reluctant to accept farm employment. This condition is due to the longer work hours required on the job; to a lack of adequate housing, necessitating driving to and from work; and to the low remuneration received as compared to other industries. Agricultural work of today requires more skills in the successful performance of many phases of the work than was needed in years past.

Applicant surpluses of workers normally attached to the labor market are found during the winter months. They consist of skilled and unskilled construction workers and woods workers, government employees (to a large extent forest workers), sales personnel, and service workers. In Baker County very few opportunities exist for these individuals during their normal low employment periods.

Other surpluses of labor are found during the summer months among students who are eager to work, and among housewives who are re-entering the labor market and may lack recent or any experience for available jobs in the area.

Based on the U. S. Census of Population of 1960, the female labor force in Baker County represented approximately 27 percent of the total labor force, as compared to 33 percent on a national average. It is reasonable to believe that many women in Baker County are not actively in the labor market due to the shortages of jobs that a woman could reasonably be expected to fill. Since the 1960 census there has been little change in the industries in Baker to alter the opportunities for women.


## Service Industries

This Committee centered its discussion on needs and problems in service industries, especially as they relate to motels, restaurants, beauty shops, and service stations.

Basically, the problem exists in procuring competent help in these service establishments. Because they are fields involving manual labor, mental attitudes toward accepting such jobs are often quite negative. People often feel they are demeaning themselves if they accept such employment. It is suggested that perhaps legislation is needed that will permit job openings for the early teens who want to work but become discouraged and adopt wrong attitudes when faced with the constant reminder that they are too young to work.

The truth is that a good maid, service station attendant, or waitress is an invaluable employee, not only to his employer, but to the entire community. Oftentimes these are the only people with whom the tourist or visitor has contact. Giving good, cheerful service will have a lasting impression, and the community benefits. Service grudgingly given or poorly rendered affects the visitor adversely and the community image suffers.

The responsibility for creating a friendly atmosphere in a service establishment must ultimately rest with the employer who, by personal example and constant reminder, impresses upon his employees that main contribution to his business is efficient, cheerful, friendly service. As part of the service industry, it must be recognized by employer and employee that service is to be given to the customer—not vice versa.

In regard to youth employment in service industries, it is generally acknowledged that wages in the service industries in Baker are low. This contributes to the problem of obtaining competent help. People who must work to support their families cannot afford to work in these fields. Wages, however, seem to be in relative relation with the prices charged in this area for goods and services.

With the potential for year-round tourism that is in Baker County, the need for capable workers will grow rather than decrease. It is felt that the proposed community college, if it materializes, would train an enlarged labor force that would be an excellent source from which to draw.

In at least one area, that of beautician, it is felt that if it materializes, would train an enlarged labor force that would be an excellent source from which to draw.

### Industrial and Commercial

Generally, industries located within the County prefer to train their own employees. Some experience or familiar-
ity with products, or their use, is desirable when hiring new employees. This labor market appears to be well supplied with individuals who could do the jobs available.

The area has some handicaps in that production supplies and materials are not readily available. The cost of bringing in materials is high and the cost of getting finished products to market is also high, especially if the firm does not have its own distribution system.

Salaries and wages are not sub-standard but they do not equal those of the construction industry. This influences the attitude of industrial workers. There is need for facilities and training wherein workers could increase their skills and knowledge. This would benefit the worker and the employer by increasing production with the same overhead costs, resulting in more profit to the firm. Increased profits could allow for a higher wage scale.

It is the general belief that the area is not adapted to great industrial development and is not likely to become so in the foreseeable future.

Building Trades

Within Baker County there are workers qualified in all of the building trades. Their number varies with the amount of construction taking place at any given time. The major portion of all industrial, commercial and residential construction is done by union contractors. The present union agreements include health and welfare programs and pension plans. These provisions presently help the members and add to their retirement benefits.

Clerical and Sales

This subcommittee feels that the art of salesmanship is rapidly becoming lost in the area. It states that there is a definite need for a sales training program and suggests that a vocational training course be offered. This could be offered through the proposed community college or through present adult instruction programs.

This committee points to the need for more public rest rooms in the downtown area and for more parking space. The committee suggests the creation of a park at the middle exit from the new freeway into Baker. This, it is believed, would encourage travelers to visit the city.

Hospital and Related Employment

With the construction of a new hospital facility in the area there is anticipated need for additional personnel and for in-service training of present employees. Need for additional staff is likely to be licensed practical nurses.

Cedar Manor reports a need at present for two L.P.N.'s, one full time and one part time. It is anticipated that the need for such professional help will increase with the natural increase for this type of care.

Public Employees

There appears to be no shortage of labor to meet the needs of City, County and State governments. Those agencies not under civil service often can meet the need by employing students.

Most State agencies have access to a civil service list from which to select qualified personnel. The greatest turnover is reported with clerical help. The rate of pay is not especially attractive, making the filling of vacancies sometimes difficult.

There is general agreement among the public agencies that a vocational school in the area would be of much benefit.

RECOMMENDATIONS

• It is recommended that vocational courses be offered through present educational facilities to train service type personnel, sales persons, clerical help and to upgrade the skills of industrial and other workers. Since Baker County is becoming a year-round tourist attraction, training of service workers seems especially important.

• Needed improvements in public facilities within the City of Baker include additional rest rooms, more parking lots for public use, and establishment of a tourist park at an exit from the freeway at Baker.

Housing

The Committee on housing had access to a sample survey made of 129 low-income families in Baker County in 1969. This study did not include all low-income families, but it might be considered a good sample.

Within the group from which data were obtained, 34 percent of the heads of household were under the age of 55; 15 percent were between 55 and 65, and 51 percent were over 65 years of age. The condition of dwellings of this group was rated as 24 percent good, 34 percent fair, 22 percent deteriorating and 20 percent dilapidated. When asked if lights dimmed when appliances were plugged in, 23 percent answered yes. Another 29 percent indicated the house was difficult to heat in winter.

The housing of the group was considered safe, desirable, and adequate for the family by 84 percent, while 16 percent considered their housing inadequate, or unsafe. Ownership of the home was preferred by 72 percent while 25 percent preferred to rent and only 3 percent had no preference. The preference as to where they would like to live indicated 85 percent preferred a single dwelling; 11 percent an apart-
ment; 1 percent a hotel, and 3 percent, a nursing home. When asked if they would be willing to live in an attractive, low-cost housing development, 42 percent answered yes; 49 percent answered no and 9 percent had no reply.

A study by the housing Committee shows that there are 3,395 private housing units in Baker County and 289 commercial units. Of these totals 3,200 private and 221 commercial units are in or near the City of Baker. Over the past 10 years 50 new homes per year have been built. It is the opinion of the Committee that Baker County can use 50 to 75 new homes per year, assuming that no large industry locates within the County. In its study the Committee found that a great number of inadequate homes have been removed and that less than one percent of present homes are not modern—lacking plumbing and electricity.

The Committee's study indicates a need for multiple housing of at least 100 units in the Baker area. There are 170 mobile homes in and near Baker, with a total of 225 for the County.

The number of summer homes in the County has increased materially in the past five years. If the present trend continues, it is the opinion of the Committee there will be 500 new summer homes built within the next 10 years.

The cities of Baker, Halfway and Richland have upgraded their water and sewer facilities. Baker has about two thirds of the homes connected to sewers and Halfway is in the process of providing sewage disposal.

**RECOMMENDATIONS**

- To eliminate substandard housing, and to assure future quality construction, it is recommended that a Countywide Building Code be adopted.
- It is recommended that an educational program on remodeling and other considerations pertinent to upgrading or replacing currently inadequate or undesirable housing facilities be initiated within the County.

**Education**

A glance at history reveals that there has been a strong and continuing interest in schools in Baker County from the time of the earliest settlements.

A public school was opened at Auburn in 1862; in Baker in 1866; at Eldorado in 1869, and the same year a parochial school, Baker City Academy, was opened. A school was opened at Rye Valley in 1870; at Connor Creek in 1872; at Durkee in 1885, and at Haines in 1888. There was a Baker City Normal and Business College established in 1887 and a high school in Baker opened in 1889. In the 1870's and 1880's more parochial schools were established—Notre Dame Academy; St. Joseph's College; St. Francis Academy; St. Stephens Parish School; and St. Francis College and Academy. There was a grade school at Huntington in 1889 and a high school in 1900.

Many more schools were opened in the early 1900's to serve the settlements that developed in the large area of Baker County. These were necessary at that time when transportation and communication were difficult. By 1930 there were 87 public school districts in the county, in addition to the parochial and business schools. Since 1950, extensive reorganization of the many small school districts has reduced the number to four. These are larger, more able districts. In 1970, St. Francis Academy and the Seventh Day Adventist school closed their doors. Baker College, after one year in operation, also closed.

The Education Committee, in addition to doing research of the historical background of education in the County, has studied the present situation relative to all education in Baker County. This includes organization, facilities, curriculum and needs. In its studies the Committee has drawn upon assistance and cooperation from school authorities, interested groups, and individuals for information and factual data.

**Intermediate Education District (IED)**

The present IED office began as that of County School Superintendent when Oregon attained Statehood. For years, the County School Superintendent was elected and his duty was to see the children of school age in all areas of the County were offered an education. By law he was to visit each school once each year. His role in earlier times was that of Supervisor. Within the past 20 years this office was changed from County School Superintendent to the Rural School District, and then to the present Intermediate Education District. As the organizational changes took place, changes in function and emphasis were initiated.

IED at present has two major functions:

1. To assist the State Department in administration of State functions, such as legal service, certification, report gathering and dissemination from the State office.
2. To complement local districts in conducting their problems. Specifically, the IED, by contract or request of local districts, maintains a Special Education Department, which furnishes speech therapy and consulting services; and a material Center, where are assembled films, transparencies, audio-visual equipment as a resource to local districts.

Collateral function of the IED include custodian for the school equalization fund and fiscal agent for the Federal Small High Schools project, representing 80 small schools of the state.

**Community College Education**

Baker County is not within a Community College District, but is adjacent to such districts. A special committee
on the subject analyses the situation and the position of the County in respect to this type of education. The Committee endorses the objectives for community colleges as stated in Senate Joint Resolutions Number 5. It feels that effective community college type education—must be given locally, and must utilize buildings, facilities and other resources of existing institutions to the full extent of their potential.

Educational organizations and teaching arrangements in a sparsely populated area must be innovative and flexible, conducted with a sense of cooperation by all concerned. Attaching a locality to an existing educational district without assuring local instruction fails to meet the purposes of community college education, and further damages the area by drawing off tax dollars for which the locality receives minimal benefit. The Committee believes that no area of Oregon should be damaged for the purpose of sustaining, or strengthening another area or institution by forcing it into an existing educational area where the first area would not receive benefits commensurate with dollars for which it would be taxed.

Lacking completion of community college arrangements at this time, an educational consortium composed of the county Extension agent and local districts offers a variety of college, vocationally oriented and enrichment courses, by employing the Extension Service, colleges and local resources.

### Present Organizations & Facilities

Baker County is larger in area than the states of Delaware and Rhode Island combined. It is reorganized into four administrative school districts, compared with the original number of eighty-seven in 1930. Some areas in Malheur and Union Counties are interchanged with Baker County to form joint school districts, geographically divided by natural barriers. Further reorganization with the County is impractical due to difficulties of transportation and these barriers.

School district organization in Baker County has been developed to the degree that all four districts are well organized, covering a total area of approximately 3,000 square miles. This has permitted the districts of the county to become leaders in the State in maintaining building and curriculum development programs.

In September, 1970, a county-wide evaluation study was begun by local boards and administrators. Its purposes was to provide the county with a plan for improvement of curriculum and services. Local boards sought the leadership of the Oregon Bureau of Education Research and Service, together with the State Department of Education. Extensively conceived, this evaluation encompassed all facets of education, and involved school personnel as well as members of the community.

In the past, Baker County has developed exemplary programs by careful planning, and purposeful use of the educational dollar. As a result, the schools are currently strong and economically operated.

On the basis of this past performance and with the vigorous cooperative planning currently under way, the county looks forward to development of one of the State's finest school systems.

The total number of public schools in the County at present is 21, with a total enrollment of 3,800, and graduating a total of 220 students per year.

### Baker School District No. 5J

Baker School District is centrally located in the county, consists of approximately 1,500 square miles, and has a student population of approximately 2,500 students (Sept. 1970).

The district has completed major building programs begun in the late 1940's and proceeded to extensive reorganization to establish a sound financial base. The district has no indebtedness and existing buildings are new or recently remodeled.

The district educational program is planned and continuously reevaluated. Purchasing and budgeting are related directly to curricular goals. District planning looks toward development in vocational fields as well as college preparatory.

The district conducts numerous community services such as swimming pool, community meeting facilities, and adult education. Special education and testing and guidance services are offered District 5J students.

