

CHAPTER 10 SUMMARY AND ANALYSIS

INTRODUCTION

Citizen Involvement

The four former planning units (Western, Eastern, Central and Southern), will each be represented by a citizen involvement group and will have opportunities to give their input into future plan updating procedures.

A. HISTORY

Lewis and Clark first came to the area known as Wasco County in 1805 on their way west along the Oregon Trail. The County was established in 1854 by the territorial legislature.

The building of The Dalles Dam on the Columbia in the early 1950's provided thousands of new jobs and gave easier river access to barge transport of goods up and down river. Since the dam's completion in 1958, economic growth has been based on cherry and wheat production.

B. PHYSICAL CHARACTERISTICS

1. General Location

The County is bounded on the north by the Columbia River, on the east by the Deschutes and John Day Rivers, and on the west by the Cascades. Much of the southern half of the County lies within the Warm Springs Indian Reservation.

2. Topography

Steep rolling hills and sharp cliffs are characteristic land-forms in the County. Elevations range from 5,700 feet in the west to 150 feet on the Columbia River.

3. Climate

The climate is temperate to semi-arid. Low annual precipitation, low winter temperatures, high summer temperatures and high winds along the Columbia River Gorge are typical.

4. Water Resources

a. Surface Water

The County lies within three major drainage basins: the Hood, Deschutes River and John Day River basins. Stream flows are generally rapid during early winter rain-storms, before heavy snowfall and freezing conditions prevail. Many streams are perennial; drying up during the summer months.

b. Ground Water

Ground water supplies are generally adequate in all parts of the County. The Dalles Ground Water Reservoir has been declared a Critical Ground Water Area by the State Engineer, due to declining water levels. Stream diversion into the reservoir is helping to ease the pre-sure on it.

c. Water Rights and Usage

Estimated surface water rights in the Hood and Lower Deschutes River Basin in 1967 totaled over 2,000 cubic feet per second (cfs). This information was not available for the John Day River Basin. Ground water rights for the Hood Basin totaled 102.78 cfs in 1964. Again, this information was unattainable for the John Day and Deschutes River Basins.

d. Municipal Watersheds

Two municipal watersheds provide water for the cities of The Dalles and Dufur. They lie within the western forests of the County.

5. Geology

Generally, the County is underlain with expansive flows of Columbia River Basalt. Layers of ash, tuff and other volcanic material have been deposited in many areas as have Erosion materials from the Cascades, such as sand and silt. The flows of Columbia River Basalt are very obvious in the cliffs along the Columbia River Gorge.

6. Natural Hazards

A variety of geologic and flood hazard areas have been identified. On-site investigations should be made before development occurs in these hazard areas.

7. Mineral Resources

a. Metallic Mineral Resources

There are no economically important metallic mineral deposits in the County.

b. Non-Metallic Mineral Resources

Non-metallic mineral resources found in Wasco County include: semi-precious gem stones (agate, chalcedony, jasper, opal); fossils; agatized fruits, seeds and nuts; perlite; decorative volcanic tuff and ryolyte; and widely dispersed minor deposits of peat.

c. Aggregate Resources

Wasco County has approximately 73 aggregate pits with a total production capacity of 6.3 million tons.

8. Soils

Soils are generally formed from loess and volcanic basalt and ash, as well as sediment and other erosional materials. Soils Capability Classes II-VIII is found, with Classes III, VI and VII being the most widespread.

9. Vegetation

The plant associations from east to west are as follows: grass-land communities, chapparral-oak, ponderosa pine-white oak, douglas fir-ponderosa pine and high elevation forest.

10. Natural Areas

Areas of ecological and scientific value have been inventoried by the Oregon Natural Heritage Program, Nature Conservancy. Thirty-seven areas have been identified in Wasco County. The location descriptions are much generalized and include vast acreages.

Wasco County has also identified five natural areas in addition to those named by the Nature Conservancy. The natural areas will be protected and preserved by the placement of the Environmental Protection District over-lay zone.

11. Forest Resources

The U.S. Forest Service and other public agencies administer about 95 percent of the commercial timber volume. There are a total of 550,000 acres of forest land and a timber volume of 6,720 million cubic feet.

