

Crook County Comprehensive Plan

Adopted 1978

Codified January, 2003



Prepared for

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FOREWORD

The Crook County Comprehensive Land Use Plan was adopted in 1978 and has been in use by the County since that time. Over the years, there have been 49 amendments to the maps and text and, in recent years, there have been minor amendments to the amendments—particularly in the Powell Butte area. This document represents a codified version of the County’s Comprehensive Plan. The purpose is to update the Plan to make it easier to use by the elected and appointed officials of Crook County and by the average citizen needing to glean information from it.

The following table lists each amending Ordinance, the action, and where it appears in the planning text. Not all Plan amendments are text amendments and those modifying the Comprehensive Plan Map are not shown. This should be considered an edited version of the Comprehensive Plan. All of the Ordinances have been officially adopted by the Crook County Court, but do not necessarily appear in absolute “word-for-word” basis as they were adopted. If the reader desires to follow the absolute language of the Ordinance, it is recommended he review the specific Ordinance in the Crook County Planning Department or the Crook County Clerk’s office.

The Crook County Comprehensive Plan, as it was adopted in 1978, also included the City of Prineville. That City is now working on its own updated Plan. All of the material in the County Plan that was specific to Prineville has been removed from the main text and placed in a separate file in the Crook County Planning Department. Until the Crook County Plan is updated and the material officially deleted, it is still part of the Crook County Plan. For questions regarding the material, you should contact the Crook County Planning Department.

CROOK COUNTY COMPREHENSIVE PLAN AMENDMENTS

ITEM #	DATE	ORDINANCE NO.	ACTION	PLACED IN TEXT
1	11/08/78	17	Adopts Comprehensive Plan	
2	4/5/84	--	Adopts UGB Map Revisions – Revises UGB Map revisions, includes 2 maps and legal descriptions	No
3	12/28/88	--	Adopts EFU-2 Map Revisions – Map revisions adds 35 acres of H-M – Map difficult to read	No
4	1/9/91	43	Adopts Goal 5 Mineral & Aggregate Resource Listing – Major Amendment	Pages 133-136 and Appendix “A”
5	3/20/91	45	Adopts Exception Areas – Major Amendment	Policy, page 13; Policy, pages 39, 50, 65-66, 195 and Appendix “B”
6	9/16/91	51	Adopts Mineral & Aggregate Amendments – adds policies and Appendix “A”	Adds Policies, pages 137-139, and deletes Policy, page 109, and Appendix “A”
7	2/26/92	55	Adopts More Mineral & Aggregate Amendments – adds to Appendix “A”	Deletes several Policies, pages 137-139, adds Policy, page 196, and Appendix “A”
8	2/28/92	59	Adopts Modified EFU-2 Exception – amends 55 – Map difficult to read	Appendix “B”
9	5/14/92	62	Adopts Airport Exception – two maps	No
10	5/14/92	65	Adopts Airport Master Plan (in total) – only even numbered pages available	Policies, pages 86-87
11	5/14/92	66	Adopts Airport Master Plan by Reference	
12	5/14/92	64	Adopts Airport Layout Plan – new ALP – map not available	
13	6/22/92	70	Adopts Additional Mineral & Aggregate Site – Appendix “A”	Appendix “A”
14	7/28/92	71	Goal 5 Periodic Review – Inventory and policies	Pages 31-33, 100-106, 108-111, 112-120, 124-125, and 140-143
15	11/6/92	73	Map amendment – agricultural to outlying commercial – also amends UGB – map difficult no read	No
16	3/24/93	78	Rural Exception – add to Appendix “B”	Appendix “B”
17	6/23/93	80	UGB Amendment – Map amendment – no policies	No
18	9/1/93	82	Rural Exception – map amendment – no policies – adds to Powell Butte Exception Area	Appendix “B”
19	12/8/93	86	Additional Historic Sites – add intro & permit requirements – McCall Ranch	Page 113
20		88	Amends Prineville UGB – airport expansion map amendment – no policies	No

ITEM #	DATE	ORDINANCE NO.	ACTION	PLACED IN TEXT
21	4/28/94	89	Add Mineral & Aggregate Site – Barnard Construction	Appendix “A”
22	4/27/94	91	Ordinance #88 re-recorded as 91	No
23	9/7/94	93	Add Mineral & Aggregate Site – Bend Aggregate	Appendix “A”
24	9/14/94	94	Add Mineral & Aggregate Site – Raasch	Appendix “A”
25	12/14/94	95	Add Mineral & Aggregate Site – Couch	Add to Appendix “A”
26	3/1/95	97	Add Mineral & Aggregate Site – Kendall	Add to Appendix “A”
27	3/8/95	98	Add Mineral & Aggregate Site – Breeze	Add to Appendix “A”
28	4/5/95	99	EFU to R-5 map amendment only – no policies	Add to Appendix “B”
29	9/13/95	104	Add Mineral & Aggregate Site – R & R Equipment	Add to Appendix “A”
30	9/13/95	105	Add Mineral & Aggregate Site – Williams	Add to Appendix “A”
31	10/4/95	106	Periodic Review – Rural service centers -- Post, Paulina, E & W Powell Butte, amends Exception Appendix	Appendix “B”
32	10/11/95	107	PR Amendment – Goal 14 analysis justifying nonresource zoning – amends Exception Appendix “B”	Add to Appendix “B”
33	10/11/95	108	Add Mineral & Aggregate Site – Schlosser	Add to Appendix “A”
34	10/11/95	109	Add Mineral & Aggregate Site – UCON, Inc.	Add to Appendix “A”
35	11/22/95	111	Add Mineral & Aggregate Site – Fehrenbacher	Add to Appendix “A”
36	11/13/96	120	Add Mineral & Aggregate Site – Kilpatrick	Add to Appendix “A”
37	6/25/97	122	Rural Land – revises public facility policies	Pages 88, 89
38	5/27/98	124	Sensitive Bird Habitat – adds policy and inventory	Pages 143-154
39	12/11/98	126	Powell Butte Area 2-3 – added section to plan text	Pages 66-69
40	12/11/98	127	Powell Butte Area 2-4	Pages 66-69
41	12/11/98	128	Powell Butte Area 2-1	Pages 66-69
42	2/3/99	130	Powell Butte Area 1-2	Pages 66-69
43	2/3/99	131	Powell Butte Area 1-1	Pages 66-69
44	2/3/99	132	Powell Butte Area 2-1	Pages 66-69
45	2/3/99	133	Powell Butte Area 3-1	Pages 66-69
46	2/3/99	134	Powell Butte Area 3-2	Pages 66-67
47	5/22/02	52	Destination Resort text and policies	Pages 70-82
48	5/23/02	53	Destination Resort Maps – 4 maps plus composite	No
49	10/30/02	55	UGB Amendment – map, no policies	No

CROOK COUNTY COMPREHENSIVE PLAN
Codified Edition – January, 2003

ROLE OF THE COMPREHENSIVE PLAN

The ethic of growth is increasingly being challenged; many people no longer accept it unquestioningly as a premise of progress. The effects of growth on quality of life are widely debated, and management and quality control of growth are seen as essential elements by many within a given community. More and more, the costs and benefits of continued and uncontrolled growth have emerged as a major issue. There is hesitation over accommodating further development with its attendant consequences of greater numbers of residents and the resultant higher density demands to minimize land consumption trends. Locally, these concerns were expressed throughout the citizen involvement program and are increasingly evident in testimony presented at public hearings involving development proposals.

At the same time, this trend has not been without opposition; dissent over the implications of growth restrictions has been heard from various sectors of the business community. Frequently, the basis for opposition stems from the fact that the far-reaching repercussions of growth controls are not adequately analyzed and, in those cases, the opposition is probably justified. However, more often than not, opposition is based on the individual's claim of private property rights above that of the common good.

We all have a stake in a community which is considerably greater than the property to which we legally claim title. That principle was recognized early in this country when the right to vote was not tied to the wealth of a man. Further, though the law has been sometimes slow to recognize it, legal title cannot morally convey the right to destroy the non-renewable resources that nature has formed, for as we engage in such destruction, we go beyond use and into the realm of preventing others from living (through the elimination of habitat). Quoting the late President John F. Kennedy, "When the youngest child today has grown to the cares of manhood, our position in the world will be determined first of all by what provisions we make today--for his education, his health, and his opportunities for a good home and a good job and a good life."