The district operates seven elementary schools, four in the city and three in the rural areas, junior high, senior high, and adult education programs. Coordination and supervision of all activities are handled through the Education Center, including supportive services such as cafeterias, transportation, payroll and accounting, and all aspects of the educational program.

### Huntington District No. 16J

This district has one elementary and one high school. Enrollment in grades 1 through 8 is about 110 and in the high school, grades 9 through 12, there are some 57 students. About 10 are graduated each year.

Huntington district has undertaken a curricular improvement program, including vocational training and coordinated curriculum. They have had outstanding success in football.

Huntington is a part of the Treasure Valley Community College district.

### Hereford-Unity District No. 30J

In this district there are three elementary schools and one high school. Enrollment in the elementary schools, grades 1 through 6, runs about 93. In the high school, grades 7 through 12, there are usually some 80 students, with about 8 to 10 being graduated each year.

The buildings are modern and Burnt River High School has been doing some exemplary work in special education and curricular improvement, with special emphasis on upgrading the basic teaching and introduction of vocational work.
Pine-Eagle District No. R61

This district has three elementary schools with grades 1 through 2 in Oxbow and 1 through 8 in Halfway and Richland, with an enrollment in excess of 300, and one high school, grades 9 through 12, with an enrollment exceeding 150 and graduating 35 students each year. The new Pine-Eagle High School building is believed to be one of the most modern and functional physical plants in Oregon. Increased vocational training is being encouraged.

Special and Other Education

In the City of Baker a kindergarten has operated for over 15 years. It was organized by the American Association of University Women and is now operated by the Baker Kindergarten Association, with support from the organizing group. This is a tuition school, with two teachers conducting classes in the morning and afternoon during the school year. Parents of the children are elected to serve as directors each year.

The curriculum offers both elementary school preparation, and social experiences. Community groups and individuals provide scholarship support for some children who otherwise would be financially unable to attend.

Education for Mentally Retarded

In 1964 it became mandatory in Oregon for schools to provide facilities for the educable, mentally retarded. The Brooklyn School in Baker, provided one room in 1964 for this purpose. The age span served was from seven to thirteen years of age. In 1966 a room at the junior high in Baker, was provided for those of intermediate age. In 1970, a senior high class was made available in the high school to continue training of these students. The goal is to continue the academic training in the high school one half day, with a work - training program of a half day. These, it is hoped, will have trained the students to their ultimate academic ability while providing job training that will equip them, upon graduation, to be self-supporting and contributing members of society.

Summer Programs in Schools District 5J and Hereford-Unity School District 30J

Three Federally - sponsored programs are in operation at present. A summer reading clinic for children experiencing reading difficulties is offered to youngsters in grades three through seven. It is aimed for the culturally and educationally deprived, but may accommodate others on a "space available" basis.

Head Start is a summer pre - school program for economically deprived children. In addition to classroom experiences, funds are available for medical and dental care. "Stretch" is a Federally - sponsored program for children from low income families which are culturally and educationally deprived. This is an additional program for under - achievers in grades four through seven. Other children are enrolled regardless of family income when space is available.

Three tuition summer programs are offered. The intermediate "Summer Boost" offers programs in remedial or accelerated reading for students in grades seven through nine. "Summer Mathematics" offers remedial or advanced mathematics for students in grades three through nine. Individual differences are recognized. The aim is that all levels of ability can achieve maximum advancement.

Hereford - Unity has had a summer federal program organized in cooperation with Baker School District as a boost to educational levels in that district.

The Seventh-day Adventist Parochial School

Started in Baker in 1954, this school has offered elementary courses in harmony with county and state requirements for grades 1 through 8. Originally built with two class rooms, and opening with an enrollment of 35, the enrollment for 1968 - 69 was 11, with the second room used as a recreation area. Six city lots afforded playground facilities. The school is now closed.

St. Francis Academy Parochial School

In June, 1970, St. Francis Academy closed its doors. This school, operated by the Sisters of St. Francis, has made significant contribution to the cultural and religious life of the community and will be missed in the community.

The Academy's history dates back to 1872 when the Sisters of the Holy Names of Jesus and Mary organized the first school in a small house in Baker to teach fine arts and English to four young pupils.

In 1885, the operation of the Academy was turned over to five Sisters of the Order of St. Francis. The Sisters were in charge of about 60 pupils of varying ages and academic levels.

In 1903, the building was erected at a cost of $100,000. Since that time the three - story building has served not only as a private school but as a place where many public school students could receive private instruction in music and art.

The first floor of the building will be leased to School District 5J for the 1970-71 school year, according to Sister Rita. At the end of that time, the building will be put up for sale.

RECOMMENDATIONS

- High schools, in the opinion of the Committee, have done a good job of preparing students in basic academic courses for entrance into college. However, the great number of Baker County youth graduating from the high schools who
do not enter college seem to be educationally disadvantaged. Therefore, it is recommended that pre-vocational courses be offered so that students may be given opportunity to explore vocational pursuits other than those requiring a college degree.

- The teaching of subjects relevant to the average and below average student should be emphasized so that these students may benefit in later life from a school experience. A good guidance program should be provided.
- Kindergarten eventually should be a program in the public schools. Until facilities and program direction are available, it is recommended that the tuition program, club sponsorships, and scholarships offered by individuals be continued.
- It is recommended that District 5J proceed with plans for vocational training using the cluster concept give more emphasis to guidance and counseling to reach students that many not go to college; and expand the sports program to include more students, including girls.
- Summer enrichment and remedial classes in the school should be continued and expanded into high school. Adult education should be continued as at present, or through a future community college.

**Health and Medical Services**

The new 53 bed hospital in Baker, in the opinion of the Medical Committee, will be adequate for the needs of the County at this time. However, it is an acute-care type hospital with no geriatrics care department. There is some interest in using the old hospital for geriatric care, but cost of its repair or remodeling may be prohibitive. With the increase of life expectancy, it is the belief of the Committee that a geriatric care facility will be needed.

As of July 1, 1970 Baker County has a full time mental health clinic with a qualified, experienced psychiatric social worker as director. A psychiatrist comes to Baker two days a month and plans are to employ a psychologist to come to Baker one day a month.

There is a shortage of doctors in Baker County, particularly in specialized fields. A specialist in internal medicine and an orthodontist are needed. These, if not in residence locally, may be interested in making visits to the County on a regular schedule.

The Committee sees a need for a visiting nurse in the County. Presently some registered nurses, on their own time, are making home calls to patients released from the hospital. Eventually it is hoped that each community in Baker County would utilize local nursing talents in specific areas. Some refresher courses or nursing clinics may need to be offered if this is to become a reality.

**Care of the Aged**

From the County Welfare Commission, the Committee learned that Baker County has a high percentage of elderly persons compared to the number in the total County work force. These are people of long residence in the County. There is practically no in-migration of elderly people. Many of the elderly have been in industry or in lines of work that were not under Social Security. This makes for a high recipient rate for welfare assistance; one of the highest in the State. However, the burden of nursing home care for the elderly is not as great as in many parts of the State. It is reported that the nursing homes in the County always have room for the elderly needing such care.

The general assistance welfare load is light compared to many areas. There is not a migratory labor demand in the County and assistance is usually on an emergency basis.

The nutrition level of people in Baker County is not generally low; publicity otherwise notwithstanding, according to the Commission. Malnutrition is not common and where found those people get direct assistance through food stamp or other foods and nutrition programs.

Of the welfare cases, it is reported that of those in the high school age range, none are school dropouts.

**Sanitation and Health**

Wells and springs supply about 90 percent of the domestic water supply in the County. Wells range in depth from 10 to 500 feet. Durkee, Unity, and a few other areas have water heavily laden with minerals, mostly sulphur or iron.

The County Sanitarian reports that most wells 35 to 40 feet in depth show bacteriological contamination at some
time during the year and some wells 80 feet deep show contamination. There have been cases of gastro-intestinal troubles in both humans and livestock in the County. This indicates that most shallow wells could be contaminated with a coli form of bacteria.

High water tables that exist near Haines, Baker, Richland, Halfway, and along some irrigated areas, contribute to the contamination of shallow wells.

In these areas too, as well as in Sumpter Valley, Anthony Lakes, and other natural lake areas, mosquito breeding conditions are favorable.

Algae growth is evident in much of Powder River below Thief Valley reservoir and down stream from Unity reservoir. This indicates lack of aeration and/or a heavy load of minerals in the water. This condition in extreme is detrimental to fish life and is not conducive to good health of animals, or man. Placer mining has caused turbidity problems on Geiser Creek (a tributary of Burnt River) and could become a problem in several areas, including the vicinity of Bourne. Drainage from some feed lots finds its way into various streams and the increased use of farm chemicals could become a problem.

**RECOMMENDATIONS**

- The people of the community are interested in a three-step cost plan for hospital care. The Committee recommends different costs for intensive care, for bed care and for ambulatory care, and that nurses working with intensive care patients be given courses in this work and paid accordingly.
- It is recommended that the services of a visiting nurse be provided in the County. There is need for this service to follow up on patients from the hospital for proper home care.
- It is recommended that a strong community effort be made to attract the needed medical personnel and that specialists be induced to make regularly scheduled visits to the County, if not to establish residence here.
- It is recommended that attention be given to better coordination, planning and distribution of health services in the County, that there be greater effort for better organization of health services and man power, and that the quality of services rendered be evaluated continually.
- For better sanitation and health it is recommended that a full-time sanitarian be assigned to Baker County.
- A community water supply system should be investigated for the New Bridge area where there is a concentration of homes with individual sewage disposal systems and wells.
- It is recommended that irrigation and drainage systems receiving public financial assistance (ACP, PL566, Bureau of Reclamation and Farmers Home Administration) avoid creation of high-water tables and give attention to vector control and other health considerations.
- It is recommended that wells supplying water for domestic use be tested periodically, especially when water tables are high: that chlorination be considered where applicable; that water supplies be checked for cause of death loss in cattle; and that contaminated water sources be fenced.
- It is recommended that water sources near recreational areas be posted regarding its suitability for consumption.
- A study of waste disposal and control systems is recommended.

**Youth**

Results of a survey conducted through schools in all areas of the County give what is thought to be some insight into such things as participation in youth activities and what youth themselves regard as needs in the way of clubs, recreation, church, education and employment.

In the Baker area, of the 1,037 students responding, 568 desired some kind of part-time employment and 768 wanted summer employment. In the Pine Eagle area about 50 percent of the boys find some summer employment, but none in the winter. Only 5 percent of the girls work in the summer or winter. In the Baker area 51 additional youngsters would like to become Cub Scouts, 42 would like to join the Scouts, and 9 the Explorers. These are in addition to present membership. Counseling services seem to be limited in most areas.

From an overall view obtained from the survey, the Committee could readily recognize some needs and opportunities for youth activities and services.

In general, an overall view suggests that the number and variety of activities offered at schools is adequate, but that there are more students wanting to participate than there are participating. Some of the reasons given for this were that rules or requirements of certain clubs exclude some, that there is a lack of leadership, and that there is a reluctance on the part of advisors and other adults to show interest and to take part in the various activities.

The interest of many students in some kind of employment has been indicated. Suggestions relative to employment were to organize summer youth camps where the youth are given much of the responsibility of their operation and to grow the kind of crops in the area that would give summer employment to more of the students.

Counseling and guidance generally is limited to services available in the school, through the church, and by the employment service. In the Pine Eagle area, however, the school board is interested in employing a counselor on a yearly basis.

In Scouting, greatest interest would seem to be in the grade schools. As in school activities there were more interested in Scouting than are now participating. There is some interest among the older youth. Interest in Explorer
Scouts was indicated by a number of boys, and older girls were interested in Junior Cadets and Senior Scouting. The 4-H program was found to be offered in most areas. It is evident, however, that there is need to increase membership in the present clubs and a need to organize additional units to meet the desires of the number that indicated interest in the 4-H program.

Health services, particularly in the outlying areas, could be improved. There is no County school nurse. Students, when referred by the family doctor, may get immunization and booster shots from the County nurse. Special cases, when referred by the County nurse, may receive treatment or care at the Shriners Hospital, or at the University of Oregon Medical School hospital. The County nurse also may refer cases in need of glasses to the Lions Club, or other agencies. In some areas there are nurses that are called upon when needed.

Within the area surveyed, there seem to be no serious discipline problems. Local police apparently encounter only minor problems, which are handled judicially.

Physical fitness programs in the schools appear adequate while school is in session. However, there is no organized effort to continue a fitness program during the summer months. There appears to be such a need, especially for girls.

Religious interests among youth may be illustrated by the results of the survey of students in the Baker area. Of 752 students questioned, 485 attend church, 267 do not attend. Of 623 students surveyed, 390 belonged to a church, 233 did not. Out of 540 students, 321 were interested in church and 219 were not interested.