Timber has been classified into seven productivity ratings, based on the yield in cubic feet per acre. Classes II-VII exist in Wasco County; Class VII being considered non-commercial timber. Most of the timber is classes III-VI.

12. Land Use and Ownership

Most of the land is in either agricultural or forestry uses. Population is concentrated in the urban area of the City of The Dalles. The Warm Springs Indian Reservation covers a large portion of the southern part of the County.

Over eighty-four percent of the Counties are in private ownership. This includes Railroad Company, Indian reservation and private timber company lands. Public and semi-public lands, which total 15.6 percent of all lands, include Federal, State, County and City lands, as well as those owned by utilities, school districts and others.

13. Fish and Wildlife Resources

Wildlife Resources

An estimated 230 species of animals are found in the ten various habitat types which exist in Wasco County. Much of this habitat is considered sensitive to destruction by either natural and/or man-made forces. Conflicts of use arise between human activities and those of animals who must use these areas for food and cover. In an effort to correct these problems and avoid future conflicts, the sensitive wildlife habitat areas are being protected by the placement of large minimum lot size zoning classifications and the Environmental Protection District Over-layer zone. This will both reduce population densities in these areas and will allow proposed developments to be examined by the local governing bodies and any conflicts of use to be resolved.

Several means by which landowners can protect their lands from damage done by big game are offered by the Department of Fish and Wildlife. They include: damage control hunts, kill permits, hazing permits, use of repellents and fencing. The Department will work with landowners to devise a means by which damage from big game animals may be greatly reduced.

Fisheries Resources

Fisheries habitats include the Columbia River, back-water ponds of the Columbia River, Fifteenmile Creek Drainage, the Deschutes River, Deschutes River Tributaries and lakes and reservoirs. The Columbia River is considered to be the single greatest fisheries resource in the Pacific Northwest. The high quality water and stable flows provide optimum conditions for good fish populations.

14. Environmental Considerations

a. Air Quality

Air quality in Wasco County is considered to be good according to the Department of Environmental Quality (DEQ). The highest potential for air pollution problems exists within The Dalles airshed, which is centered at The Dalles and bounded by the surrounding high topography. This area is monitored by the D.E.Q. and measures may have to be taken if air pollution standards are being exceeded.

b. Water Quality

The Columbia, Deschutes and John Day Rivers are the only streams that are monitored regularly for water quality. Generally, all state and federal standards for water quality are met. Sewer and water systems appear to be satisfactory, as do ground water supplies and quality.

c. Land Resources Quality

Solid waste disposal presents no problems at the pre-sent time. Burning is allowed twice a year at the only sanitary landfill in the County and is closely monitored by the Department of Environmental Quality.

d. Noise Pollution

Due to Wasco County's rural nature, noise pollution is not a serious problem. Because the agriculture and timber industries are common livelihoods in the County, the noise which accompanies them is generally accepted. There is currently no noise ordinance in effect outside city limit boundaries.

15 Energy

a. Sources

The following is a list of developed and potential energy sources of energy in Wasco County:

Hydroelectric -	this will continue as a major source of energy for the area.
Pumped Storage -	five potential sites for this type of production are being investigated.
Thermal -	it is estimated that by the year 1995, thermal plants will operate as the main source of electrical energy, supplemented by hydro power for peak demands.
Geothermal -	there is little potential for this energy source in the County.
Oil and Gas -	Although there are no natural gas or oil supplies in the County, this will continue as a major energy source for the area.
Wind -	the utilization of wind as an energy source in Wasco County appears to be very feasible, particularly in the Columbia Gorge area.
Solar -	use of this feasible energy alternative has not had widespread application in the County.
Waste Products -	timber production wastes are currently being utilized to produce heat in at least one mill in the County. Use of organic agricultural wastes to produce alcohol has been studied and found

to be too unstable a resource at present to be useful on a large scale. The methane gas produced at The Dalles Sewage Treatment Plant is used to run part of the equipment at the plant.

b. Consumption

The transportation sector is the largest user of energy. Petroleum products account for almost all of the energy consumed. Space and water heating dominate energy use in the residential sector.