We no longer live in a time when we are few and the land is wide and waiting for us. We have reached the point where we can no longer insulate ourselves from the punishment and pollution we visit upon the earth and the atmosphere, and where the natural resources we once regarded as so endlessly available and expendable are becoming increasingly hard to get. The spread patterns of settlement and development that characterize our past urban growth are the unfortunate legacy of our old illusion that we had endless acres of land to build upon and unlimited resources to enjoy and consume.

Not unlike nearly every other community in the nation, the concern of the people of Crook County over the possible degradation of environmental quality and its relationship to the quality of life and livability of the county has been increasing in the past years. The realization that land, forests, water and other resources are limited in their ability to support the needs and absorb wastes has led to a determination to guide such actions in a manner which is compatible with a livable environment.

While the land surface area of the county remains constant over time, inevitably the population will continue to expand. There will resultantly be a greater demand and need for more land for urban or suburban type development, and the choices made in the use of land frequently reduce substantially the options for future use. For example, the decision to commit land to a subdivision precludes the use of that land for many other purposes for decades to come.

Common resources, such as streams, lakes, and air are by their very nature subject to exploitation. Differing from land, such resources are difficult, if not impossible, to reduce to individual ownership; thus they are subject to overuse or congestion.

All too often, land use policies formulated to address the foregoing concerns, problems, and situations take a totally negative view toward growth. In truth, such plans and regulations should only take a negative view toward unplanned or poorly planned growth which ultimately can cost the general public and the taxpayer uncalled for and unnecessary damage to their physical, social, economical and environmental situations. Commonly, when land use designations or policies are established, they set forth definitively those lands which cannot or should not be developed. There is, however, a lesser effort to set forth guidelines or policies as to which lands can or should be developed and standards for such development.

This plan has been formulated under the constant realization that the population of the area is going to continue to expand and represents the culmination of more than two years effort on the part of numerous and various Citizen Advisory Committees, a technical Advisory Committee representing all appropriate local, state and federal agencies, public utilities and special districts, and the Planning Commissions for the City of Prineville and Crook County. Even though historically, as urban and suburban growth needs expand, there has been a gradual transition to higher density developments which are lower land area consumers, those involved realized the need for additional lands for such development would continue to expand (even with the transition).

With this awareness, the objectives have been to develop a land use plan that will provide the basis for an orderly and efficient transition of current land use to more intensified uses within the parameters of an established set of guidelines, policies, standards and regulations; a document with which all involved parties are required to comply, regardless of the party's position. That is to say that those establishing the guidelines, policies and regulations must "play the game" by the same rules as any applicant.

Although compliance with the applicable Statewide Planning Goals as mandated by O.R.S. Chapter 197 has been a constant objective, the primary goal is to provide a plan for the people of the City and County which is based upon the best available facts, desires for the future

livability and economical-environmental balances, and to achieve to the greatest extent possible, a set of regulations which are reasonable and realistic. Growth is not to be discouraged, but managed in such manner that detrimental physical, social, economical and environmental factors are minimized. Implementing regulations have a measure of flexibility as commonly set forth in performance standard type regulations with the intent to provide maximum opportunity for efficient development.

Those citizens directly involved in the planning process for the County have viewed the requirements set forth by O.R.S. Chapter 197, not as a mandate, but as an opportunity and a responsibility to consider the impact of their activities related to land and other resource use on the future and quality of life in the City and County. Their direction has been to seek a balance between the goals and needs of development and livability. In that sense, the plan is a unified document for the City and County, although there is within the document a distinctive Urban Element concerning the City of Prineville and surrounding urban area (i.e. that area within the boundaries of the Urban Growth Boundary).

The planning program has not assumed that air, water, land and other natural resources are unlimited; it does recognize that the quality of these is relevant to the well-being of the people of the City and County, both present and future generations.

There has been constant recognition that the situation in the county is serious in the sense that nearly every decision made during the next decade will greatly affect the future use of land and of other natural resources. The scope and level of background resource information is a reflection of a concern that such decisions not be made without adequate information, planning and consideration of the long-term consequences.

The entire process and resultant plan is a sincere expression of the need for every citizen of the City and County to share in the responsibility for achieving and maintaining a high level of livability in the Crook County. Policies contained within the plan are clearly a reflection of an awareness that the City and County will always be faced with choices and compromises between various alternatives with each and every decision. We cannot have wood, paper, and building materials for homes and not cut trees. The problem of resource management is termed critical because of the difficulty in finding solutions. However, even though the task has appeared, at times, to be impossible, it has been present, it has been acknowledged and it has been dealt with; such is the essence of this plan.

DEVELOPMENT PROCESS

The comprehensive planning process has been based upon citizen involvement in order that community wants and needs may be met in a final document, and in order that broad public support is gained for this document. The encouragement of an informed and enlightened public has been the basic premise of the program which has offered technical information as well as human and financial assistance to the planning endeavors of the citizens of Crook County.

A broad and intensive program was implemented to provide citizens with information and opportunity for the best possible organization for citizen comprehensive planning. The program encouraged the public to be informed about the planning process and to be involved in the process in order to identify existing and potential problems and issues and to establish planning priorities for various areas of and various interests within Crook County. The final phases of the intensive citizen involvement program for comprehensive planning provided the opportunity for citizens to be heard at formal public hearings with the Planning Commissions, the City Council and County Court and established components of an ongoing involvement program with built-in feedback mechanisms from the citizens to the governing bodies and from governing bodies to the citizens.

CITIZEN ADVISORY COMMITTEE

Based upon a citizen involvement program adopted by the Prineville City Council and the Crook County Court, the City and County Planning Commissions were assigned responsibility for the citizen involvement program through a twelve-member Citizen Advisory Committee representative of various areas of and various interests within Crook County, appointed for the purpose of advising upon, overseeing, and evaluating the processes and implementation of the citizen involvement program. This body held monthly public meetings and special meetings to review the ongoing citizen involvement program. Functioning with the committee was a Citizen Involvement Coordinator, a member of the Planning Department staff, hired for the purpose of assuring that the program laid out by the local governing bodies was followed, and that communications between citizens and the governing bodies remained open and active.

PUBLIC AWARENESS AND PARTICIPATION

Planning displays, paid advertisements, education/orientation meetings and presentations to clubs and civic groups throughout the county were initial methods of public education concerning planning processes and opportunities for involvement in planning. Eight (8) county areas were designated as county population centers to be considered study areas for citizen comprehensive planning meetings. Meetings for these areas were scheduled (through area contact people) and were advertised through media including area newspapers, area radio

stations, and the local television station. Posters placed in businesses and agencies within Prineville and rural centers notified the public of upcoming area meetings, while flyers informed Prineville people about Prineville area meetings.

Subcommittees were formed to represent various interests within, the Prineville area, and members of these subcommittees met with the planning staff members to discuss concerns and desires for specific interests within the county. Subcommittee meetings were advertised in the same manner as the area committee meetings.

The following are total numbers of citizen comprehensive planning meeting notifications from July, 1976 - July, 1977:

Newspaper (public meeting notices) - 136
Posters (public meeting notices) - approx. 342
Radio airings (public meeting notices) - approx. 576
Personal letter meeting notices (1st class) – 1819

Records show direct involvement of approximately 225 citizens in the 63 meetings held, while news stories relating to the citizen comprehensive planning process totaled 40. Both Town Hall meetings were televised, and Town Hall meetings as well as Planning Commission hearings are recorded on tape and available at the Planning Department office.

CITIZEN PROPOSALS

Citizen concerns and desires were coordinated with factual resource data, existing Oregon Revised Statutes and Statewide Planning Goals. Policy proposals were suggested, reviewed, and revised at area committee and subcommittee meetings. Two Town Hall meetings, one for the Prineville area, and one for Crook County, were held to allow for further input concerning proposed policies. Proposals were then submitted to the City and County Planning Commissions for review and revision and for public hearings concerning the proposals prior to City Council and County Court hearings. Citizen suggestions not reflected in proposals were also presented to these bodies at the hearings.

Written records of all citizen involvement, Citizen Advisory Committee, Town Hall, and Planning Commission meetings are available for review at the Planning Department office.

PUBLIC OPINION SURVEYS

Another important aspect of the citizen planning process was the distribution, compilation, and incorporation of surveys and survey results into the program and its reflected proposals. These surveys were distributed at random, to specific groups, and to all citizens of Crook County. Returned surveys and compilations of such are also available for review at the Planning Department office. The following shows survey types, numbers distributed, and methods of distribution.