In all areas of the County the survey showed a great and varied interest in recreation. The 24 recreational activities listed ranged from such things as music and indoor games to skiing. In nearly all categories of recreational activities there proved to be as many interested non participants as there are of those now participating. This, it is thought, indicates a need for leadership, sponsorship, and, in some instances, additional facilities.

The Committee feels strongly that there is need for more and better communication with youth of the County by parents, by teachers, by administrators, and by all adult groups. Some suggestions made were that student representatives be invited to attend and be given an opportunity to be heard at school board meetings, city council meetings, school faculty meetings and others. The Committee noted concern about student loyalty to their schools and their patriotism to their country. These attitudes, it is felt, can be improved through better student - teacher relationships and through parent and home relationships.

RECOMMENDATIONS

- A need for adult as well as junior leaders for all youth activities of the County is evident. It is recommended that leadership training courses and forum sessions be organized to interest leaders and to qualify them for leadership in Girl Scouts, Boy Scouts, 4-H Clubs, youth camps, athletic groups, and other youth activities.

- It is recommended that athletic programs such as volleyball, track, swimming, and other be organized for youth — particularly for girls, and that competition be developed between communities within the County. It is felt that this would help to create an inter - community relationship which is somewhat lacking.

- A vocational work - study program, lacking in the smaller schools, is recommended.

- Youth counseling is inadequate in most areas and it is recommended that more adequate counseling programs be developed within schools, churches, the health clinic, and through their appropriate agencies.

- Youth employment is in much demand, both for part-time jobs and summer jobs. It is recommended that businessmen, farmers, local governments, and all agencies consider employment of youth whenever possible.

- The organization of summer youth camps by service club groups, churches, schools, lodges, and conservation groups is recommended.

- It is recommended that high school students be involved more with lower grade students in discussing subjects such as smoking, larceny, drugs, and similar topics.

- Since many residents are not aware of the many and varied programs and activities currently serving youth within the County, it is recommended that the leadership of these programs work together in a continuing effort to promote public awareness of the nature and availability of all such youth opportunities.
Churches

The Committee on Religion finds that there are an adequate number of church facilities in Baker County and that the number of ministers is sufficient for the support now being given church activities. A high percentage of the people in the County are church members. The percentage in the County is 60 percent compared with 30 percent church membership in the State.

The number and distribution of churches in the County is as follows: City of Baker 19; Durkee 1; Haines 2; Halfway 3; Hereford 1; New Bridge 1; Richland 3; Sumpter 1 and Unity 2.

Religious education now available includes various church schools, Catholic parochial school, Adventist parochial school, adult study groups, youth fellowship groups, vocational Bible schools, and various denominational youth camps.

Counseling is available for individuals through the church, marriage counseling through a nine week course on marriage enrichment through the Ministerial Association, individual counseling through the Mental Health Clinic, and a psychiatrist counsels with the ministers of the County once a month. For youth there are church-sponsored youth groups and informal counseling.

The Committee projects some needed services such as a pre-marital counseling program; closer cooperation between school counselors and ministers; the offering of specialized counseling in vocations, citizenship responsibilities and marriage. A survey of the County is suggested to find areas where no organized church is functioning and that lay ministers be used in rural areas not otherwise served.

Further needs recognized are: involvement of church members where human need is apparent; foster homes; counseling for foster parents; programs to overcome economic, social and racial prejudice; senior citizen and youth activities; vital ministry; understanding of the needs of disadvantaged families to supplement the activities of the Salvation Army; support of and cooperation with the Baker Co. Council on Alcoholism; and increased use of church facilities by the community.

Arts & Other Cultural Features

Baker County is an area rich in colorful history. Enrichment offerings are limited because of the County’s sparse population and low income. The County Library and book-mobile, schools, and nearby institutions of higher education are depended on for resource material and for instruction in the fields of art, music, and drama. Local organizations such as Community Concerts Association, Baker County Historical Society, Beta Sigma Phi, and the American Association of University Women do much to further creativity and enrichment in the cultural fields.

Suitable meeting or studio rooms are needed for development in the fields of art, music, and drama. A museum building is needed in a desirable location to properly display the treasured historical objects available in the County.

RECOMMENDATIONS

- Renovation of an existing building for use as a “Cultural Enrichment Center” that could also provide space for a museum is recommended. The old Natatorium is a possible building for renovation in this regard. The location is ideal if the current freeway access route plan is followed.
- The employment of an Arts Center supervisor is recommended. He would schedule, coordinate, and plan the various activities that would be offered through such a cultural center as outlined above. It is also recommended that the Arts Center facilities be incorporated with a summer recreation program.
- Re-establishment of the County-wide Music Week where the various schools throughout the County present their bands, orchestras, and choruses in concert for all residents to enjoy is recommended. This used to be done in May, in conjunction with National Music Week, and might even be broadened to include all the cultural arts.
- It is recommended a Creative Arts Committee be formed. The committee should be comprised of professional resource people in the fields of the several arts, along with organizational representatives from those groups especially concerned in the area. This Committee could function to bring into reality the Cultural Enrichment Center and later to oversee its efficient operation.
- It is recommended that objective study of the Bible and comparative study of religions be offered in public schools.
- The joint church sponsorship of church teacher training courses, religious courses, and seminars, is recommended.
Organizations

Defined as a body of persons organized for some specific purpose, as a club, union, or society, there are a number of classes of organizations many of which have concerns dealing with county economic problems. On the other hand there are many other groups having limited interests only.

Practically all adults in the county and most young people of school age belong to an organization of some description.

Segregating the many organizations in Baker County into groups of common characteristics is a simple way to classify them. For study purposes organizations can be classified into nine groups locally, as:

Service Organizations
Baker County Chamber of Commerce
Baker Kiwanis Club
Baker Lions Club
Huntington Lions Club
Halfway Lions Club
Richland Lions Club
Baker Rotary Club
Baker Junior Chamber of Commerce
Baker Soroptomist Club
Baker and County Parent - Teachers
County Planning Board
City Planning Board
Baker County Business and Professional Women’s Club

Health Organizations
Heart Association
T. B. Association
Hospital Auxiliary
Gray Ladies
Cancer Society
Dental Association
Medical Association
Red Cross
Mental Health Assn.
Easter Seal Society
Council on Alcoholism

Church Organizations
Far reaching and including:
St. Francis Catholic Church, Altar Guild, Clubs & Circles
Baker L.D.S. Church, Relief and Improvement Societies.
Halfway L.D.S. Church
Reformed L.D.S. Church
First Christian Church
St. Stephens Episcopal Church
Baker Nazarene Church
Richland Nazarene Church
First Lutheran Church
Baker United Methodist Church
Haines United Methodist Church
Baker Presbyterian Church
Halfway Presbyterian Church
First Church of God
Baker Assembly of God Church
Halfway Assembly of God Church
Christian Science Church
Calvary Baptist Church
Haines Baptist Church
Central Baptist Church
Salvation Army

These organizations are banded together to provide various services for their own members and to promote community welfare. Most have programs of activities that relate to community betterment and are looking for direction. They will welcome suggestions in carrying out the concerns as developed by the Conference.

The concerns of the members of this group would be similar to those developed by the Medical Committee of the Human Resources section of the Conference.

The churches of Baker County are vitally interested in the economic aspects of county welfare programs which affect their adherents. The concerns of this group would be re-reflected in any program worked out through the local Council of Churches and the Committee on Religion as set up under the Human Resources division of the Economic Conference.
Fraternal Organizations

Much duplication of members in other organizations.
B. P. O. E.
Masonic Lodges
Shrine Club
Knights of Columbus
Order of DeMolay
Order of Rainbow Girls
P. E. O. Sisterhood
Beta Sigma Pi
Order of Moose
I. O. O. F.
Patrons of Husbandry
Pomona Grange

These groups are mainly wrapped up in their own rituals but are of course generally concerned with county problems. The twelve granges of the Patrons of Husbandry and the Pomona Grange are rural fraternal groups with agricultural programs which would tie in with and complement the concerns of the Natural Resource division. All organizations in this group would cooperate in following through on recommendations of the Economic Conference.

Commodity & Agricultural Organizations

Baker County Farm Bureau
National Farmers Organization
Baker County Livestock Association
Baker County Cowbelles
Baker County Woolgrowers
Baker County Woolgrowers Auxiliary
Blue Mt. Quarter Horse Assn.
Baker Valley Irrigation Dist.
Lower Powder River Irrigation Dist.
Burnt River Irrigation District
Soil Conservation Service Agency
SCS Districts, Baker, Keating, Eagle Valley & Burnt River
U. S. Forest Service Agency
Forest Service Grazing Units
Bureau of Land Management Agency
BLM Advisory Boards
Farmers Home Adm. Agency
Baker County A.S.C. Committee

All of those organizations or agency units have interests dovetailing with the Natural Resource division of the Economic Conference and would be concerned with carrying out the recommendations of that branch.

Veterans Organizations

American Legion
American Legion Auxiliary
V. F. W. & Auxiliary
D. A. V. & Auxiliary
World War I Veterans
Others

These are primarily patriotic organizations interested in the general welfare of the Nation but also concerned with local and state benefits which may improve the lot of the veteran generally. One group suggested a beneficial program would be to restore needed monies to the State Veterans Fund for making available lower interest loans to veterans for the construction of homes etc. Thus improving the economy locally.

Recreational Organizations

Powder River Sportsmen's Club
Anthony Lakes Ski Club
Powder River Camera Club
Archery Club
Men's Golf Club
Junior Golf Club
Baker Soft Ball Club
Snowmobile Club
Baker Bowling League

These organizations are all avid supporters of sports and outdoor activities generally. All are interested in improved facilities and are concerned with the proper use of the recreational resources within the County. Consequently these organizations would approve any recommendations for improvement of conditions made by the Youth and the Recreation committees of the Human Resources division of the Conference.
Miscellaneous Organizations

Baker County Bar Association
Baker Co. Historical Society
Baker Toastmasters
Industrial & Resource Corp.
Sheriff's Posse
4-H Leaders Assn.
Neighborhood Scout Leaders Assn.

Youth Organizations

Little League
Babe Ruth League
Various Church Youth Fellowships
4-H Club
Future Farmers of America
Boy Scout troops
Girl Scout troops
Drum & Bugle Corp.
Rainbow Girls

RECOMMENDATIONS

*It is recommended that the Chamber of Commerce take leadership in the publication of a directory of all organizations in the county. Such a directory is needed to encourage cooperative efforts for action on mutually beneficial projects.

There are perhaps a number of other groups which could go in the category of miscellaneous. These might be included in the other seven groups but are included here for general consideration.

4-H horse training.
The beginning of Agriculture in Baker County was incidental to the discovery of gold within the County in the early 1860's. Since mining camps and towns that sprang up following this discovery were far from any center where food supplies could be obtained, agrarian-minded settlers came to the Baker Valley where they began to divert water from the streams for production of food crops to supply the needs of miners. Agriculture was thus born within Baker County, and, from this beginning, has grown to become its principle industry.

Land, water, and forage are basic agricultural resources of the county. Their quality, development, and efficient use have long been, and remain, as the elements of concern of land owners around which most problems and opportunities for improvement revolve. Marketing is also a concern relating to all phases of agriculture that is believed to merit special attention.

Total land area of Baker County is 1,993,668 acres. Of this area 50 percent is publicly owned by Federal, State and local agencies. In comparison all public lands in Oregon comprise 56 percent of the total. By U. S. Census definition, intensive agriculture occupies 191,455 acres or 10 percent. Grazing occurs on 1,750,000 acres or 81 percent and 604,070 acres or 30 percent are forest lands, most of which are also grazable.

Livestock

After the introduction of agriculture into Baker County it was logical that livestock raising followed. Lower valleys were man high with various wild grasses, while the non-timbered benches, foothills, and sparsely timbered areas sustained native range grasses and browse. From the time of the early settlers, who first saw the potential livestock, to the present, livestock raising has been the primary agricultural enterprise of the county. Current consideration and evaluation of potentials indicate that for the foreseeable future it will continue in this place of relative importance.

Beef cattle production is most important of the livestock enterprises found within the County. Its magnitude is such that it rates high among all industries as a contributor to the local economy. Over the past three decades it has expanded while other livestock enterprises—notably sheep and dairy production—have declined.

In 1969 there were 47,000 beef cows, 2,800 dairy cows, and 20,000 ewes in Baker County. Gross agriculture income (value of products sold at the farm gate) amounted to $10,674,000 in 1969. About $9,282,000 was from livestock. Of this total livestock return, beef cattle accounted for $7,702,000. Too, gross farm value of agricultural production does not represent the total contribution to the economy of the county or area. Economists agree that this figure should be multiplied two or three times when transportation, handling, storage, processing, and off-farm labor is figured. This could mean 20 to 30 million dollars contributed to the economy by agriculture from Baker County. The beef industry accounts for about 73 percent of this total.
Operations of Mason Dam and other such proposed storage facilities will make possible better utilization of crop land. Regulation of river flows to avoid periodic flooding, lengthening the irrigation season, improving drainage, constructing drains, and making possible some reclamation, should add to the productivity of farm lands. These benefits, coupled with improved forage varieties, fertilization, and better ranch and range management, offer opportunities for building a broader base for livestock production.