Energy conservation and recycling are encouraged as ways of preserving existing non-renewable energy supplies. These conservation methods include recycling glass, aluminum and paper, using bicycles and mopeds, pedestrian walk-ways and carpools. Local governments need to be responsive to programs which suggest these practices.

C. POPULATION

Population in Wasco County is projected to increase at a higher rate than in the past based on recent economic trends with much of the growth occurring in The Dalles Urban area and surrounding rural residential lands. In 2005, the population totaled 23,935 people. Forecasts for the year 2026 show the population will increase to 33,780, a 41 percent increase.

D. POLITICAL STRUCTURE

The County Governing Body, consisting of three Commissioners, is the main administrative body in the County. These are elected positions as are the positions of Clerk, Assessor, District Attorney, Sheriff and Treasurer.

E. COMMUNITY FACILITIES AND SERVICES

1. Police Protection

The County is served by the State Police, County Sheriff's Office, The Dalles City Police, the Dufur City Marshal and the Antelope City Marshal.

2. Fire Protection

The several fire departments and districts that service the County include the City fire departments for the cities of The Dalles, Mosier, Dufur and Maupin and the Wasco Rural Fire Protection District, Columbia Rural, Mosier Rural, and Juniper Flats Rural Fire Districts. Wildland or non-structural fires on public lands are manned by the U.S. Forest Service, Bureau of Land Management or Oregon State Forestry Department.

3. Medical Services

Most medical facilities in the county are located in The Dalles. They include the Mid-Columbia Medical Center, the Mid-Columbia Clinic, The Dalles Clinic, The Dalles Family Practice Group, the county-operated Columbia Basin

Nursing Home and the Valle Vista Nursing Home. The Columbia Gorge Rehabilitation Center located in Hood River also provides service to Wasco County.

Emergency medical services are provided by six ambulances. Two are operated by the Wasco Rural Fire Protection District, one by the Dufur City Fire Department, one in Maupin and two in Rajneeshpuram. Emergency services to other parts of the county are inadequate.

4. Schools

The County is served by ten school districts. Student-teacher ratios are presently adequate and no new facilities are proposed.

5. Postal Services

The cities of The Dalles, Dufur, Maupin, Mosier, Antelope, and Shaniko all have city post offices, as does the community of Tygh Valley.

6. Television and Radio

Television service is provided by cooperatives that receive signals from the major antenna located near The Dalles. Stations in many parts of Washington and Oregon can be received.

Three radio stations serve the County. KODL and KACI are located in The Dalles and KCIV-FM is located across the Columbia on the Klickitat Hills.

7. Telephone

Several telephone companies service the County. Pacific Northwest Bell covers The Dalles, Dufur, and Seven-mile Hill areas. Other areas are served by United Telephone Company of the Northwest, North State Telephone Company, Deschutes Telephone Company and the Trans-Cascade Telephone Company.

8. Newspapers

Five newspapers serve the county they are: The Dalles "Chronicle", The Dalles "Reminder", and the "Oregonian".

9. Libraries

The Dalles-Wasco County Library is the main facility in the County. Maupin, Mosier and Dufur each have small public libraries.

10. Parks and Recreation

a. Current Supply of Recreational Facilities

Most of the 42 parks and recreation sites in the County are in public ownership (75%) and are in or near the Mt. Hood National Forest and the Deschutes, White and Columbia Rivers. The Deschutes River is a

particularly popular steelhead fishing stream. This river and the John Day River have both been designated as Oregon Scenic Waterways.

There are no designated wilderness areas in the County. There are also no winter skiing facilities, Oregon recreational trails or bicycle trails. Several scenic areas have been designated by the State and these include portions of I-84 which pass through the Columbia Gorge, the old Gorge highway (U.S. 30) and several others.

b. Future Recreational Needs

The Statewide Comprehensive Outdoor Recreation Plan (SCORP) shows a need for additional campsites and picnic facilities, especially along I-84, swimming beaches, walking and hiking trails, biking and bridle trails, ball fields, tennis and all-purpose courts, golf courses, and additional neighborhood, community, district and regional park lands. Demand for these resources will generate their development on either public or private lands.

c. Outstanding Scenic and Recreational Areas

Outstanding scenic and recreational areas have exceptional qualities which attract local and outside visitors. These areas include: Columbia River Gorge, Deschutes, John Day and White Rivers, Rock Creek Reservoir and Pine Hollow Lake.