General Planning Survey - 500 (random mailing)
General Planning Survey #2 - 19 (AAUG1)
Transportation Survey - 800 (mill and Les Schwab production center employees)
Walk-in, Drive-in Business Survey - 25 (Prineville area citizen committee)
Powell Butte Farmer's Club Survey - 373 (Powell Butte residents and property owners)
Housing Survey - 715 (every 3rd household in the Prineville area)
Citizen Planning Proposal Survey - 4720 (every household in Crook County)

CONTINUING PROCESSES

With the establishment of area and subject advisory committees to make recommendations to the City and County Planning Commissions, the process of citizen review and revision of the comprehensive plan will be a continuing one. The public must accept the responsibility of keeping informed about and participating in future planning processes to provide incentive for prioritization and implementation of the adopted Comprehensive Plan. It will be the responsibility of the governing bodies to make information available to the public and to respond to the desires of the people of Crook County.

RURAL - URBAN RELATIONSHIP

The urban-rural relationship is based on providing for a smooth transition of rural to urban use and minimizing conflicts that might arise. The preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the county's economic resource base. The expansion of urban development into rural areas of the county is a matter of public concern due to increasing costs of community services, conflicts between farm and urban activities, and continuing loss of open space and natural beauty.

The most productive croplands within the county are concentrated in the valley area surrounding the City of Prineville, in the lowlands along the Crooked River and its major tributaries, and in the Powell Butte and Lone Pine areas. Rural subdivisions and partitioning of lots ranging from two to ten acres encompassed in excess of 1,200 acres of class I through VI agricultural lands in the Prineville valley area during the 1971 to 1975 period. This trend of consuming prime agricultural lands by introducing part-time farming and rural non-farm residences on small parcels poses serious problems and conflicts. Some of the more important of the problems and conflicts are:

1. Increased demands for the use of irrigation and ground water supplies for domestic use.
2. Higher costs in the distribution of water for irrigation of small-subdivided acreages.
3. Difficulty in the control of weeds and rodents.
4. Higher operating costs and increased land assessments.
5. Restrictions on the use of farm, chemicals.
6. Complaints of odors, dust and noise, dogs and children vs. livestock increased.
7. Nuisance and costs of vandalism and trespass.

It is, therefore, in the best interest of the public to preserve agricultural lands. The major portion of Crook County's population growth shall be concentrated within the defined Urban Growth Boundary of the City of Prineville and low density development in rural areas shall be maintained.

Prineville has had a population increase of over 5% per year over the last seven years. If this rate continues, the county could have approximately 15,500 people in the urban area by the year 2009. Approximately 9,600 persons are presently living in Prineville and the valley area adjacent to the City of Prineville. This assumes a 6,000 person increase in a 23 year period. (See Demographic Profile-Population Predictions, Pg. 37). Policies set forth in this plan encourage a higher density for new housing developments within the urban area to provide for the increasing population.

URBAN GROWTH BOUNDARY

Accompanying the population expansion of the Prineville valley will be a greater demand and need for more land for urban or suburban type development. Historically, as urban growth needs expand, there has been a gradual transition to higher density developments which are lower land area consumers, but even with this transition, additional lands for such development will continue to be needed.

Accepting the fact that growth is going to occur, the goal must therefore be for such growth to occur as orderly and efficiently as possible. Such growth should be directly in a manner that detriments to physical, social, economical and environmental factors are minimized. The recognition of the need for the establishment of an Urban Growth Boundary is one of the means by which growth can be directed. Although the establishment of such a boundary is a primary tool for identifying an area within which urban type growth is most likely to occur and certainly the area within which such is most desirable, it must be realized that this tool alone will not ensure absolute "orderly and efficient" development. Such an accomplishment utilizing said boundary singularly would only be possible if the boundary was strictly established to include only the city and existing adjoining developed areas. An action of such restrictive magnitude would effectively eliminate any flexibility or freedom in the market place and undoubtedly increase already "high" development costs.

An Urban Growth Boundary has been adopted to provide for the economic and efficient extension of public facilities and services, to maximize energy savings, and to assure that buffers occur between urban developments and agricultural land uses and practices. Buffers between agricultural and urban land uses may consist of open space and/or a general decrease in housing density as farm lands are approached. In order to maximize energy savings, subdivisions should be evaluated for lot size and compatibility with surrounding land uses, and carrying capacity of the air, land and water resources of the area. The Urban Growth Boundary marks the extent of area eligible for city services and facilities until the year 2000. City utilities and services may not be available outside the Boundary.

The Urban Growth Boundary is designed to accommodate a projected growth to the year 2000, and to provide sufficient area to provide some level of flexibility and freedom in the market place. To maximize the goal of "orderly and efficient" growth over time, the need for a definitive set of criteria to evaluate development proposals and establish development priorities is deemed necessary. In an attempt to satisfy this need, a set of "Urban Development Priority Factors" has been developed and is included in this document for the purpose of formulating growth policies by which all relevant factions will be guided.

The use of such a system in establishing growth priorities is not uncommon. For example, priority development #1 would be development which meets all of the factors set forth; priority #2 could be development which complies with 9 or 10 of the factors; priority #3 -or- development which would be of the least desirable might be that development which would be approvable only after meeting additional criteria such as public need, lack of available alternatives, etc. See Urban Development Priority Factors set forth in this Chapter, Pg. 13.

An UGB is required to be established to identify and separate “urbanizable land” from “rural land” and may only include “urban land” and urbanizable land as set forth in the following definitions:

1. Rural Land: Rural lands are those which are outside the UGB and are:
 - (a) Non-urban agricultural, forest or open space lands or,
 - (b) Other lands suitable for sparse settlement, small farms or acreage homesites with no or hardly any public services, and which are not suitable, necessary nor intended for urban use.

2. Urban Land: Urban areas are those places which must have an incorporated city. Such areas may include lands adjacent to and outside the incorporated city and may also:
 - (a) Have concentrations of persons who generally reside and work in the area.
 - (b) Have supporting public facilities and services.

3. Urbanizable Land: Urbanizable lands are those lands within the UGB and which are identified and:
 - (a) Determined to be necessary and suitable for future urban uses.
 - (b) May be served by urban services and facilities.
 - (c) Are needed for the expansion of an urban area.

Establishment and change of the boundaries shall be based upon consideration of the following factors:

1. Demonstrated need to accommodate long-range urban population growth requirements.
2. Need for housing, employment opportunities, and livability.
3. Orderly and economic provision for public facilities and services.

4. Maximum efficiency of land uses within and on the fringe the existing urban area.
5. Environmental, energy, economic and social consequences.
6. Retention of agricultural land.
7. Compatibility of the proposed urban uses with nearby agricultural activities.

Establishment and change of the boundaries shall be a cooperative process between a city and the county that surrounds it.

Land within the boundaries separating urbanizable land from rural land shall be considered available over time for urban uses. Conversion of urbanizable land to urban uses shall be based upon consideration of:

1. Orderly, economic provision for public facilities and services.
2. Availability of sufficient land for the various uses to insure choices in the market place.
3. LCDC goals.
4. Encouragement of development within urban areas before conversion of urbanizable areas.

PLANNING GUIDELINES

1. Plans should designate sufficient amounts of urbanizable land to accommodate the need for further urban expansion, taking into account (1) the growth policy of the area, (2) population needs (by the year 2000), (3) the carrying capacity of the planning area, and (4) open space and recreational needs.
2. The size of the parcels of urbanizable land that are converted to urban land should be of adequate dimension so as to maximize the utility of the land resources and enable the logical and efficient extension of services to such parcels.
3. Plans providing for the transition from rural to urban land use should take into consideration as a major determinant the carrying capacity of the air, land and water resources of the planning area. The land conservation and development actions provided for by such plans should not exceed the carrying capacity of such resources.

IMPLEMENTATION GUIDELINES

1. The type, location and phasing of public facilities and services are factors which should be utilized to direct urban expansion.
2. The type, design, phasing and location of major public transportation facilities (i.e. all modes: air, rail, mass transit, highways, bicycle and pedestrian) and improvements thereto are factors which should be utilized to support urban expansion into urbanizable areas and restrict it from rural areas.
3. Financial incentives should be provided to assist in maintaining the use and character of lands adjacent to urbanizable areas.
4. Local land use controls and ordinances should be mutually supporting, adopted and enforced to integrate the type, timing and location of public facilities and services in a manner to accommodate increased public demands as urbanizable lands become more urbanized.

In summary, the UGB can best be described as a limit (boundary) beyond which the urban growth of the area should not extend during a specified time period. The objectives of the UGB can be primarily implemented through zoning and public facilities programming, and basically provides a means of curbing urban sprawl, while at the same time, encouraging progress towards orderly and well-planned growth. The UGB is not an unchangeable boundary, but one which can be altered in accordance with the procedures followed for establishment. Development within the UGB (pursuant to County Planning Commission recommendation) should be subject to review by both the city and the county. As a policy, land outside of the UGB shall be preserved through the application of Exclusive Farm Use (EFU) Zoning. The UGB is a means of concentrating and planning urban expansion for the conservation of land, air and water, stopping urban sprawl, and providing for the efficient use of public facilities and funds.