Range improvement and crops, discussed elsewhere in the report, are so intimately related to livestock production that they cannot be disregarded here. With such a high percentage of the land area of the county devoted to grazing, range improvement and management on both public and private lands are challenges to the livestock industry.

Some authorities conservatively estimate that the carrying capacity of the present grazing lands in the county could be increased two or more times. If this were accomplished at a future date, could the winter feed base be increased correspondingly to fully utilize the range resource? Some believe that improvements on ranch properties could produce more than enough winter feed. Where this can be done, more stock could be carried than the grazing capacity of the range will allow by summer grazing part of the herd at the ranch. This is done in many parts of the west where improved pastures with high carrying capacities are established and maintained.

To enlarge the livestock enterprises of the County the committee visualizes an emphasis on improving the productivity of ranch land and improvement of the quantity and quality of forage on range lands. Better management of the feed resources will increase the number and quality of livestock that can be maintained in the County.

In view of present and prospective feed crop and marketing conditions the committee believes that other livestock enterprises of the County—dairy, sheep, and poultry, will remain at about present levels for the next decade.

RECOMMENDATIONS

- An industry-wide system of obtaining and disseminating reliable information regarding numbers, types and status of livestock throughout the country, is needed as a production and marketing management tool at the producer level. It is recommended that appropriate local individuals, groups, organizations, and business interests provide leadership and exert all possible influence toward development of such a system.

- Authoritative information is essential to efficient management of individual livestock operations, and to the development and operation of industry wide programs. To this end, it is recommended that producers keep accurate records on costs, returns, production, animal performances, etc.

- It is recommended that stockmen support local, State and national livestock groups and encourage programs through these and other organizations that will improve the marketing system.

- In order to broaden the base of their operations, reduce the number of separate enterprises within the production cycle, capitalize on improved performance developed within their own livestock, and more effectively relate production to demand, it is recommended that stockmen maintain ownership of their stock through as many steps of the total supply process as possible.

- It is recommended that appropriate individuals, groups, organizations, and business interests exert all possible influence toward development of a much needed single source of financing through which stockmen may finance all phases and segments of their operations.

- It is recommended that stockmen (individually and through groups and organizations to which they belong) support research, sanitation and management practices aimed at prevention, diagnosis, and treatment of costly livestock diseases.

- It is recommended that the program of livestock predator control be continued and adequately supported.

- Exhibits, contests, sales, meetings and conventions are educational and economic assets to a livestock oriented community. It is recommended that individuals, groups, organizations, business interests and governmental units provide leadership and support efforts to provide a much needed facility suited to these and other county functions.
It is next to impossible to make plans for timber growing and removal separately. Forest land also is used and valuable for recreation, wildlife, domestic livestock grazing, mineral utilization and water source. This is especially true in Baker County. Forest land is intermingled with areas of meadow land, non-timbered ridges and south slope benches. Yellow pine grows in fairly open stands with grass, shrubs, and other forage plants using much of the ground. Streams in timber lands are stocked with fish. Higher elevation areas are in demand for camping, picnicking, hunting, skiing, and other recreational uses. Timber growth may be influenced by the presence of minerals and production of them. Areas set aside for wilderness of course cannot be managed for timber production.

Publicly owned lands are managed on a multiple use basis, whereby the whole property is put to its best uses consistent with the needs of the tributary population. In the case of private land, the owner has only partial control. He may prohibit human occupancy of his property, but elk and deer, for example, make full use of it without the owner's permission. It rains and snows on private and public land alike and stream flow goes to the same power plants and irrigation ditches. Very few of the uses of private timber lands, other than timber and forage provide the owner with revenue.

While minor conflicts of use do occur, and will occur in the future, with reasonable comprises they can be resolved. No major conflicts are known in the County—such as the Minam River in Union County where one group insists on putting the area into a wilderness area and other people believe it should be opened up by roads and utilization of timber allowed.

### Present Timber Situation

Commercial forest land makes up nearly a third of Baker County. Approximately a fifth of this is privately owned. Table 1 contains additional detail on forest land acreages in the county.

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Acres</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>129,530</td>
<td>22</td>
</tr>
<tr>
<td>U. S. Forest Service</td>
<td>460,000</td>
<td>76</td>
</tr>
<tr>
<td>Bureau of Land Mgmt.</td>
<td>13,320</td>
<td>2</td>
</tr>
<tr>
<td>State, County, City</td>
<td>1,220</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>604,070</td>
<td>100</td>
</tr>
</tbody>
</table>

*Forest Service and Bureau of Land Management figures are supplied by those agencies. Private and public figures are from Forest Survey Report No. 132: Pacific Northwest Forest Range Experiment Station; October 1958. Stand size class distribution are estimated as follows:

- Large sawtimber (21" dbh and larger) 295,000 acres
- Small sawtimber (11 to 21" dbh) 153,070 acres
- Pole timber (5 to 11" dbh) 131,000 acres
- Seeding & Saplings (less than 5" dbh) 25,000 acres

Ponderosa pine types make up about two-thirds of the forest area. Allowable annual cut from National Forest lands is estimated at 60,000 Mbf and from Bureau of Land Management lands 2,400 Mbf. Estimated sustained cut from private lands, based on the above figures would be about 20,000 Mbf.

Re-inventory of Federal forest lands is conducted every 10 years; new figures for the National Forest should be available within a year.

Demand has traditionally been for large pine sawtimber. In recent years, however, cutting has included more small sawtimber, larger pole timber, and more of the associated species.

Three sawmills and one plywood plant utilize most of the county log harvest. A small portion is hauled to Union County mills.

Reforestation is not often needed on forest lands in Baker County. Too much reproduction is a problem more often than too little. Exceptions, where planting may be needed, are large burns and some marginal sites where overstories have been completely removed.

Reduced forest growth due to overcrowding exists on as much as 25 percent of forest lands in the County. Both sapling and small sawtimber stands are over-stocked. An estimated 40,000 acres of private lands should be thinned. An additional 153,000 acres of Federal forests would benefit from precommercial thinning. In addition, local landowners are eligible for cost sharing through the Agricultural Conservation Program for precommercial thinning done under this program, but funds are limited. ($84,000 during calendar 1968 for all ACP programs in Baker County.)

Studies show that precommercial thinning will yield a return of over 8 percent. (Source: Economic Guides for a Method of Precommercial Thinning of Ponderosa Pine in the Northwest Pacific Northwest Forest & Ranger Experiment Station, 1966)

Mountain pine beetle (Dendroctonus monticolae) presents a continuing threat to overstocked pine stands approaching the limits of merchantability. Dense stands 50 to 70 years old commonly are attacked and the largest and best trees are killed most often. Infestation of mountain pine beetle occurred on about 24,000 acres in the county in 1967. Oregon pine Ips (Ips pini) occurred on about 34,000 acres in 1967. This beetle attacks sapling-size trees principally.

Direct control of these insects is not practical or economical on most areas. Thinning to maintain vigor of pine stands appears to be the only practical control over the long term.

Lack of a market has hindered development of a commercial thinning program in the County. When thinning in pole and small sawtimber can be put on a paying basis at the time of thinning, private forest owners will have more incentive to manage their forest lands. Additional stand improvement can be done on Federal lands also when there is demand for the trees cut.
Recent developments in Baker County by Ellingson Timber Co. and in other areas of the northwest indicate a commercial market will develop for small logs in the near future.

About 75,000 acres of public and private land would benefit from a thinning of commercial size trees and yield needed raw material at the same time.

Potentials of irrigating forest stands have not been fully explored. Liberal irrigation will increase tree growth to the point where wood density and fiber strength are so low as to make the timber virtually worthless for commercial purposes. On the other hand, limited supplemental moisture late in the growing season (early summer) might increase and prolong growth. It definitely would increase forage production for livestock and wildlife in forested areas.

As with irrigation, little is known of the potentials of forest fertilization in northeast Oregon. Studies and pilot programs in northwest Oregon have shown promise in that area. Fertilization of stands on gentle ground, with good access, where frequent cuttings are practical, may have applications in Baker County.

Satisfactory access is a prerequisite to successful forest management. At the present time, access is not a limiting factor in timber growing programs. Road developments to harvest mature timber will provide necessary access for thinning and other silvicultural programs for the foreseeable future.

Harvesting Timber

The forest stands in Baker County, like other eastern Oregon areas, are stocked with an uneven age and size of trees. This presents a problem and an opportunity in the management and harvesting of timber. Both private and publicly owned commercial forest land in Baker County is capable of producing up to 100 percent more wood than is being harvested at this time.

Trees, like carrots, must have room to grow. Trees that grow for awhile but are crowded out and die are lost production. Plans are needed to utilize these small trees before they die. A key, then, to full production is timely harvest at a profit. This is only possible when a market exists for the products, large and small, as well as knowing about and using advanced, practical logging techniques.

Imagination and foresight are the real ingredients necessary for the future of the timber industry in Baker County.

There has been a limited, intermittent market for products such as posts, poles, and small specialty items like lawn furniture and decorative fence rails. These should be encouraged, but they utilize only a small volume of material and provide limited employment. The hopeful market of the future lies in chip production from small size trees and cull material, in addition to the conventional boards and veneer products.

Future harvesting techniques must be versatile enough to permit the handling of small size material, low value material, and large logs—either in one operation or several depending upon the products and equipment. It is essential that techniques be developed for harvesting and utilizing the presently unused wood left behind by a logging operation. The use of this material will be eliminate waste, reduce the fire hazard, and improve the appearance of the woods. It is the material which is left in the woods that is often criticized by the forest recreation user, not the material which is hauled away.

An adequate transportation system is necessary to facilitate the harvest from all lands. It is desirable to accomplish road construction well in advance of logging. On public lands this can be accomplished by road-building contracts financed with funds appropriated by Congress. It is estimated that approximately one-half of the forested public lands in Baker County do not have adequate road systems for timber harvest. Good harvesting and resource management practices require that roads be constructed to a high enough standard to safely permit logging traffic plus traffic from other uses—but not to a higher standard, since overbuilding takes land out of production.

Manufacture & Marketing

These two phases of timber work are so closely intertwined that it seems advisable to consider them together.

The following tabulation gives a rather complete presentation of various products and their present and future marketability.
### Basic product

**Finished product**

<table>
<thead>
<tr>
<th>Basic product</th>
<th>Market for product</th>
<th>Future market</th>
<th>Future for at Baker</th>
<th>Manufacture</th>
<th>Availability of raw material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red fir dim.</td>
<td>Excellent</td>
<td>Good</td>
<td>Limited to supply</td>
<td></td>
<td>Logs of this quality are used in Plywood</td>
</tr>
<tr>
<td>White fir dim.</td>
<td>Good</td>
<td>Good</td>
<td>Limited to supply</td>
<td></td>
<td>Only a limited amount of these trees</td>
</tr>
<tr>
<td>Spruce dim.</td>
<td>Good</td>
<td>Good</td>
<td>Limited to supply</td>
<td></td>
<td>Only a limited amount of these trees</td>
</tr>
<tr>
<td>Posts &amp; timbers</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td>Not enough big trees</td>
</tr>
<tr>
<td>Poles</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td>Not enough big trees</td>
</tr>
<tr>
<td>Ties</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td>Enough trees to make short timber if not used in Plywood</td>
</tr>
<tr>
<td>Clear products</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td>Enough pine to last present out-put for many years</td>
</tr>
<tr>
<td>Poorer grades</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td>same</td>
</tr>
<tr>
<td>Crating &amp; pellets</td>
<td>Good</td>
<td>Good</td>
<td>Good but need for larger manufacturing</td>
<td></td>
<td>same</td>
</tr>
<tr>
<td>Molding</td>
<td>Good</td>
<td>Good</td>
<td>Could be good</td>
<td></td>
<td>Enough raw materials, not enough manufacturing facilities</td>
</tr>
<tr>
<td>Cut up mills</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td></td>
<td>Enough raw materials, could be a good future—but plastics very competitive</td>
</tr>
<tr>
<td>Toy stock</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakes, window stock</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock, furniture</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paneling</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheating int.</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td></td>
<td>Limited to amount of logs of cut</td>
</tr>
<tr>
<td>Sheating ext.</td>
<td>Good</td>
<td>Good</td>
<td>Eventual</td>
<td></td>
<td>Demand for exterior will force change</td>
</tr>
<tr>
<td>Sanded</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td>Quality of trees limits this. Faces could be shipped in</td>
</tr>
<tr>
<td>Chipboard</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td></td>
<td>Faces could be shipped in. We have enough cores and backs</td>
</tr>
<tr>
<td>Laminated</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td>Plenty of trees of this quality</td>
</tr>
<tr>
<td>overlays, etc.</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardboard</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Containers</td>
<td>Good</td>
<td>Good</td>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood fiber</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td></td>
<td>Material for fiber is available but lack of water and competition make it impractical</td>
</tr>
<tr>
<td>Bark dust</td>
<td>None</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastics</td>
<td>Good</td>
<td>Good</td>
<td>? Possible with investments</td>
<td></td>
<td>Might be future use for poor grade logs Bakernow has around 30 tons per day</td>
</tr>
</tbody>
</table>

---

**Footnote**

Our timber resource is limited at this time by the amount of trees that can be cut and yet guarantee timber for future years. Utilization of scrub type trees, lodge pole type, is the only way the lumber industry can be increased in capacity, in this area or by hauling in the raw materials. We have about 600 people directly employed in the lumber and logging industry with about $4.5 million dollars of payroll income.