11. Cultural Resources

1. Historic Areas

Historic sites in Wasco County include: the Oregon Trail, Barlow Road and Barlow Cut-off Road, The Dalles Military Wagon Road, Town of Ortley, many old school sites and others.

2. Archeological Areas

Many archeological sites exist in Wasco County, particularly along the Columbia, Deschutes and John Day Rivers. Fivemile Rapids and Fort Rock Campsite are on the National Historic Register. Memaloose Island and Abbott Site near Wapinitia are eligible for placement on the Register.

12. Social Services

There are nineteen active service agencies in the County. These include both private and public service agencies. There are also at least sixteen active service clubs, including Chamber of Commerce, Jaycees, Kiwanis, Boy and Girl Scouts, to name a few.

13. Utilities

a. Natural Gas

The Dalles and Chenowith are the only areas serviced by natural gas in the County. It is furnished by the Northwest Natural Gas Company in The Dalles.

b. Electricity

Three electric companies provide service to the County. They are the Northern Wasco County People's Utility District (P.U.D.), Pacific Power and Light (P.P.&L.), and Wasco Electric Co-op, Inc. Generally, the Northern Wasco County P.U.D. serves The Dalles, Chenowith, Dufur, Tygh Valley and Wamic; P.P. & L. services Mosier and Wasco Electric services the remainder of the County.

b. Public Water and Sewer Systems

There are 36 water systems in the County. Many provide water for both domestic use and irrigation and some are for agricultural and irrigation use only.

There are two community sewer systems in the County. One services the City of The Dalles and Urban area and has a maximum capacity of seven million gallons per day. The other system is in the Sportsmen's Park subdivision and is a community drainfields which services up to 180 lots.

d. Solid Waste Disposal Facilities

The Northern Wasco County Sanitary Landfill is a privately owned facility. Various garbage collection services dump at the landfill. It has an estimated life-span of between 15 to 25 years at current use rates. The additional 17.5 acres which have been purchased adjacent to the landfill and the addition of Hood River County to the use rate will increase the life-span to 30 years. Consequently, no additional landfill sites are currently being sought.

F. TRANSPORTATION

1. Road Systems

Roadways serve the largest share of trips and support many of the other modes of travel used in Wasco County. Automobiles/trucks, pedestrians, bicyclists, transit users, marine vessels, and freight transportation all rely on roadways to some degree for mobility and access to various land uses, including rail, marine, air, and pipeline/transmission facilities.

Detailed information on County roads, their current condition, their priority for improvements, their length and designation and other information is contained in the Wasco County Transportation Improvement Program.

2. Other Modes of Transportation

A variety of non-auto modes of transportation are important for county residents to meet their mobility and recreation needs. These include pedestrian, bicycle, dial-a-ride public transit, marine transport and air transport. Detailed information on other modes of transportation is contained in the Wasco County Transportation System Plan.

3. Freight, Pipeline and Transmission Facilities and Needs

Wasco County is an important location for existing and future freight, pipeline and transmission facilities. Detailed information on these is contained in the Wasco County Transportation System Plan.

G. HOUSING

1. Existing Housing

A windshield survey of existing housing classified housing as either standard, marginal or substandard. A total of 1,295 housing units were inventoried outside the city limits and urban growth boundaries of the six incorporated cities, the Celilo Village and the Warm Springs Indian Reservation. Of these units, 256 or 20 percent are mobile homes. About 85 percent of both conventional homes and mobile homes were classed as standard.

Building permit counts from 1975 to 1979 show that from 58 to 81 percent of permits is for mobile home placements. This indicates their importance as an economic and popular form of housing.

2. Housing Needs

Build able lands (land with excessive slopes of 20% or greater have not been excluded), were inventoried. Soils classes, ownerships, timber site productivity classifications, hazard areas, sensitive wildlife habitats, aggregate sites and natural areas were taken into consideration. There does not appear to be an abundance of adequate build-able lands in the County.