URBAN DEVELOPMENT PRIORITY FACTORS

1. Compliance with the Comprehensive Plan - Compliance with the Comprehensive Plan is required by ORS 197 for any type of development.
2. Location Within the Urban Growth Boundary - State Planning Goal No. 14 sets forth that the Urban Growth Boundary is to be considered a division between urban lands and rural lands; thus, it is clear that location within must be considered a mandatory criteria for urban development.
3. Adjacent to City or Existing Adjoining Urban Development - Urban sprawl is recognized as a major contributor to higher public service and facility costs and higher local taxes, and to poor and inefficient land use patterns. Therefore, development which occurs as an extension to existing development is a method of minimizing such costs.

4. Area Served by Public Sewer, Water Utilities & Transportation - Sewage disposal and domestic water supply have emerged as critical factors in urban development. Increasing dangers of underground water pollution and increasing withdrawals of underground water sources lead to an increasing demand for central systems, and the most efficient means of providing such. The balancing of supply and demand, and costs vs. revenues relating to utilities and transportation facilities have also emerged as a prime factors. Urban development criteria must, therefore, take into account the problems and costs associated with development which is not an immediate extension of these factors, and provide for efficient extension.
5. Located on Non-Agricultural Lands; Physically or Due to External Factors - State Statute and State Planning Goals both emphasize the need and positive factors of Agricultural Lands preservation and protection. Such preservation and protection is also considered vital at the local level as exhibited in related policies and findings related to economical, social and physical considerations. The location of urban development relative to such lands must be considered a prime factor.
6. Access to Existing Improved Arterial or Collector - Although the relationship to transportation has been referenced hereinbefore in Item #4, it is imperative that the need for development to have access to an existing improved arterial or collector be emphasized. Such need is supported by the fact that most major access routes are maintained by the public and therefore provide the most efficient means of access if expansion is limited. In the case of development not having immediate access to an existing improved arterial or collector, such access, must be established and the initial cost therefore should be assumed by the effecting development.
7. Location Relative to Fire Protection Facilities - The location of development relative to base fire protection facilities is directly related to the effective response time by said service, and is therefore a determinant factor in relation to the effectiveness of such protection, the public costs for provision of such, and to private costs related thereto. It is therefore imperative that the location of development within two (2) miles of base fire protection facilities be a priority factor.
8. Location in Relation to Schools or Existing School Bus Routes - Bussing is expensive, and to many people, undesirable; however, in many cases necessary and less costly than additional school facility construction. It is therefore important economically and socially that development be located within walking distance of either an existing elementary school facility or school bus route (or logical extension thereof).
9. Location Relative to Floodplain and Other Natural Hazards - From the standpoint of public safety, welfare and costs, it is vitally important that development not be permitted to locate within identified floodplains or other natural hazard areas.

10. Development Design - A number of State Planning Goals and findings set forth by the local planning program emphasize the need to be concerned about the designs of developments, particularly in relation to recreational and open space needs, public services and facilities vs. the costs therefore, livability, needs of the young, elderly and handicapped, and the need for a variety of housing types and environments. It is concluded that developments of a Planned Unit Development concept and design should be encouraged.

11. **Rural development shall occur based upon the Crook County Exception Area document and controlled by the appropriate rural zone identified in the document. (Ordinance No. 45; 3/20/91)**

**Table I
COMPARATIVE ANALYSIS – 1972 BOUNDARY VS. 1978 BOUNDARY**

SUBJECT	1972 UGB TOTAL ACRES	% OF TOTAL	1978 UGB TOTAL ACRES	% OF TOTAL	1972 VS. 1978	
					DECREASE IN ACRES	PERCENT DECREASE
Total Acreage	17,180	100.0%	5,375	100.0%	11,805	68.7%
Acres Inside City	1,375	8.0	1,375	25.6	- 0 -	- 0 -
Acres outside City	15,805	92.0	4,000	74.4	11,805	74.4
Acres – Present Use (Developed)						
Agriculture	6,315	36.8 (47.6)	1,178	21.9 (27.6)	5,137	81.3
Residential	3,037	17.7 (22.9)	1,956	36.4 (45.9)	1,081	35.6
Industrial	803	4.7 (6.0)	516	9.6 (12.1)	287	35.7
Commercial	312	1.8 (2.3)	281	5.2 (6.6)	31	9.9
Public	2,810	16.4 (21.2)	331	6.2 (7.8)	2,479	88.2
Total:	13,277	77.3 (100%)	4,262	79.3 (100%)	9,015	67.9
Inside City:	1,250	7.3 (9.4)	1,250	23.2 (29.3)	- 0 -	- 0 -
Outside City:	12,027	70.0 (90.6)	3,012	56.1 (70.7)	9,015	74.9
Acres Undvlpd	3,903	22.7 (100%)	1,113	20.7 (100%)	2,790	71.5%
Inside City	125	0.7 (3.2)	125	2.3 (11.2)	- 0 -	- 0 -
Outside City	3,778	22.0 (96.8)	988	18.4 (88.8)	2,790	73.8
Acres Urbanized (R, I, C, P)	6,962	40.5 (52.4)	3,084	57.4 (72.4)	3,878	55.7
Acres Urbanizable (Ag. & Undvlp.)	10,218	59.5	2,291	42.6	7,927	77.6

Percentages in () are % of total for relevant subcategories

Table II						
ANALYSIS – 1978 URBAN GROWTH AREA						
SUBJECT	TOTAL AREA		INSIDE CITY		OUTSIDE CITY	
	ACRES	% OF TOTAL	ACRES	% OF TOTAL	ACRES	% OF TOTAL
Total Acreage	5,375	100.0%	1,375	100.0% (25.6)	4,000	100.0% (74.4)
Acres-Present Use (Developed)						
Residential	1,956	36.4 (45.9)(63.4)	753	54.8 (62.2)	1,203	30.1 (64.2)
Industrial	516	9.6 (12.1)(16.7)	109	7.9 (9.0)	407	10.2 (21.7)
Commercial	281	5.2 (6.6)(9.1)	180	13.1 (14.9)	101	2.5 (5.4)
Public	331	6.2 (7.8)(10.7)	168	12.2 (13.9)	163	4.1 (8.7)
Subtotal	3,084	57.4 (72.4)(100.0)	1,210	88.0 (100.0)	1,874	46.9 (100.0)
Agriculture	1,178	21.9 (27.6)	40	2.9	1,138	28.4
Total	4,262	79.3 (100.0)	1,250	90.9 (29.3)	3,012	75.3 (70.7)
Acres Undvlpd	1,113	20.7 (100.0)	125	9.1 (11.2)	988	24.7 (88.8)
Expansion Use Designation						
Industrial	284	5.3 (25.5)	25	1.8 (20.0)	259	6.5 (26.2)
Commercial	60	1.1 (5.4)	12	0.9 (9.6)	48	1.2 (4.8)
Residential	639	11.9 (57.4)	88	6.4 (70.4)	551	13.8 (55.8)
Public	130	2.4 (11.7)	-0-	-0-	130	3.2 (13.2)
Note: Percentages in () are % of totals for relevant subcategories						

URBAN GROWTH BOUNDARY - SUMMARY ANALYSIS

(Population figures derived from Population Predictions of the Bureau of Census of the Bureau of Census; see pg. 40.)