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### Water

Water is important for domestic use, for irrigation of farm lands, and for industry. In Baker County much of the supply comes from the timbered mountain areas. The ideal watershed cover is composed of a forest of trees growing on porous soil and supplying a mulch cover of duff, leaf mold, decayed wood and vegetable matter. Rainfall and melting snows percolate through this material and soil to bedrock, then gravitate to lower elevations, coming to the surface as springs. Clear, pure water results.

But when severe and sizable fires occur or when roads are built, or logging operations are carried out, or heavy trailing of livestock occurs, the spongelike ground cover is broken up or destroyed and runoff on the surface picked...
up the exposed soil. Washing of gullies results in dirty
water shows in streams below.

A different situation quite frequently is found. On some
southerly slopes, tree growth, shrub and other vegetation
is sparse or absent, the soil may be shallow and lacking in
humus, and the underlying rock may be basalt, which is
very slow to disintegrate. Here rain and snow melt usually
cause surface runoff that results in sheet erosion in varying
degrees.

Normally water in mountain streams is pure enough to
drink. But heavy and careless use by campers or allowing
carcasses of livestock to decay in streams could cause con-
tamination.

The challenge, therefore, is to make reasonable use of
the forests and yet modest the sponge cover as little as pos-
sible and repair the damage as quickly and fully as possible.
The following list of things to do are self explanatory:

* Prevent fires from starting or
* Put them out when small.
* Locate roads on a moderate grade.
* Provide ample permanent culverts for cross drainage.
* Make back slopes flat enough to stand.
* Sow grass seed promptly on all exposed earth surfaces
  from fires, road building and from logging.
* Build adequate check dams where gully washing occurs.
* On more open slopes guard against weakening of forage
  root system and destruction of cover by uncontrolled grazing.
* Keep camping a reasonable distance from water
  courses.
* Provide latrines at all points where camping is allowed.

Summary

It is not the proposal to summarize the comment and
numerous recommendations that have been made. Each
seems important. The Committee wishes, however, to par-
ticularly emphasize one proposal. As brought out in the
section on manufacture and marketing, the principal op-
portunity to increase the growth and harvest of timber
products in Baker County is through substantially increased
cutting of small trees as precommercial and commercial
thinnings on both public and private timber lands. It not
only would salvage the thinning but permit greatly in-
creased growth of remaining trees.

Also as shown in the section on manufacturing and
marketing, the most likely outlet for this class of material
is for chip board and crude fiber products. Utilization of cell
and waste material from present operations and use of
lodgpele, which is generally too small for sawlogs, would
provide additional volume to supplement the commercial
thinnings.

Further investigation is recommended, to find suitable
methods of logging and manufacture of this kind of material
into a profitable product.

RECOMMENDATIONS

* Owners of private forest land should initiate management
  programs on their forested acres. Ranch woodlots are a
  potential source of added income. Advice and marketing
  guides for specific areas may be obtained without charge
  from the Farm Forester in La Grande.

Management programs at present should include both
precommercial and commercial thinning. Growing final
crop trees to a diameter of 18" to 20" will yield a satisfac-
tory rate of return on most sites. A program of inter-
mediate cuts thinning in preceding years will improve
stand quality and value by removing poorer and defective
trees, protect from insect attacks by relieving overcrowd-
condition, maintain tree vigor and facilitate a rapid growth
rate. At the same time, these intermediate cuts will yield
a profit to the land owner.

* It is recommended that a county Forest Management Com-
mittee be formed. Membership should include state and
federal timber managers, private land owners and industry
representatives. The committee would (1) keep abreast of
new manufacturing techniques and the resulting timber
market potentials, and (2) provide technical advice to farm
woodlot owners to help them coordinate woodlot manage-
ment with market potentials.

* Research and development on the utilization of small logs
is recommended for the County. Forest management pro-
grams in the County are dependent on a market for small
logs.

* Research on forest irrigation and fertilization should be
conducted by the Forest & Range Experiment Station to
determine economic feasibility in northeast Oregon.

* The public image of log harvesting appears to be a job
that requires brawn but not brains. The local wood using
industry and public agencies should embark upon a pro-
gram to correct this impression of today's logging job. A
program should be presented to our schools emphasizing
the skills and technology used now and needed in the future
to accomplish an efficient and total harvesting job.

* The local loggers and manufacturers should institute a
"Logger's Apprentice" training program to encourage the
selection of desirable employees.

* It is recommended that support be given to research and
development of new equipment for the economic harvest and
utilization of all wood grown including cull and small size
material. Private industry and public experimental agencies
should participate.

* It is recommended also that a research program be insti-
tuted to determine the true cash value to recreation and
other resource uses for the removal of submarginal value
wood. It follows then that consideration should be given to
a method of reimbursing owners for costs incurred com-
mensurate with other values received in removing this sub-
-marginal material.

* Local organizations, such as the Chamber of Commerce
committees, are encouraged to investigate markets or har-
vest of products such as small and large poles and ground
wood to be made into substitutes for boards. Competing
industry should not be encouraged for conventional products
when existing plant facilities are adequate to process the
available production in the county.

* Public agencies including County, State and Federal, should
be encouraged to improve forest access roads under their
jurisdiction to facilitate the harvest of forest products.
Hay and pasture account for the largest proportion of total crop production in Baker County. This is likely to continue to be true, as these crops are essential to the large livestock industry of the County. Grain crops—primarily wheat and barley—are next in importance in terms of both land use and income. Relatively small acreages are devoted to orchards and miscellaneous specialty crops.

Estimated Production & Income from Sales of Farm Crops, Baker County—1969.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Acres harvested</th>
<th>Value of sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal crops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>8,500</td>
<td>$421,000</td>
</tr>
<tr>
<td>Barley</td>
<td>6,000</td>
<td>125,000</td>
</tr>
<tr>
<td>Oats</td>
<td>1,000</td>
<td>9,002</td>
</tr>
<tr>
<td>Rye</td>
<td>300</td>
<td>4,000</td>
</tr>
<tr>
<td>Corn</td>
<td>200</td>
<td>2,000</td>
</tr>
<tr>
<td></td>
<td>16,000</td>
<td>$561,000</td>
</tr>
<tr>
<td>Hay crops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alfalfa</td>
<td>41,000</td>
<td>$446,000</td>
</tr>
<tr>
<td>Clover grass</td>
<td>16,500</td>
<td>29,000</td>
</tr>
<tr>
<td>Grain</td>
<td>2,200</td>
<td>2,000</td>
</tr>
<tr>
<td>Meadow</td>
<td>20,000</td>
<td>58,000</td>
</tr>
<tr>
<td></td>
<td>79,700</td>
<td>$335,000</td>
</tr>
<tr>
<td>Seed crops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alfalfa</td>
<td>200</td>
<td>$ 16,000</td>
</tr>
<tr>
<td>Vegetable seed</td>
<td>170</td>
<td>28,000</td>
</tr>
<tr>
<td></td>
<td>370</td>
<td>$ 44,000</td>
</tr>
<tr>
<td>Specially crops</td>
<td>900</td>
<td>$252,000</td>
</tr>
<tr>
<td></td>
<td>900</td>
<td>$252,000</td>
</tr>
<tr>
<td></td>
<td>96,970 acres</td>
<td>$1,392,000</td>
</tr>
</tbody>
</table>

Since hay and pasture are the dominant crops of the county, the Committee has focused much of its attention on problems and opportunities for improving hay and pasture production. The Committee recognizes that yields and quality of hay and pasture crops are below what is both desirable and possible. Stands that are allowed to become too old, native grasses that are low yielders, weeds, insects, shortages of late season water, poor drainage, and improper harvesting, are all limiting factors within the present production pattern.

Although grain cropping is particularly responsive to governmental programs, the Committee sees little likelihood of any significant increase in wheat or barley acreages, and neither does it foresee any great change in the relative importance of presently grown small grain crops. There is need for a high-yielding, rust-resistant spring wheat, a hardy variety of fall barley and a stiff strawed spring barley that resists shattering.

Weed are a problem seriously limiting the production, quality, and market acceptability of all crops produced any-where within the County. The need for increasing the supply and control of irrigation water is also prime importance. Rodents present a County-wide problem relating to production, harvest and water distribution.

Tree fruit production within the County has been on the decline over a period of several years. Because of factors such as low product prices, frost hazards, labor shortages, distance from market, and high transportation costs, the Committee to merit consideration and investigation include increased acreages of corn for silage; and specialty crops such as onion seed, dill, lettuce, carrots and peas, oil seed crops such as mustard, sunflower, and rape; and increased acreages of mint for production of root stocks and oil.

Recent developments also give tree farming and farm woodland management great economic potential.

RECOMMENDATIONS

*It is recommended that land owners and land users be encouraged—through organization, education, and example, to take advantage of available opportunities to increase their production, production efficiency, and product value by:

*Controlling weeds
*Controlling insects and disease
*Fertilization
*Crop rotation
*Use of best adapted crop varieties
*Proper irrigation and drainage

*It is recommended that land owners, organizations, and
resource-development agencies work together toward increasing the supply and control of irrigation water supplies through development of potential storage facilities on Burnt River, Pine Creek, Eagle Creek, Powder River, North Powder River and their tributaries.

- It is recommended that land owners, organizations and resource development agencies work together toward adoption of an effective weed control program.
- It is recommended that nurseries and demonstration plots be established within the County for use in evaluating and promoting use of adopted forage and grain varieties.
- It is recommended that research be initiated to evaluate management adjustments to increase production from native meadows now receiving all season water as a result of storage developments.
- It is recommended that soil fertility research and demonstrations be maintained as a basis for education and promotion of efficient fertilizer use.
- In order to evaluate their production potential within the county it is recommended that trial plantings be made as follows:
  - Peppermint for oil and for root stock production in Baker Valley.
  - Spearmint for oil and root stock production in Eagle Valley.
  - Speciality seed crops of onion, dill, lettuce, carrot, potatoes, and peas.
  - Peas and sudan grass for silage.
- It is recommended that programs be initiated to encourage management of privately owned timber as a crop.
- It is recommended that an economic evaluation under local conditions be made of various forage preservation and storage methods such as silage, haylage, grainlage, pelleting, wafering, cubing, chopping, and baling.
- It is recommended that an economic evaluation under local conditions be made of possibilities and economics of land preparation and forage crop renovation through chemical treatment.
- It is recommended that research and educational efforts be directed toward reduction of crop losses resulting from rodents.
- It is recommended that research and educational effort be directed toward evaluation of tourist and recreational development opportunities on private land.

Range

Approximately 1,750,000 acres of the total 1,993,668 acres in Baker County is range land. This vast area contributes substantially to the economy of the County in many ways. It produces spring and summer feed for most of the livestock in the County, and provides year round feed and habitat for wildlife. About 600,000 acres of this range area grows timber, which supports a large wood products industry within the County.

Range lands are also a primary source of large volumes of high quality water. Water from these lands is used many times and for many purposes before it reaches the ocean. It irrigates crop lands in Baker County, generates power at seven dams, provides habitat for fish, provides recreation and water sports, and adds to the supply for irrigating many thousands of acres outside of Baker County. Thus, proper management of these range lands is important to the livestock industry, to wildlife, to outdoor recreation, and to hobbists such as rock hunters. Range lands also are an esthetic asset. Outdoor recreation is rapidly increasing the use of land for the well being of America's growing urban society. Coordinated and skillful management of these lands, both public and private, is essential if they are to meet multiple use demands being placed upon them.

It is the opinion of this committee that action to improve the quantity and quality of forage available for both livestock and wild game. To accomplish this, management must consider the number of both domestic and wild animals, and their distribution in relation to forage supplies. Since range is only a seasonal source of forage, its improvement and most efficient use also must be related to other feeding resources.

It is recognized by the Committee that the public has interest in several species of animals, and that these various species use different forage types. It is important that enough forage of various types be available, and in balance, to support both domestic and wild animals, and that their numbers and distribution then be managed to produce healthy animals of all species. The Committee is concerned with ways in which various users and interests in this multi-purpose resource can contribute an equitable share to its improvement, its maintenance, and its management, to the maximum benefit of all.