The Dalles Urban Comprehensive Plan shows that there is 1,455 acres of build able land within the established Urban Growth Boundary, 1,160 acres or 80% with at least one development restriction. Development restrictions may include a lack of sewer or water lines, excessive slope, lack of access or odd lot sizes. Using population and per-sons per household estimates, it appears that the build able lands in The Dalles Urban Area will be at or near capacity by the year 1995.

It is not known how much of the build able land in the Urban Area is actually available. Increasing pressure on vacant lands to be developed into home sites will force prices up. Alternative housing sites, especially those of a rural nature will satisfy the need for low cost housing and will allow for the alternate lifestyles called for in Goal # 10, Housing. These alternative housing sites

should be as near the urban area as possible, to conserve energy and limit encroachment on viable farm and forest lands, and should be located on lands that have been committed to small (ten acres or less) average lot sizes.

3. Financing Housing

In 1970, about 27% of all households in the County spent over the acceptable level of 25% of their income on housing. This indicates that housing costs are not meeting the needs of the County's citizens. It is important that both housing costs and building site costs be kept within an acceptable range. The increase in demand for small acreage (ten acres or less) rural home sites which allow mobile homes reflects the discrepancy between housing costs and incomes in the County.

H. ECONOMICS

The County's economic activity is primarily basic production: the production of goods and services for export. This type of production brings outside money into the area. The non-basic sector, which produces goods and services for local production is not as developed, especially outside The Dalles Urban area. This means that people in the rural areas of the County will generally purchase their goods and services in The Dalles or outside the County.

The basic sector of the County's economy is based on agriculture, forestry, processing of agricultural and forest products and aluminum production and a growing tourist industry in the county.

1. Agriculture

The Census of Agriculture shows that the total number of farms between 1959 and 1974 has decreased by 25 percent. The number of acres in farms has decreased by almost 13 percent, although there has been a slight increase in average farm size. This shows that smaller farms are becoming less economical to operate, probably due to the cost of mechanization. The census also shows that the number of small farms (less than 10 acres) and very large farms (2,000 or more acres) have increased, while everything in between (10 to 1,999 acres) has decreased.

Three types of agricultural commodities generally are produced in Wasco County. They are: tree fruits, small grains and livestock. Tree fruits, primarily cherries are mainly grown in and around The Dalles and Mosier. Their value has increased steadily, while the number of acres in production has remained fairly stable.

Small grains, primarily wheat, are grown in many of the non-forest portions of the County to the east and south of The Dalles. Acres in small grain production continue to stay at the same high levels of 20 years ago, although fewer farms exist.

Much of the livestock production, all but about 5%, depends on small grain operations. In most cases, grain farmers graze cattle on their marginal, non-crop lands or on public range lands. High feed prices and/or shortages of feed may force some farmers to reduce their supplemental livestock operations in the future.

2. Forestry

The U.S. Forest Service and other public agencies administer about 95 percent of the commercial timber volume in Wasco County. According to the Forest Service, the permitted annual cut in the Mt. Hood National Forest is currently 40-45 million board feet per year. About 80 percent of the allowable cut is purchased by Mt. Fir Lumber Company.

3. Manufacturing

Manufacturing firms outside the Urban Growth Boundaries of The Dalles and Maupin is primarily logging, food packaging, and aggregate mining. Martin-Marietta Aluminum, located within the urban growth boundary of The Dalles, is a major employer in the area.

4. Tourism and Education

5. Non-Basic

Rural economies, such as rural Wasco County, typically have not achieved a size and diversification needed to support a large non-basic sector. Local non-basic demands are satisfied in available markets such as Bend, The Dalles and Portland.

6. Labor Force Statistics

Unemployment has been a problem in Wasco County. It is found here at a rate consistently higher than the State average. This has been the case since the completion of the government dam projects in the 1960's. Seasonal employment in agriculture, food processing, construction, forestry, and lumber processing have also contributed to the high unemployment rate.

7. Future Economic Outlook

The Bonneville Power Administration has compiled employment projections that show that total employment in Wasco County will increase by 24.3 percent by the year 2000. Agricultural employment will decrease by 16.1 percent during this period while non-agricultural employment will increase by almost 30 percent. Wholesale and retail trade, as well as finance, insurance and real estate are all projected to increase by 40 percent and services by 55 percent, indicating that this area will become a regional service and trade center.