1. RESIDENTIAL DENSITY FACTORS

(a) County Area with UGB (outside city)

- 1) 1977 Population: $3,920 \div 2.33 \text{ persons/hshld.} = 1,682 \text{ D.U.'s.}$
- 2) $1,682 \text{ D.U.'s} \div 1,203 \text{ acres resid. use} = 1.4 \text{ D.U.'s/acre residential density.}$
- 3) $1,682 \text{ D.U.'s} \div 1,874 \text{ acres developed} = 0.9 \text{ D.U.'s/acre overall density.}$

(b) Total UGB Area

- 1) 1977 Population: $9,610 \div 2.33 \text{ persons/hshld.} = 4,124 \text{ D.U.'s.}$
- 2) $4,124 \text{ D.U.'s} \div 1,956 \text{ acres resid. use} = 2.1 \text{ D.U.'s/acre residential density.}$
- 3) $4,124 \text{ D.U.'s} \div 3,084 \text{ acres developed} = 1.3 \text{ D.U.'s/acre overall developed density.}$
- 4) $4,124 \text{ D.U.'s} \div 5,375 \text{ acres total UGB} = 0.8 \text{ D.U.'s/acre overall density.}$

2. PROJECTED UGB AREA NEEDS

- (a) Projected population – year 2000: $15,540 \div 2.33$ persons/hshld. = 6,670 D.U.'s.
- 1) 6,670 D.U.'s @ 3.2 D.U./acre = 2,084 acres residential use (additional 128 areas needed).
 - 2) 6,670 D.U.'s @ 2.0 D.U./acre = 3,335 acres overall (additional 251 acres needed).
 - 3) 6,670 D.U.'s @ 1.4 D.U./acre = 4,764 acres residential use (additional 2,808 acres needed).
 - 4) 6,670 D.U.'s @ 0.9 D.U./acre = 7,411 acres overall (additional 4,327 acres needed).
 - 5) 6,670 D.U.'s @ 2.1 D.U.'s/acre = 3,176 acres residential use (additional 1,220 acres needed).
 - 6) 6,670 D.U.'s @ 1.3 D.U.'s/acre = 5,130 acres overall (additional 2,046 acres needed).

3. ACCEPTED UGB AREA VS. PROJECTED NEEDS

- (a) Utilization of total UGB area, excepting agricultural land; i.e. 4,197 acres.
- 1) 6,670 D.U.'s f/exist. & designated residential acres of 2,595 acres = 2.6 D.U.'s/acre residential density.
 - 2) 6,670 D.U.'s for exist. & designated developed areas of 4,197 acres = 1.6 D.U.'s/acre overall density.
- (b) Utilization of undeveloped lands only; i.e. 1,113 acres.
- 1) Projected 6,670 total hshlds. minus existing 4,124 D. U.'s = 2,546 D.U.'s.
 - a. 2,546 D.U.'s f/designated residential acres of 639 acres = 4.0 D.U./acre residential density.
 - b. 2,546 D.U.'s f/total undeveloped acres of 1,113 = 2.3 D.U./acre overall density.

- (c) Utilization of undeveloped & agricultural lands; i.e. 2,291 acres.
 - 1) $2,546 \text{ D.U.'s} / (\text{designated residential acres of } 639 + 1,178 \text{ acres ag. lands (total-1,817)}) = 1.4 \text{ D.U.'s/ acre residential density.}$
 - 2) $2,546 \text{ D.U.'s} / \text{total } 2,291 \text{ acres} = 1.1 \text{ D.U.'s/acre overall density.}$

4. CONCLUSIONS OF URBAN GROWTH BOUNDARY ANALYSIS

- (a) Adequacy of the UGB (with maximum preservation of agricultural lands) is dependent on the following factors:
 - 1) Achieving an overall density of 2.6 D.U.'s/acre for all residentially developed lands; such will require the following:
 - a. Encouraging additional development within existing residentially developed areas.
 - b. Expanding urban services; particularly public sewer and water.
 - c. Encouraging higher densities than presently permitted or encouraged.
 - 2) Incentives through zoning and other development regulations for replacement of existing lower standard housing with new, higher quality and higher density housing.
 - 3) Alternatives to present single-family, large-lot residential developments.
 - 4) Provision of adequate public services and attainment of financing therefore.

Map
Existing Metro Land Use and Urban Growth Boundaries

Drawing
Existing Land Use: Prineville Area

Drawing
Physical Development Plan: Prineville Area

Drawing
Rural Residential Subdivisions

AIR, WATER AND LAND RESOURCE QUALITY

Natural resource policies are based upon the following three goals for the protection and preservation of Crook County's natural resources.

1. To maintain and improve the quality of the air, water and land resources of the county.
2. To minimize the impact of developments on the surrounding environment.
3. To direct growth in the most environmentally capable and satisfactory areas.

Upon investigation of resource quality problems in and around the City of Prineville, the following seven situations were identified as ongoing or potential pollution problems.

1. The city sewage lagoon is insufficiently handling the amount of waste that passes through the system resulting in odor and overflow in the summer. The location of the lagoon, in the midst of residential area, compounds sanitation problems associated with the sewage lagoon.
2. Logging mill operations pose threats to air and water quality and are closely monitored by the State Department of Environmental Quality.
3. The Ochoco Pellet Plant has ongoing problems with particle emissions and noise, both of which are subject to restrictions of the State Department of Environmental Quality.
4. The county landfill could pose threats to the operations of the airport, unless continued as a sanitary landfill (dust, smoke, odor, attraction of birds).
5. Feed lots pose possible odor and sanitation problems.
6. Prineville's geographic setting (wind direction from the northwest and heavy industrial activity in the northwest and lying in a valley bounded on three sides by rimrocks with two natural escape routes) subjects Prineville to potential pollution problems, and the Crooked River and Ochoco Creek which passes through the city of Prineville may collect and carry wastes.
7. Environmental problems associated with urbanization are not always discovered in reviewing proposed developments (i.e. low or high water table, sewage leakage, etc.).

Maintaining and improving natural resources involves many governmental agencies, including but not limited to the City and County Planning Department, the State Department of Environmental Quality, the Bureau of Reclamation, the Federal Forestry Department, and the Bureau of Land Management.

The goal of DEQ is to preserve and enhance water and air quality by:

1. Establishing air and water quality standards.
2. Protecting existing air and water quality which is higher than established standards.
3. Guiding planning for waste treatment.
4. Identifying air and water quality deficiencies.

The State DEQ has identified three points of source discharge that are inspected and monitored to ascertain the level of pollutants being discharged. These include the Ochoco Lumber log pond, the City of Prineville sewage lagoon, and the irrigation return at the base of Round Butte.

The Bureau of Reclamation, Federal Forestry Department and Bureau of Land Management are concerned with management and maintenance of nearly 50% of the county land area. Each of these agencies is heavily regulated to preserve a high level of resource quality and each is compelled to file detailed environmental impact statements regularly.

The Crook County Health Department administers state and county health regulations and the City-County Building Official administers state housing and engineering codes to ensure continuity and competence in design and construction of new buildings.

AIR, WATER AND LAND RESOURCE POLICIES

1. Encourage nonpollutant industries to locate in Crook County (Industrial Element, Chapter III).
2. Provide available industrial sites downwind from town (Industrial Element, Chapter III).
3. Adopt and enforce an effective nuisance abatement ordinance (Housing Element, Chapter VIII).
4. Encourage “design with nature” considerations in the design and engineering of all development proposals (Housing, Industrial, Commercial and Transportation Elements, Chapters VIII, III, III, and IV).

5. Evaluate development proposals according to available scientific data pertaining to potential impact on the environment, including but not limited to:
 - (a) Depth of soil
 - (b) Slope
 - (c) Septic tank suitability
 - (d) Agricultural suitability
 - (e) Hazards
 - (f) Unique species or habitats
 - (g) Water availability and impact (Housing Element and Natural Resources Element, Chapters VIII and IX).
6. Provide for bicycling and walking as viable transportation alternatives and provide facilities for such (Transportation Element, Chapter IV).
7. Maintain air and water quality through enforcement of DEQ regulations (Crook County Health Department).
8. Maintain and improve the handling and disposal of solid waste consistent with DEQ requirements.

ECONOMICS

The scope of the context of this plan relative to economics is limited within this section. There is, however, extensive consideration of economic factors in nearly every major topic section in the document. Further, as set forth by reference, there is extensive background information, objectives, and resource information basis for planning decisions relative to economics set forth in the County's Overall Economic Development Plan and the Crook County Input-Output Study (I.O. Study). In fact, the primary objective set forth at the outset of the planning process for the county, and the one primary objective set forth throughout this document, is for all planning decisions to achieve an economic-environmental balance.

FINDINGS

1. General Description of the Economy: Reflecting the economy of all the eastern portion of the state, the county's economic base is almost totally dependent on its natural resources, with agriculture, forestry and recreation being the primary enterprises.

Agriculture contributes to the economy of the county in two ways--by providing income to the agriculturist, the farm and ranch workers, and as a predominate factor of the county's tax base. Agriculture in the county consists of two main types--intensive cash crop farming and the production of livestock. Beef cattle dominate the livestock industry, and potatoes, hay, grain and mint comprise the largest cash crops.

From a wage and salary worker standpoint and considering value of exports, the lumber and woods product industry is the single most important sector of the county's economy. Slightly more than half of all wage and salary workers are employed in this industry. Thereof, the timber resource base is of vital importance to the county's total economic base, and the ownership of forest lands is predominately (80%+) under public ownership and management.