RECOMMENDATIONS

- It is recommended that all range interests — individuals, stockmen, conservationists, sportsmen, and public agencies—get together on development of a coordinated plan to assure multi-purpse usage, share responsibility, and promote range improvement through —

  *Increased covers for herbaceous vegetation for soil protection, for water conservation and for forage supply.
*Control of undesirable shrubs and brush.
*Seeding of depleted areas with improved grasses
and desirable shrubs.
*Thinning of overstocked forest stands.
*Adoption of practices that will distribut animals
uniformly to obtain maximum utilization of available
forage.
*Integrating the use of range by domestic and game
animals.

- It is recommended that the County Extension Service
provide leadership and coordinate efforts of other agencies
and groups in —
  *Organizing range tours for the public to inform all
within the county of the use and of the economic
importance of range lands.
  *Conducting range meetings for, and distribute infor-
mation to, special interests groups to familiarize
members with the importance of the range resource
for use by wildlife and by livestock and the inter-
relationship of these and other uses.
  *Organizing tours for range users and for financial
interests to show the impact of range improvement
on personal and local economic well being.
  *Working with all range user groups and interests
to coordinate range use for maximum benefit to all
users.
  *Assisting individuals in adopting range improvement
practices beneficial to the range and to its users.

Marketing

Committee review reveals that there is not now and never
has been any consistent or firmly established single market-
ing channel for agricultural products from Baker Co. Except
for some rough quality designations, there is little in the way
of standardization, reliable information, or guides, that pro-
ducers may rely upon in order to exercise a degree of con-
trol over any phase of the entire production - marketing com-
pex.

Most Baker County cattle are marketed as feeders. These
are sold either at the ranch to order buyers or through
regular or special auction sales. In most cases the decision
to sell is based on limited knowledge, and often the buyer
is better informed on marketing conditions than is the pro-
ducer. Cull cows, sheep, and swine are marketed in pretty
much the same manner as are cattle.

Crops raised in the County — largely hay and grain, are
marketed primarily within the County for livestock feed.
Exceptions are wheat, which moves to the Portland market,
and specialty crops which are marketed in various ways.
To date, specialty crops are a minor item in the total ag-
icultural marketing picture. Local wheat prices are based
on Portland prices less freight and handling charges.

Costs of transportation to market are production costs
and, as such, merit equal consideration with all other phases
of production. Transportation, however, is a phase of pro-
duction about which reliable information is very difficult, if
even possible, to obtain. For this reason a need is seen for
a central source of information, available to all producers,
regarding transportation methods, rates, available facilities,
and procedures.

In the opinion of the committee there is a also need for
an organized marketing system that would provide for col-
vective and orderly marketing of all agricultural products.
Many benefits, including favorable influence upon both
freight rates and product prices, could result from pooling
large quantities of a product for volume sales.

An organization of feeder cattle producers representing
and controlling significant numbers of cattle could contract
with feedlots to furnish constant supplies of quality feeders.
If such a joint venture with a strong cooperative membership
could be organized, and necessary know - how developed,
producers could maintain control of their product through
transporting, processing, packaging, and possibly even retail
channels. With such an organization, producers, individually
and collectively, would be associated closely with their pro-
duct through the entire marketing chain.

There are a number of organizational and cooperative
groups currently in operation to aid in the marketing of
agricultural products. Their effectiveness depends on active
participation and support by all members. The special feeder
cattle sales of the Baker County Livestock Association could be more successful, and more profitable to producers, if more members participated. Total animal numbers sold through these sales in 1968-69 were about one-half the number sold in each of the two previous years. The Association is studying methods to make the special feeder sales more effective. The Tri - County Wool Pool was organized to market wool produced in the area and for several years has successfully obtained prices considerably in excess of those received by individual producers.

The National Farmers Organization (NFO) is working to get producers of all agricultural products to cooperate in pooling products on a national scale. Aim of this organization is to regulate the supply of a product going to market at any one time and place so that surpluses will not occur and depress prices. It seeks orderly marketing at all times by contractual agreements or by control of the product through the marketing process.

Farm and ranch operations are becoming larger and more complicated and are experiencing correspondingly increased capital investment requirements. This necessitates more complete and accurate records. Producers must know their unit costs of production for each commodity if they are to properly evaluate their operations and make management decisions necessary to a profitable business operation.

**RECOMMENDATIONS**

- It is recommended that farmers and ranchers make greater use of computerized management and record keeping services available through colleges, universities and finance firms.
- It is recommended that appropriate organizations, finance firms, and service agencies work together toward development of an accurate and reliable producer - oriented market information gathering and dissemination system.
- It is recommended that the field of marketing be given prominence in the programs of all organizations and educational institutions and agencies serving agricultural producers.
- It is recommended that producers support and participate in existing volume marketing programs such as the feeder sale program of the Baker County Livestock Association and the Wool Marketing Program of the Tri - County Wool Pool and that they consider the development of other such group programs through which to market additional products.

**Water Resource and Development**

It is the opinion of this Committee, and of others concerned with the progress and economic development of the County, that additional steps need to be taken to develop supplemental water supplies for irrigation, wildlife enhancement, and recreational development. This need is especially critical in late summer and early fall, when stream flows practically cease.

There are a number of project possibilities that could provide all season water supplies. Work over a number of years on the North Powder - Wolf Creek development make them ready for construction. Burnt River and its tributaries have feasible water - holding sites, but funds for needed studies and for construction are lacking.

The Thief Valley reservoir in the lower Powder District could provide additionally needed water for multi-purpose use by increasing the height of the dam. There is a feasible site for water storage on East Pine Creek, awaiting necessary fund for the development.

Eagle Valley, upper Baker Valley, Pine Creek (N.W. of Baker) and Rock Creek areas contain lands that would benefit from additional irrigation water. Areas of fertile lands in many parts of Baker County presently are not being irrigated. These lands could be highly productive if and when water is applied. Some of these could be the most productive lands in the County if water were available.

### POTENTIAL IRRIGABLE AREA & SOURCE OF SUPPLY

#### BAKER COUNTY 1966

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Source of Supply</th>
<th>Stream Flow</th>
<th>Storage, Imports</th>
<th>Ground Water</th>
<th>Total Acres</th>
<th>Potential Storage Acre-feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Pine misc.</td>
<td>(a) North Pine</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>(b) Pine</td>
<td>—</td>
<td>2,000</td>
<td>—</td>
<td>2,000</td>
<td>14,400</td>
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<tr>
<td></td>
<td>(c) Snake misc.</td>
<td>100</td>
<td>6,500</td>
<td>—</td>
<td>6,600</td>
<td>*16,500</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>8,500</td>
<td>—</td>
<td>8,600</td>
<td>*30,900</td>
</tr>
<tr>
<td>2 Powder</td>
<td>(a) Eagle</td>
<td>—</td>
<td>3,000</td>
<td>—</td>
<td>3,000</td>
<td>3,200</td>
</tr>
<tr>
<td></td>
<td>(b) Keating</td>
<td>1,800</td>
<td>12,100</td>
<td>—</td>
<td>13,900</td>
<td>*80,850</td>
</tr>
<tr>
<td></td>
<td>(c) North Powder</td>
<td>3,000</td>
<td>9,200</td>
<td>—</td>
<td>12,200</td>
<td>63,050</td>
</tr>
<tr>
<td></td>
<td>(d) Middle Powder</td>
<td>—</td>
<td>29,700</td>
<td>2,500</td>
<td>32,200</td>
<td>2,900</td>
</tr>
<tr>
<td></td>
<td>(e) Upper Powder</td>
<td>—</td>
<td>2,600</td>
<td>—</td>
<td>2,600</td>
<td>100,000</td>
</tr>
<tr>
<td>Total</td>
<td>4,800</td>
<td>56,600</td>
<td>2,500</td>
<td>63,900</td>
<td>*250,000</td>
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</tr>
<tr>
<td>3 Burnt</td>
<td>(a) Lower Burnt</td>
<td>450</td>
<td>7,850</td>
<td>1,800</td>
<td>10,100</td>
<td>19,700</td>
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<tr>
<td></td>
<td>(b) Upper Burnt</td>
<td>150</td>
<td>9,850</td>
<td>—</td>
<td>10,000</td>
<td>61,400</td>
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<tr>
<td>Total</td>
<td>600</td>
<td>17,700</td>
<td>1,800</td>
<td>20,100</td>
<td>84,100</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>5,509</td>
<td>82,800</td>
<td>4,300</td>
<td>92,200</td>
<td>*365,000</td>
<td></td>
</tr>
</tbody>
</table>

*Includes imports.

Data Source: USDA 1966 Cooperative Report.
Studies made by the State Water Resources Board, the U. S. Department of Agriculture, Oregon State University, and other agencies indicate that water is available if developed to add supplemental supplies and for the development of new lands.

AVERAGE MONTHLY AND ANNUAL DISCHARGE
AT SELECTED LOCATIONS — BAKER COUNTY
1935 - 64

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine Creek at bridge above</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carson</td>
<td></td>
<td>24</td>
<td>32</td>
<td>33</td>
<td>27</td>
<td>22</td>
<td>32</td>
<td>120</td>
<td>260</td>
<td>370</td>
<td>84</td>
<td>31</td>
<td>19</td>
<td>88</td>
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<tr>
<td>Pine Creek at mouth</td>
<td></td>
<td>75</td>
<td>100</td>
<td>100</td>
<td>85</td>
<td>68</td>
<td>100</td>
<td>410</td>
<td>910</td>
<td>1300</td>
<td>130</td>
<td>26</td>
<td>13</td>
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<td>Powder River near Baker</td>
<td>2755</td>
<td>14</td>
<td>25</td>
<td>40</td>
<td>38</td>
<td>60</td>
<td>140</td>
<td>340</td>
<td>350</td>
<td>230</td>
<td>47</td>
<td>14</td>
<td>10</td>
<td>110</td>
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<tr>
<td>Rock Creek near Haines</td>
<td>(CPUC intake)</td>
<td>8.7</td>
<td>8.7</td>
<td>8.1</td>
<td>7.3</td>
<td>7.8</td>
<td>8.8</td>
<td>28</td>
<td>83</td>
<td>95</td>
<td>37</td>
<td>20</td>
<td>8.8</td>
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<tr>
<td>Wolf Creek near North Powder</td>
<td>2840</td>
<td>2</td>
<td>3.6</td>
<td>6</td>
<td>5</td>
<td>6.3</td>
<td>18</td>
<td>88</td>
<td>94</td>
<td>24</td>
<td>5</td>
<td>1.5</td>
<td>1.5</td>
<td>21</td>
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<tr>
<td>Powder River near Richland</td>
<td>2867</td>
<td>38</td>
<td>51</td>
<td>100</td>
<td>140</td>
<td>270</td>
<td>460</td>
<td>770</td>
<td>430</td>
<td>340</td>
<td>71</td>
<td>66</td>
<td>48</td>
<td>232</td>
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<tr>
<td>Eagle Creek above Skull</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Creek near Newbridge</td>
<td>2832</td>
<td>110</td>
<td>140</td>
<td>140</td>
<td>110</td>
<td>120</td>
<td>170</td>
<td>510</td>
<td>1000</td>
<td>1000</td>
<td>380</td>
<td>140</td>
<td>100</td>
<td>327</td>
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<tr>
<td>Burnt River near Hereford</td>
<td>2730</td>
<td>34</td>
<td>21</td>
<td>26</td>
<td>25</td>
<td>29</td>
<td>76</td>
<td>260</td>
<td>170</td>
<td>120</td>
<td>93</td>
<td>99</td>
<td>68</td>
<td>85</td>
</tr>
</tbody>
</table>

Data Source: U. S. Geological Survey & SWRB Correlations.

The following tabulation illustrates the potential for greater development and the increased use of water in Baker County.

Inventory of existing water storage facilities -

- Mason Dam .................. 95,000 acre feet
- Thief Valley ................. 17,000 acre feet
- Unity ........................ 25,000 acre feet
- 15 small reservoirs ......... 6,000 acre feet (estimated)

Total supply .................. 143,000 acre feet

Inventory of proposed storage reservoirs -

- North Powder ................ 17,000 acre feet
- Wolf Creek .................. 10,000 acre feet
- Thief Valley ................ 10,000 acre feet
- Dark Canyon ................ 12,000 acre feet
- East Pine Creek ............. 10,000 acre feet
- Burnt River ....... 19,000 acre ft (No., Middle, So. forks)
- Pickler Creek ............... 5,425 acre feet
- Sunny Slope ................ 450 acre feet
- Muddy Creek ................ 425 acre feet

Total proposed supply .......... 94,300 acre feet

Studies and review of data made by the Committee show conclusively that additional water is available to supplement supplies and to irrigate additional land. Knowing this does not lessen the concern nor solve the problems involved in the development necessary to put the total water resource to use. There are many questions unanswered as to who will give time to study, to coordinate and to furnish leadership to gain support for the financing of the storage and other facilities needed.

Improved water management is a need recognized by this Committee and by many others. It is pointed out here that there are water losses in the rivers and the creeks and in existing distribution systems. High water tables exist in the Upper Powder (Baker Valley) and in Eagle Valley. Drainage is needed in these valleys as is the case also in the Lower Powder and Burnt River areas.

Maintenance and improvement of water quality is of concern as is the development and protection of water sheds that are the source of these waters.

Water is a carrier that spreads weeds if weeds are not controlled along water courses. Uncontrolled weeds adversely affect water quality.

RECOMMENDATIONS

- It is recommended that organizations and agencies throughout the County work together in a common effort to expedite the completion of approved storage reservoirs on North Powder and Wolf Creek, East Pine Creek, and Dark Canyon.
- A study to advance projects to develop ground water is recommended. This should be a County-wide study. Present information indicates 70,000 acre feet of ground water in the upper Baker Valley. If developed, this water might be exchanged with older rights to supplement existing sup-
areas needing improved drainage, in the existing districts, or by organizing drainage districts where needed, valuable land becomes less productive and in extreme cases, useless. There is a need for land drainage in several areas of Baker County and it is recommended that efforts be directed immediately to the correction of current problems and the prevention of potential or threatening ones. This may be done by working with existing districts, or by organizing drainage districts where applicable and by working with individual land owners. Areas needing improved drainage, in the opinion of the Committee, are: lower end of Eagle Valley, where some pumping may be necessary; lower Powder, Burnt River, Pine Creek (northwest of Baker), and Baker Valley.

- Since water is such a vital resource and its utilization is the life-blood of the agricultural economy of Baker County, water losses and waste must be avoided. The Committee recommends that there be consolidation and improvement in irrigation water distribution systems throughout the County. Fewer ditches, with improved grades would save much water. Too many ditches at present cause sluggish flows, ponding, and encourage the growth of moss beds.

- In the interest of efficient water use, it is recommended that improved headgates, turnout devices and measuring equipment be installed where these are not now in use. Irrigation districts, ditch companies, or groups of water users should enlist the service of the State Watermaster and his deputies, or employ competent personnel to supervise the measurement and equitable allocation of available water. Thus, it is believed, would result in the delivery of more water to the lands of the users.

- It is recommended that studies be initiated to determine the extent of, and possible means of preventing, suspected excessive water losses from streams in the western part of Baker Valley.

- The need, by all users for information on more efficient use of irrigation water is recognized. It is recommended that appropriate educational resources be enlisted to present information to all County water users relative to the importance of various soils and crops; construction and use of water control devices, and methods of water application to improve irrigation efficiency.

- It is recommended that, in the interest of water quality and of pollution control, a County-wide system be initiated to avoid feed lots, corrals, and other possible pollution sources from locating near water courses. This could assist in controlling the spread of livestock diseases and guard against health hazards. (Zoning may assist in this). Controls are needed to prevent the disposal of wastes, such as used tires, logs, car bodies, and other refuse in the water courses of the County. This would improve water quality, enhance flow, and save land owners and irrigation districts much expense in the removal of this debris.

- Improvement of watersheds by both public and private land owners is encouraged. Forest stand thinning to reduce water loss by transpiration and the removal of sagebrush and other useless deep rooted perennial plants aid in conserving water.

- It is recommended that watermasters and deputies be employed by the State of Oregon. It is believed that this would result in improved service and would relieve the County, irrigation districts and ditch companies of the expense and of the responsibility of supervising this service.

- Much time is spent on feasibility studies, engineering and financial arrangements to develop irrigation projects. It is recommended that a search be made for local sources of financial aid to develop the smaller projects. This should speed up the procedures and bring such projects in to use sooner.

- It is recommended that appropriate weed control district, or districts, be created by the County and that first priority on weed control be concentrated in the irrigation water distribution systems, including farm ditches.

- Stream channel improvements, particularly in the Powder River at Baker and Sumpter junction and the Burnt River, are needed. It is recommended that these and other needed improvements be pursued.

- It is recommended that where practical, irrigation districts be combined. This would create an organization with a stronger voice to advance the development of potential water storage and to install pumping facilities, the latter to utilize ground water for irrigation and in some instances for drainage. This organization may be formal, or an informal combining of districts, or there may be effected a strong cooperative alliance among them.
Recreation

Historically, the recreational attractions in Baker County have been hunting and fishing. These are still popular. There is also a wealth of other recreational opportunities that are and can be developed.

Baker County has some of Oregon's most spectacular scenery. With segments of both the Blue and Wallowa Mountains within its boundaries, the County abounds in picturesque landscapes, high lakes, and clear mountain streams. Three of these streams make their way to the Snake River, which forms the eastern boundary of the County and flows through rugged Hell's Canyon—the deepest gorge in America.

Present developments have come as the needs and interests of local people and visitors have been expressed. These needs, in more recent years, have been projected into policies of multiple use of all natural resources. Facilities so far developed in the County for recreation are commendable. The potential and opportunities for future development seem limitless.

Both public agencies and private interests are at work in the County developing public recreational facilities. The U. S. Forest Service, which supervises about one-third of the total County area, has 21 well-developed parks and camping sites distributed over the area. These include tables, fireplaces, tent and trailer space, and parking areas. There are other sites, used mostly by hunters and hikers, where only sanitary facilities are now installed. There are two State parks, at Farewell Bend and at Unity Lake. The County has developed Hewitt Park at Brownlee Reservoir, and the Bureau of Land Management is developing the Spring Recreation site near Huntington.

The Forest Service reports a 200-percent increase in the use of forest lands for recreation since 1960. The State reports an increase of 216 percent in the use of its two parks within the County.

Private developments include the Anthony ski area, which is attracting local and outside skiers, and the Radium Hot Springs resort at Haines, offering swimming, picnicking and overnight camping.

In addition to the usual recreational activities of sightseeing, picnicking, camping, hunting and fishing, Baker County has the attraction of historic mining towns and of gold panning. Water sports are popular. There are boat landing facilities at Anthony Lakes, Farewell Bend, Unity Reservoir, Brownlee Reservoir, Oxbow and Phillips Reservoir.

Winter sports contribute to making the County a year-round recreation area. The ski facilities at Anthony Lakes accommodate local and visiting skiers of all ages. A package offering daytime skiing at Anthony Lakes and evening swimming at the hot springs at Haines recently has been offered.

The coming of the snowmobile has introduced another winter sport for which Baker County is admirably adapted. An active snowmobile club in the County stresses this sport for all members of the family. The U. S. Forest Service has mapped and marked 100 or more miles of trail over which travel is safe with these machines. A brochure is available from the Forest Service showing these trails and offering other information relative to this sport.

The numerous organized recreational groups in the County attest to the interest the local citizens have in recreational activities and development.

The Powder River Sportsmen's Club, incorporated in 1954, has a membership averaging 1,200, with members in 17 states. The purpose of the club is to work for the conservation of forests, land, wildlife, water and fish resources and for the use of all resources for sustained yield and conservation.

The Elkhorn Archers Club was organized in 1948. This club has moved its center of activities a number of times, but is now in the Community Center for indoor shooting. It has an active youth program with a membership of 50 junior archers. The Club is encouraging service clubs and business firms to organize archer teams. Archery is to be a gold medal event at the 1972 Olympic games and the local club is hopeful that Baker may be represented.

The Baker Golf Club has sponsored a junior golf program for many years, but in 1965, when there were only 15 to 20 members, more adult effort was put into this program and presently there are about 100 junior members. The sponsors are planning to create outside competition for the juniors and to encourage the school to include golf in the physical education curriculum.

The Sheriff's Mounted Possee of Baker County sponsors a youth trail ride each summer. This is for youngsters 12 through 17 years of age that could not otherwise spend a weekend in the mountains on horseback. From 60 to 100 youngsters regularly participate in the three day outings. The camp, in past years, has been established at Boulder Park at the entrance to the Eagle Cap Wilderness area. All food, horses and equipment (except bedding) are furnished the youngsters. Because of the distance and time required to transport riders, tents, cooking equipment, food, horses and feed, this activity may in the future occupy two weekends in order to give participants more riding time. Consideration is also being given to a camp and trail area closer to Baker.

Also reflecting local interest in and appreciation of available resources of the County are the many other organized recreational groups such as Red Cross swimming classes, 4-H, Girl Scouts, Boy Scouts, riding clubs, Little League baseball, ski clubs, snowmobile clubs and others.

The U. S. Forest Service, by past action and by projected plans, is an important contributor to outdoor recreation in the County. Personnel of this service show willingness to work with all recreation groups. Obtaining Federal financing for desired developments is the major problem. Most of the major developments completed by the Forest Service have been mentioned.

Developments projected for 1970-71 are as follows: Begin construction on the Sumpter-Whitney Tipton Bates route; complete paving of Elkhorn Drive from the forest boundary to Anthony Lake; complete initial development of Elkhorn Drive route; continue construction on the Crawfish Creek-North John Day section; begin construction of Phil-
litter and providing more waterside facilities presents the possibility of developing
additional facilities. These may include the development of more trails, warming
huts, service facilities, and repair shops.

The Baker Police Protective League has studied the possibility of developing a
recreation center at Samo Springs in Baker. There is a year-round flow from this
source, with water temperature of 72 degrees. The League suggests construction of an
indoor-outdoor Olympic sized swimming pool, a small gymnasium containing workout
equipment, handball courts, a steam room, and a community meeting room. This group will support a total community effort to develop such a facility. It suggests that development
may be done on a portion of a time, in a manner similar to that used on other community facilities such as the Adler Field.

Great numbers of people, local and visitors, use the hunting and the fishing resources of Baker County. To utilize and to conserve these resources there are some improved facilities and practices needed. Hunters pursue, in season, a variety of big game animals, upland game birds and waterfowl. The Committee learned from personnel of the State Game Commission that there is need for improvement of habitat and for increased watering facilities for upland game birds. There is need for improving the range for big game animals, particularly winter range, and for a feeding and resting area for waterfowl.

The fishing resource in Baker County is extensive and is used heavily by local people and by visitors. It affords recreation to all ages, individuals, and to family groups. The Committee recognizes that the waters of the County serve many purposes. Maintaining adequate stream flow, minimum impoundment in reservoirs, access to high lakes, adequate stocking in some waters, control of pollution and litter and providing more waterside facilities present problems.

Because of distance from the population center to the established winter sports area within the County, it is believed that youth participation could be increased through development of recreational facilities nearer to the City of Baker. Development by private interests, or by the community, of an ice skating rink and areas for sliding and tobogganing is suggested.

The Community Action Agency facility is open four evenings a week for recreation activities for all youth of the community. More volunteer supervisors are needed to expand this program. Play areas for young children, close to home, are needed and children of low income families should be encouraged to join 4-H Clubs, Scouts and other youth groups. Some financial aid, such as scholarships, may be needed for some. Finances are needed for about 30 youth from low income families to attend summer camps. There is also a need by this group for summer jobs and for job training of school dropouts.

It is the belief of this committee that the present recreational activities within the County, both publicly and privately sponsored, are of great economic benefit to the economy of Baker County. The annual expenditure by recreationists who visit the County is substantial. Continued development for recreation will be a good investment for public and private funds.

RECOMMENDATIONS

- It is recommended that organized groups and individuals support and assist in obtaining needed Congressional funds for further recreation development on public lands. The same assistance and support should be given for developments that come under the jurisdiction of State and local agencies.

- It is recommended that recreational use of private lands be increased where feasible and that private enterprise be encouraged to consider recreation developments for public accommodation.

- It is recommended that through cooperation of the local snowmobile association, the U. S. Forest Service, the Bureau of Land Management, private land owners, and business interests, additional and improved facilities be developed to accommodate and capitalize on the expanding use of snowmobiles. These should include the construction, marking and mapping of more trails; the construction of lodge facilities separate from skiing accommodations; provision of warming huts along trails, and central service and repair shop facilities for the machines.

- In the interest of conserving and of improving the fishing resources of the area, it is recommended that at all future impoundments of water, provision be made to maintain a minimum pool that will provide maximum recreation development. The minimum stream flow from such impoundments should be adequate to permit trout production. It is further recommended that a larger minimum pool be maintained at Mason and at Thief Valley reservoirs; that pollution and littering laws be strictly enforced; that Federal, State and local governments cooperate to provide more sanitary facilities in recreation areas; that boat launching facilities be improved and increased, and that an educational program be intensified to inform the public of its responsibilities and to emphasize rights of private land owners.