The above-referenced forest lands, together with the two major reservoirs in the county (Ochoco and Prineville), are the primary basis for an emerging prominent recreation sector of the economy. The county and its recreation resources have become a prime attraction for both out-of-state visitors and Oregonians from all over the state. In-depth data on the recreation and tourism industry of the county is set forth in the above referenced County OEDP and I.O. Study, and Greater Prineville Area Open Space-Recreation Study, and the Central Oregon Open Space-Recreation Study.

The county's I.O. Study reveals that the three major contributors to the county's economy are forest products, government and agriculture. To a total economic output of \$264 million in 1975, these three sectors contributed \$164 million, \$27.4 million and \$19.1 million respectively, or 80% of the total.

2. As early in the planning process as 1974, it became evident that additional information was necessary for planning decisions to be made on a sound economic basis. Such recognition was the basis for the initiation of the County's Input-Output Study. The objective of the study was to portray the current economy of the county and project the impact of specific changes in that economy. As anticipated, the study confirmed that the county's economy was strongly natural resource oriented, and that forestry and forest products have the greatest influence on the economy, followed by government and agriculture.
3. It is recognized that good planning requires analysis of each situation and the establishment of facts associated with the program being considered. One absolutely necessary set of facts concerns the economic relationships of the present economy. From these facts, the economic consequences of different development programs can be projected. Various alternatives must be economically evaluated and decisions made concerning the direction economic growth should take. Economic facts must also be considered to answer such questions as how income and employment will be affected by the expansion or contraction of existing businesses, or by the introduction of new industry into the local economy and who will receive the economic benefits and losses. Planning must take into account which economic growth policies will contribute most to the economic well being of local residents and what type of economic growth will contribute least.
4. For an effective planning process, it is important to disclose the nature, interactions and the interdependencies of all economic sectors within the county's economy and to provide a factual basis for decisions relating to project increases or decreases within the more important sectors of the economy and to analyze this impact on the remainder of the economy.
5. Crook County, like most Eastern Oregon counties, has an economy that is dependent on the lumber industry, agriculture, government agencies and recreation. Commercial and service activities also contribute to the economy, but are dependent on the basic industries listed hereinbefore.
6. Because of the importance of the forest products industry and the ownership pattern of the base resource therefore, federal policies and land management practices are extremely important to the economic well being of the county. For example, reductions in the annual allowable cut (amount of timber harvested) or available forage has significant economic implications. Important items to be considered are: a) reduced income to the county's economy; b) probable increases in taxes on private property to maintain current levels of public services;

c) reduced revenue to federal and local government agencies; and d) quality of living environment.

7. Federal government policies play a prominent role in the county's economy also because a large part (49.5%) of the land area of the county is federally owned. The effects of this are influential in policies relating to natural resource allocation and transfer payments. Locally, the planning process has little impact on transfer payments in the form of social security, welfare payments, etc.; however, there can be some influence on revenue sharing, grants for sewage, water and other public facilities, etc. The effects of government land management policies and resource allocations are perhaps more important. Such resource decisions are not limited to forest, range, soil and water, but also include other values such as wild-life, scenic views, watersheds, and associated vegetation. Recent controversy and changing government policies concerning land use and natural resource allocation has increased the need for related economic information and consideration thereof. This does not suggest all natural resource uses or environmental considerations can be economically evaluated, but the economic information available should be utilized in making rational decisions relative to future uses and the impact such uses will have on the county.
8. Changes in the economic structure of an area usually result in gains or benefits in some segments and losses to other segments of the economy. It is therefore important to identify the "gainers and losers" and to evaluate the total effect of any major changes or developments on the county's economy.
9. The apparent predominate reliance on the forest product's industry makes it clear that there is a need for stabilization of that sector of the economy and a need for industrial diversification.
10. Relative to the need for industrial diversification, there is a need for improvement of labor force capabilities and for other industrial development incentives.
11. As noted in the agricultural and recreational elements, the quantity and quality of water is important economically; resource management and allocation decisions must be coordinated and evaluated by all levels of planning agencies. Such is particularly true when related to stabilization and growth of the agricultural sector, industrial growth and the related housing need generated thereby.
12. Policies set forth in the Commercial and Industrial sections of the Urban Element of this Plan must be re-emphasized in this element.
13. The need for a balancing of economic-environmental concerns in resource management and allocation decisions cannot be over-emphasized.

OBJECTIVES

1. To provide planning, economic and regulatory incentives relative to the stabilization of existing important sectors of the economy; including, but not limited to, forestry, agriculture, government, and recreation.
2. To emphasize those resource related policies which are supportive to economic stabilization and growth; particularly as related to the primary natural resources upon which the existing economy is dependent.
3. To utilize the County's Input-Output Study for evaluating the differing economic consequences of development programs whereas such information will provide a substantial informational base relative to these consequences.
4. To emphasize the importance of the various sectors of the county's economy, and to insure that resource management and allocation decisions are not made without thoroughly evaluating the effect on such decisions.
5. To expand coordination activities concerning planning decisions involving those resources which are the base of the county's economy.
6. To emphasize the protection of existing industries, provide opportunities for growth thereof, and to provide incentives for industrial growth and diversified production.
7. To increase communications and coordination between industry and education to assist in the development and maintenance of a quality labor force.
8. To insure that public facilities and services, and other supportive services and facilities (including housing) are available at such levels to support existing industry and growth thereof. Such includes the provision of available land area and sites for expansion and development of industry.
9. To develop a cultural and financial climate that will encourage industrial growth and development.
10. To insure through the planning process that economic and environmental considerations are balanced.
11. To continue participation in the OEDP Program to insure updated economic information, maximum opportunity for economic development financial assistance, and to maintain an economically active community.

ECONOMIC POLICIES

1. To diversify, stabilize and improve the economy of the county.
2. To coordinate all planning programs and decisions concerning economical base resources in the county and to maintain an economic-environmental balance in all resource management and allocation decisions.
3. To require that development plans are based on the best economic information available and to take into account areas suitable for economic development, the effects on the existing economy, available resources, labor market factors, transportation and livability.
4. To require an economic analysis of all major development proposals, resource management proposals, and allocation decisions.
5. To insure implementation of policies set forth in the commercial and industrial sections of the Land Use element of this Plan (Chapter III).
6. To implement programs and policies which provide economic and regulatory incentives for industrial stabilization and development.
7. To insure that implementing regulations provide maximum protection for existing industry and for expansion thereof, and to provide ample land area for additional industrial growth.
8. To insure that implementing regulations provide maximum protection for all existing economic developed areas and for expansion thereof.
9. To continue participation in the OEDP Program to insure maximum opportunity for economic development assistance and financing.

ENERGY

The following principles may be used as a basis for policies which maximize energy conservation and efficiency with the intent of alleviating potential energy shortages.

1. Prineville and Crook County receive about 300 days of sunshine per year. Solar energy will be a very feasible source of energy.
2. There is not an abundance of water in Crook County. Hydroelectric dam sites are, at best, minimal.
3. Geothermal, oil and gas sites are located in the southeastern portion of the county. These sites are quite distant from storage and market areas. Their potential will not be known until it becomes socially and economically feasible to drill. Known sites are within an Exclusive Farm Use Zone and are subject to a Conditional Use Permit pursuant thereto.
4. Local forest product mills currently use most wastes. Most of the waste is sold or used to produce steam heat. Utilization of slash in the woods is not a big income item or economically feasible at present, but could be in the future.
5. At present, it is not economically feasible (nor are there any on-going projects in Oregon) to generate fuel from animal wastes.
6. Crook County is part of the DEQ approved Central Oregon Intergovernmental Council Solid Waste Management Plan. Projections in the plan indicate mechanical methods of resource recovery would not be feasible until about 1990. There is an ongoing private effort in collecting newspapers for recycling in Portland.
7. There may be the possibility of some wind power sites in the county. Sites would most likely be found on higher elevation ridge tops in a saddle and would need an annual average minimum wind speed in the neighborhood of 12 miles per hour. Testing would be required to begin to see where, and if, there are any locations in Crook County.
8. Fuel from local bulk plants is delivered to service stations by small trucks. The use of larger trucks lowers the number of deliveries and thus saves fuel. In the Core Area of the City of Prineville are concentrations of people and service stations. If a fire from a tanker were to occur, the hazard would be compounded

by the fact that Prineville Fire Department does not have the capability to put out such a fire.