- Since hunting of big game animals, upland birds and waterfowl puts great pressure on these resources, and since management of these resources and of all lands needs cooperation of State and Federal agencies, of private land owners, of sportsmen groups and individuals, the Committee recommends the following: additional winter range for big game animals be obtained; present and future ranges be improved by seeding forage and browse plants; springs and other watering facilities for big game and upland birds be developed; habitat for all game be improved by fencing where feasible; appropriate cover be provided and land be procured by the Game Commission for feeding and resting areas for waterfowl. In the Committee's opinion there is also need to promote better relations between land owners and all sportsmen; to enforce laws against disturbing game on winter ranges; to launch an anti-litter campaign.
to get recreationists to police their own ranks, and the closure of certain roads during the hunting and calving seasons.

- It is recommended that all business, service, civic, church and fraternal groups in Baker and vicinity consider the proposal of the Baker Police Protective League for the development of a community center at Samo Springs. After a thorough study as to needs, costs, and feasibility, the merits of such a project could be determined and a plan drawn for its development.

- For many young persons and families, the winter sports areas are too far away for their use and enjoyment. It is recommended that either private interests or community groups consider the development of a facility near Baker to provide ice skating, sliding, and tobogganing for local youth and families unable to use distant facilities.

- With the increase in flow of tourists and visitors, the Committee believes that additional accommodations are needed. It is recommended that private investors consider the development of a tourist park near Baker that provides a variety of overnight accommodations and the possibility of convention facilities.

- It is recommended that the Baker Municipal golf course be more fully utilized by local citizens of all ages; that its availability be called to the attention of visitors and that the junior golf program receive full support of the community.

- The Committee feels that recreational activities for youth makes for good citizenship and for a stable community. It is, therefore, recommended that all youth activities have total community support; that organizations now sponsoring such activities be encouraged; that youth from low income families be given recreational opportunities, and that more of the citizens volunteer as supervisors, instructors and leaders.

- It is recommended that the schools throughout the County be utilized more fully for community recreational activities.

- It is recommended that some 1,000 acres in Sumpter Valley owned by the County and consisting of dredge lands, resulting from former gold dredgings, be retained by the County; that this land be surveyed and mapped to determine its potential for development of a perpetual park; that development be planned to complement the recreation potential resulting from the building of Mason Dam and in the formation of Phillips Reservoir; that the plan be coordinated with other planned recreational developments in the area so as to provide the greatest beneficial use for the greatest number over an extended period in the future.

- It is recommended that a comprehensive program be initiated under leadership of some appropriate county-wide organization such as the Baker County Chamber of Commerce to promote and coordinate full development and utilization of the economic recreational potential inherent to the county.

Anthony Lakes, all-year recreation.
Minerals and Mining

Since the early 1860’s when the lure of gold brought the first rush of settlers, the production and processing of minerals has been a major factor in the economic growth of Baker County. Metals that have been produced include gold, silver, copper, lead, zinc, antimony, manganese, tungsten, iron, and chromium. Commercially, gold has been by far the most important. Deposits of molybdenum and quicksilver are known, but have not been exploited. Non-metallic products of proved or of future potential include cement, lime, stone, sand and gravel, clays, gypsum, diatomite, perlite, vermiculite and varite.

During the five year period 1963-1967 the value of mineral products taken annually within the County averaged about $5,582,000, varying from a low of $4,174,000 in 1964 to a high of $6,493,000 in 1966. Value of 1967 output was $5,985,000. The principal products were cement, lime, crushed stone sand, and gravel.

Total output of gold and silver from Baker County mines is unknown because county statistics are not available for years prior to 1880 and for the 1881-1901 period statistics are incomplete. Past production of the entire State has been about 5.8 million ounces of gold and 5.4 million ounces of silver. It is estimated that at least half of this came from mines in Baker County. Recorded Baker County production for the period 1902-1968 is 1,259,000 ounces gold (835,250 ounces lode and 423,750 ounces placer) and 2,265,750 ounces silver.

In the fall of 1861 a party of prospectors from Portland discovered gold in what is now Griffin Gulch, a tributary of Powder River a few miles south of Baker. The following spring the first white settlement in eastern Oregon was established at Auburn about 5 miles south of Griffin Gulch. So great was the influx of miners and adventurers that by later that year the population of the camp was estimated at between 5,000 and 6,000 persons.

The prospectors spread in all directions, and by 1864 almost every placer-mining district in eastern Oregon was being exploited. Among the most productive early-day placer mining districts in Baker County were Sumpter, Auburn, Pocahontas, Sanger, Sparta, Malheur, Mormon Basin, Rye Valley, Eldorado and Connor Creek.

Water for working the gravels in several areas was scarce, so ditches, some of great length, were constructed. The Auburn ditch was completed in 1863, the Rye Valley ditch in 1864, and the Sparta and Eldorado ditches in 1873. The Eldorado ditch, which took 10 years to complete, carried water more than 100 miles from near the head of Burnt River to the placers near Malheur. Use of these ditches for mining ceased long ago. The Auburn ditch is now part of the Baker city water system and the Sparta ditch is used for irrigation.

Sketchy records indicate that many of the early placer workings were rich, but there are no reliable statistics to show the total amount of gold produced. Production probably was at its peak during 1863-1866, then began to decline gradually as the richest placers were worked out. Impetus was renewed when the first successful bucketline dredge employed in eastern Oregon began work in Sumpter Valley in 1913. Bucketline dredges were later used on Burnt River near Whitney, and on Clarice Creek and Burnt River near Bridgeport. Dragline ditches and dry-land washing plants were employed in the Sumpter, Unity, Mormon Basin, and other areas.

Vein deposits were discovered soon after the advent of placer mining. Development of the Virtue mine began in 1962 and a ten-stamp mill, used to treat the ore, was erected on the outskirt of Baker in 1864. An arrastra was in use near the present Sanger mine before 1865. Quartz mines were worked as early as 1866 in the Mormon Basin district and in the Connor Creek and Cable Cove districts in the early 1870’s. The first claims on the great North Pole-Columbia Lode near Sumpter were located in 1877. Lode gold deposits were discovered near the present site of Cornucopia in about 1880.

Following extension of rail facilities to Baker in 1886, development of lode mining increased rapidly. Completion of the Sumpter Valley Railway to Sumpter in 1896 led to a mining boom in that area that lasted until about 1908. Sumpter grew from a small hamlet of a few hundred population to a town of 3,000 or more. During this period many of the most productive mines of the surrounding area were active, including the North Pole, Columbia, E. & E., Tabor Fraction and Golconda near Bourne in the Crackers district, the Bonanza in the Greenhorn district, the Bailsley-Elkhorn and Highland-Maxwell in the Rock Creek district. From 1904 to 1908 a 100-tons-per-day smelter erected at Sumpter was operated on ores and concentrates hauled in from the mines. The plant was well built and efficiently run, but the amount of ores and concentrates supplied by the mines was inadequate to sustain operations.

Peak production from lode mines was reached in 1915, when 63,848 ounces of gold and 105,584 ounces of silver were produced. Of 12 operating mines the most productive were the Union-Companion and Last Chance near Cornucopia, the Rainbow in Mormon Basin, and the Columbia near Bourne.

Gold production declined sharply in the inflationary period of the 1920’s, then began to increase again during the depression, particularly after 1934 when the price of gold was increased from $20.67 to $35.00 per ounce. During the four-year period, 1938-1941, Baker County gold and silver production averaged about $1.5 million per year from an average of 34 placed mines and 27 lode mines. With the curtailment of gold mining, brought about by War Production Board Order L-208 in 1942, Baker County production virtually ceased. Due to subsequent drastic escalation of mining costs, few mines were successfully reactivated after the order was rescinded in 1945. Production reached a postwar high of only $388,755 in 1947. Total 1945-1968 output has been about $2.4 million, more than 90 percent of which was produced by the Sumpter Valley dredge during 1945-1954.
Non-metallic Minerals

Limestone is and in the past has been the major commercial mineral of Baker County. Before the turn of the century small batch kilns were operated to produce building mortar for local use. From these crude kilns came the mortar for all chimneys, brick, and stone buildings in the County. The older houses and business buildings in Baker, both brick and stone, were built with mortar from lime burnt in these kilns. According to Lindgren (1901) the deposits at Lime, Oregon, (Baker County) supplied most of the lime needs of the State at that time.

Today, Baker County’s limestone industry is a substantial enterprise. The present value of raw limestone produced annually exceeds the value of gold production in any year for which records were kept.

The Oregon Portland Cement Company plant at Lime has been operating since the 1920’s. It also supplies raw limestone to the company’s plant in Oswego. Both of these plants have been modernized and enlarged.

The Marble Mountain limestone, which had minor use in the 1880’s, is now the source for the Chemical Lime Company, Baker County’s newest mineral resource development and Oregon’s only burnt lime plant. This plant furnishes chemical products to a wide range of industries. An important one is products for the manufacture of acetylene gas.

The National Industrial Products Corporation plant at Durkee supplies lime products to the sugar refining industry of Idaho and to many paper manufacturers.

Gypsum

Gypsum is a mineral closely allied to limestone in its industrial application. This mineral was mined in the County from the 1880’s to about 1924. None is now being mined. The elaborate plant used in the earlier days was high above the Snake River below Huntington, a landmark for years, but now partially flooded by waters of the Brownlee reservoir.

Building Stone

The older stone buildings in Baker were made from blocks of volcanic tuff. This stone was quarried mostly at Pleasant Valley and from a quarry near Baker at the turn of the century. In that period there was also a brickyard in the County. Building stone production now is at Dooley Mountain where rhyolite is supplied to builders in the Northwest for veneers on residential and industrial buildings.

A low quality form of coal occurs in the County, interbedded with tertiary lavas and in lake-bed formations. Attempts to mine this coal have been unsuccessful. It has a high ash content, low heat value, and a tendency to air slack into powder when mined.

Perlite exists in large deposits in the Dooley Mountain area. Experiments to economically use this ore have thus far failed. Shipping cost is the most limiting factor.

Several deposits of diatomaceous earth are located in the Keating area, with smaller deposits near Durkee and Richland. These deposits and those just outside of the County and near a railroad, have good potential for development. Complete testing of quality and quantity of these deposits has not been made. Many uses are made of this mineral, such as filtering, fillers, and absorption material. The increase in manufacture and food processing in the Northwest may require a thorough study of these deposits.

To complete Interstate Highway 80N through the County, to maintain and surface State and County roads, and to supply aggregate for building; great quantities of gravel, sand, crushed rock and volcanic cinders will be needed in the immediate future. Supplying these materials is and likely will continue to be a significant industry in the County.

Vermiculite of commercial grade has not been located in the County to date; however it does appear over many miles with the intrusive granites in the Anthony Lakes area.

The clays in Baker County were first used for brick making in an earlier day. Today some bentonite is used for lining ditches and ponds. A small deposit of fire clay is located about four miles east of Baker but the quantity makes commercial development doubtful.

Note—More detailed and scientific information relative to the mineral and metal resources of the County, may be obtained from either:

Oregon State Department of Geology and Mineral Resources,
1400 S. W. 5th, Portland 97201.
U. S. Bureau of Mines, Albany Mineral Supply Field office,
P. O. Box 70, Albany 97321

RECOMMENDATIONS

- Excavations for sand and gravel and for rock quarries often leave ugly scars on the landscape. The County officials should require a permit before such excavations begin. The application for a permit should be reviewed by the County Parks and Recreation Commission. Where water is encountered in gravel pits or in barrow areas for road building, such areas should be developed for recreation and be beautified where possible. Where unsightly scars are unavoidable, these should be located out of public view.

- Baker County has an abundance of lime. Greater use of lime and lime products needs to be explored. The use of carbon dioxide to make dry ice, use in pressure cylinders, and the inflation of collapsible devices are suggested. More extensive use of lime in stabilizing road beds for highway, County roads, and city streets, as now being done by the City of Baker at a saving in cost of 1/3 to 1/2 of the conventional method of road construction, should be studied.

- The amateur rockhound should be encouraged to explore various areas of Baker County. There are to be found various petrified woods and bones, fossils, as well as stones and gems. These include thunder eggs, agates, Oregon jade, garnet, opal and others. Those exploring should cover a wide area rather than be directed to a particular limited area. It is suggested the commercial interests seeking these treasures be discouraged. This resource is not inexhaustible and will not stand commercial exploitation.

- The Committee recommends that space be provided in the proposed museum contemplated for the Campbell
Street interchange, for a complete display of ore and minerals found in Baker County. Some time would be necessary to assemble such an exhibit with descriptive cards and to acquire suitable display cases. The Committee advocates that such a building be called the Baker County Building; that private business be encouraged to erect exhibits; that a tourist information center be established at the location, and that possibly the Chamber of Commerce offices be located at such a center.

- Hundreds of acres in the County have been washed by dredges where little or no top soil is present. These lands are rough and composed mostly of rock aggregate. Efforts should be made to restore these lands to some use. Since the County owns these lands, the County Court has jurisdiction over them.

(See Recreation Report also)