The present annual consumption of energy expressed in BTU's *(British Thermal Units) is as follows:

1. Total annual consumption of Crook County according to individual energy suppliers = 1,138,561,936,000 BTU's; per capita = 94,486,464 BTU's.
2. Total annual consumption of Crook County using Oregon per capita figures = 2,299,149,595,550 BTU's; per capita = 148,302,860 BTU's.
3. Total annual consumption of Prineville using Oregon per capita figures = 836,873,101,053 BTU's; per capita = 148,302,870 BTU's.
4. Total annual consumption of the Metro Area using Oregon per capita figures = 1,018,395,815,157 BTU's; per capita = 148,302,860 BTU's.
5. Amount of energy consumed derived from renewable energy sources (using 1975 Oregon average of 44% for P.P.&L.) = 286,776,000,000 BTU's.
6. Percentage of energy consumed from renewable resources in Crook County:
 - (a) Using energy suppliers figures = 25%
 - (b) Using Oregon per capita figures = 12%
 - (c) Information not available for Prineville or the Metro Area.

*A British Thermal Unit may be defined as an amount of energy approximately equal to the amount of heat produce by burning one kitchen match or the amount of heat required to raise the temperature of one pound of water one degree in Fahrenheit.

GEOHERMAL RESOURCES

(Ordinance No. 71; 7/28/92)

The County's prior submittal listed the following potential geothermal sites in the County. No other information on quality or quantity is available.

POTENTIAL GEOTHERMAL SITES

	<u>Location</u>	<u>Quality</u>
Rhode Well	14-17-33	22°
Powell Butte Sys.	15-16-14 15-16-15	20°
Martin Well	16-15-26	21°
Shumway Windmill Well	16-15-29	21°
Bowen Well	17-15-20	26°
Glover Well	17-16-32	20°
Camp Creek Well	19-21-5	23°
Gilchrist Valley Well	20-22-25 20-22-26	31°

The Department of Energy indicated in a telephone conversation on June 25, 1992, that the County's geothermal resources are of such a low quality (that is to say, low temperature) that they are best used as irrigation water rather than an energy source. Based on that information, the County designates these resources as 1-A. The resource sites are not important and no further action is required.

POTENTIAL HYDROPOWER SITES

The County's prior submittals listed the following hydropower sites in the County. No information on quality or quantity is available.

POTENTIAL HYDROPOWER SITES

Basin 5	Crooked River	No. 8579
Basin 5	Ochoco Creek	No. 3378
Basin 5	Ochoco Creek	No. 3532
Basin 5	Ochoco Creek	No. 4176
Basin 5	Crooked River	No. 3381
Basin 5	Crooked River	No. 4004
Basin 5	Crooked River, Prineville Dam	No. 3513

The Northwest Power Planning Council was contacted by phone on June 25, 1992. It was learned that only one active permit is currently on file. The permit was issued to Ochoco Irrigation District for a retrofit to provide a 1.7 megawatt facility on the existing Bowman Dam of the Crooked River. Because this is an existing facility on an existing dam, no further analysis is necessary. The dam is owned and operated by the Bureau of Reclamation. As such, no conflicting uses are identified. Under the federal ownership, the County finds hydropower as a 2-1 resource that is protected by existing programs with federal rules and regulations.

GAS AND OIL SITES

The five sites listed in a prior submittal, and shown below, have been researched and all that can be gleaned is that five sites are on private lands in Crook County. Since no further information is available, these five sites are designated as a 1-B resource. The County final action is a policy to complete the Goal 5 process as information becomes available on each.

POTENTIAL OIL AND GAS SITES

Gray, Lona Berna 1, 1951	OG	19-18- NE32
Standard Oil Co. California, Pexco State 1 1955	OG	20-20- NE36
Sunray Mid- Continent, Bear Creek Unit 1, 1958	OG	17-19- SE30
Texaco, Inc. Federal 1, 1971	OG	17-23- SW31
Texaco, Inc. Well 17-1, 1981	OG	19-20- NE17

The Department of Energy recommended that the Bureau of Land Management in Prineville be contacted to glean additional information regarding gas and oil exploration well sites in Crook County. In a phone conversation with the Bureau of Land Management office in Prineville on June 25, 1992, it was learned there are a total of six sites on BLM lands within Crook County. Two of the site leases will expire on July 1, 1992. The remaining four sites cover 4,828 acres of BLM land. As it is public ownership, no conflicting uses are identified and these sites are designated 2-A.

ENERGY POLICIES

1. To encourage renewable and/or efficient energy systems design, siting and construction materials in all new development and improvements in the county.
2. To provide building permit discounts relative to the value of energy conservation practices.
3. To prohibit moving or flashing signs.
4. To regulate any object from casting a shadow on an existing solar collecting unit.
5. To allow truck and trailer delivery of oil and gas products from bulk plants to local service stations in designated “strip commercial” areas.
6. To encourage high density residential development in close and/or convenient proximity to high employment areas and commercial areas.
7. To encourage all systems and efforts for the collection, reuse and recycling of metallic and non-metallic wastes.
8. To comply with, and periodically update, according to new and appropriate technology and legislation, the County’s Solid Waste Management Plan.

II. Demographic Profile – Population Predictions

DEMOGRAPHIC PROFILE - POPULATION PREDICTIONS

DESCRIPTION

Crook County, population 12,100, is the most centrally located of all the counties in the state. Prineville, the only incorporated city in the county, is nearly equidistant from Portland, Salem, Corvallis and Eugene, a distance of 150 miles or 3-1/2 hours traveling time. The geographic setting is characterized as typically high desert, with natural vegetation consisting primarily of sagebrush and juniper trees. Timber, agriculture, recreation and government comprise the main economic enterprises in the county.

Prineville is located in the western third of the county in the southern portion of the Crooked River Valley. This valley area contains the most productive agricultural lands in the county, which combined with a growing urban populace poses serious urban-rural conflicts. Approximately three-fourths of the county population lives within a four-mile radius of the city, identified in total as the Prineville Metropolitan Area. Other areas of concentrated population in the county are the Prineville Reservoir, Paulina and Powell Butte areas.

FAMILY INCOME PROFILE

Crook County's per capita income was \$5,444 in 1975, 13th among Oregon counties. Per capita income in 1975 for the State of Oregon was \$5,752. According to the 1976 Socio Economic Report from Portland State University, the median family income for 1975 in Crook County was \$12,430. In order to determine family poverty levels, a table is designed based upon the median income of the county, and family size. As of June, 1977, the poverty levels in Crook County for various family sizes were as follows:

Table III		
POVERTY GUIDELINES		
FAMILY SIZE	NON-FARM	FARM
One	\$ 2,970	\$ 2,550
Two	3,930	3,360
Three	4,890	4,170
Four	5,850	4,980
Five	6,810	5,790
Six	7,770	6,600
Additional Members	+ \$ 960	+ \$ 810

Approximately 400 households in the county (10.9%) were below the poverty level in 1976.

The same Socio Economic Report from Portland State University presented the income breakdown for Crook County, based on 1975 state tax returns.

INCOME GROUP	HOUSEHOLD PERCENTAGE
0 - \$2,000	16.0%
\$2,000 - \$2,999	6.9%
\$3,000 - \$4,999	11.6%
\$5,000 - \$7,999	16.5%
\$8,000 - \$9,999	10.0%
\$10,000 - \$14,999	22.0%
\$15,000 - \$19,999	10.6%
\$20,000 - \$50,000	6.4%

EMPLOYMENT

Total employment for Crook County in May, 1977, was 4,600 people, of which approximately 1,800 (39.1%) were women. The 1970 census for the City of Prineville showed the labor force to be 1,659, including people 16 years of age and older. An occupational breakdown of the Prineville labor force follows:

Manufacturing (largely lumber & wood products)	32%
Wholesale/retail trade	17%
Professional	17%
Other industry	11%
Finance	8%
Construction	6%
Other	8%

Unemployment has been high the past three years with the average annual rates being 10.6% for 1974, 15.5% for 1975, and 13% for 1976. Throughout a nine month period in 1975, Crook County ranked either 1st, 2nd or 3rd for unemployment in the State of Oregon. The largest unemployment period occurs between December and April. This results primarily from seasonal cutbacks in the forest and wood products industry (snow in the mountains). A decrease in retail trade also results from fewer tourists, hunters, and fishermen passing through the area. In May, 1977, the Oregon Employment Division reported that the serious unemployment problem in Crook County was continuing although a slow, steady decline in the unemployment rate was also occurring. Total unemployment was down by 140 from May 1976 - May 1977, causing the unemployment rate to fall from 16.7% to 14.0%.

Crook County maintained a high level of per capita income despite sharp unemployment losses in the 1974-75 period. This can be explained by the fact that most job losses occurred in millwork, where wages are significantly lower than in the predominant lumber milling industry. With unemployment largely due to the loss of jobs at the lower end of the local industrial wage spectrum, and income bolstered by unemployment insurance, per capita income in Crook County was not seriously affected. There have been no major firms, i.e. employing 25 or more people, that have opened or closed shop during the past five years. It is difficult to predict which or how many new industries will be attracted to the area to bolster the economy, but it is probable that economic development will occur in recreation and in support of a retirement community. In the winter of 1976, Crook County was awarded a grant for the construction of an indoor arena and improvements to the fairgrounds. This development project was designed to help alleviate the high unemployment pressures of the county and provide a recreational attraction to bolster the local economy.

POPULATION PROFILE AND FORECAST

According to the Portland State Center for Population Research and Services, Crook County's population has increased steadily over the past 20 years due to immigration and a change in birth-death ratio. From 1970 - 1976, the county has had an average population increase of about 3% per year, the city has had an increase of nearly 6% per year largely due to annexations.

Table V			
POPULATION INCREASES 1970 – 1977			
PRINEVILLE		CROOK COUNTY	
POPULATION	YEARLY INCREASE	POPULATION	YEARLY INCREASE
1970 – 4,101	-----	9,985	-----
1971 – 4,380	6.8%	10,090	1.1%
1972 – 4,505	2.8%	10,610	5.1%
1973 – 4,600	2.1%	11,400	7.4%
1974 – 4,980	8.3%	11,460	0.5%
1975 – 5,275	5.9%	11,800	3.0%
1976 – 5,590	6.0%	11,950	1.3%
1977 – 5,830	4.3%	12,100	1.2%

Analysis of the population by age since 1960 (figures derived from Portland State as referenced above) reveals some interesting trends in population composition. Crook County has been experiencing a steady decline in the 0-14 age bracket and a significant increase in those 65 years or older.

Table VI					
CROOK COUNTY AGE TRENDS 1960 – 1976					
YEAR	AGE GROUPS				
	0 – 14	15 – 24	25 – 44	45 – 64	65+
1960	35.5%	10.9%	25.3%	21.1%	7.2%
1968	33.6%	12.1%	22.9%	22.9%	8.4%
1976	24.5%	16.7%	24.8%	22.6%	10.7%

In April of 1977, a door to door housing survey in the Prineville Metro Area broke down demographic characteristics according to head of households age groups as follows:

0 – 15	16 – 24	25 – 34	35 – 54	55 – 61	62+
0.4%	6.9%	17.7%	30.7%	12.4%	32%

According to that same study, 76% of the households were headed by a married couple, 4% by single males, and 18% by single females. The survey also revealed a great degree of stability in the length of residency of the majority of households. Fifty-seven percent have lived in the Prineville Metro Area over ten years and forty-three percent of the total have retained their present residence since 1970.

The Bureau of Census Statistics for 1970 show the sex ratio evenly distributed with 50.3% male and 49.7% female. The county racial profile shows 99% Caucasian, with the remaining population being made up largely of Indian and Spanish-American people. The education profile indicates 37.6% of the total population has received high school diplomas, and 5.9% are college graduates.

Population predictions show a continuing population increase at approximately the same slow steady rate which occurred in the past. The figures used here were devised by PNW Bell forecaster's office in April of 1977. Their population predictions are bases upon the following assumptions:

1. Employment growth in the lumber and wood products industries will be very low.
2. New industries in the area will be of the types to utilize the existing pool of low skilled labor and will attract very little outside labor force.
3. Retirees will come primarily from the Willamette Valley and California and will settle in or very near the city limits of Prineville.

Table VII			
POPULATION GROWTH – YEAR 2000			
DATE	CITY	URBAN	COUNTY
12/31/76	5,590	9,400	11,920
77	5,690	9,610	12,160
78	5,970*	9,820	12,400
79	6,080	10,040	12,650
80	6,240*	10,260	12,900
85	6,820	11,380	14,160
90	7,460	12,630	15,550
95	8,160	14,010	17,080
00	8,290	15,540	18,770

*Assumes annexations; 1978 = 180; 1980 = 50

By 1992, Crook County will evaluate U.S. Census Data and make any changes, if necessary, to the existing year 2000 population projection set forth in the plan. The County's population projection will be coordinated with the City of Prineville's projected growth and projected to the year 2012. (Ordinance No. 45; 3/20/91)

III. Land Use

AGRICULTURE

FINDINGS

1. Open lands used for agricultural and forestry purposes are an efficient means of conserving natural resources that constitute important physical, social, aesthetic, and economic assets to all of the people living in rural, suburban and urban areas of the county.
2. The preservation of a maximum amount of the limited supply of agricultural and forestry land is necessary to the conservation of the county's economic resource base, and the preservation of such land in large blocks is necessary in maintaining the economy of the county and for the assurance of adequate, healthful, and nutritious food and forest products for the people of this county, state and nation.
3. Expansion of urban and suburban development and non-farm rural residential and recreational subdivisions into the rural areas of the county outside the Urban Growth Boundary of the City of Prineville is a matter of public concern because of unnecessary increases in costs of public and community services including police, fire, education, transportation, health and welfare; conflicts between agricultural and non-agricultural activities; increasing costs and liabilities to agriculture; loss of open space, natural beauty and unrenovable resources; detrimental effects on wildlife habitats and migration patterns; increased fire hazards, limits to carrying capacities of air, water and land resources; and conflicts with the conservation of energy.
4. The most productive croplands within the county are concentrated in the valley area surrounding the City of Prineville, in the lowlands along the Crooked River and its major tributaries, and in the Powell Butte and Lone Pine areas. These areas have been under a transition of being consumed by the introduction of part-time farming and rural non-farm residences on small parcels. Rural subdivisions and partitionings with lots ranging from two (2) to ten (10) acres have encompassed in excess of 1,200 acres of class I through IV lands during the period of 1971 to 1975 in the Prineville valley area, 500 acres in the Powell Butte area, and 40 acres in the Lone Pine area. This trend poses serious problems and conflicts to the continuation of commercial farming operations in the area as more and more lands are broken up into smaller non-farm parcels. Some of these problems and conflicts include:

- (a) Increased demands for the use of irrigation and ground water supplies for domestic use.
 - (b) Higher costs in the distribution of water for irrigation.
 - (c) Difficulty in the control of weeds and rodents.
 - (d) Higher operating costs and increased land assessments.
 - (e) Restrictions on the use of farm chemicals.
 - (f) Complaints of odors, dust and noise, dogs and children vs. livestock, increased liabilities, increased traffic, etc.
 - (g) The nuisance and costs of vandalism and trespass.
5. Recreational subdivisions with lots ranging from five (5) to twenty (20) acres have encompassed in excess of 18,000 acres since 1962 in the Post-Paulina area of the county alone, and for the entire county have consumed more than 28,000 acres. Such developments have generally only been successful and beneficial for the developer, leaving lot purchasers with little or no provisions for public utilities and services, access, domestic water, sewage or solid waste disposal, or employment opportunities. The term “recreational” attached to these developments is quite relative if not non-existent in fact. In most cases, the developments have destroyed existing recreational values, have taken lands out of historical rural productive capacities and have made a return to the former state impossible. The semi-arid clay origin soils of the area are fragile and development destroys ground cover beyond repair, causes serious erosion hazards, changes patterns of wildlife, alters stream courses, and destroys aquifer recharge areas. The aesthetic values of the area are literally “raped” with forests of overhead utility poles, and substandard, dilapidated, abandoned structures. The encroachment of such developments affect agriculture practices and operations, hunting, fishing, and all the pleasures people take in open land. They preclude future cultivation, grazing, timbering, open space, wildlife habitats, ecological and economical balances, and energy conservation practices. Publicly, such developments are difficult and costly to service, and normally the local government cost-benefit ratio is a deficit.
6. Goal No. 3 of the Statewide Planning Goals and Guidelines adopted by the State Land Conservation and Development Commission pursuant to ORS 197, requires that “Agricultural lands shall be preserved and maintained for agricultural products, forest and open space. These lands shall be inventoried and preserved by adopting exclusive farm use zones pursuant to ORS Chapter 215. Such minimum lot sizes as are utilized for any farm use zones shall be appropriate for the continuation of the existing agricultural enterprises within the area.....
Agricultural Land. in Eastern Oregon is land of predominately class I, II, III,

IV, V and VI soils as identified in the Soil Capability Classification System of the United States Soil Conservation Service, and other lands which are suitable for farm use, taking into consideration soil fertility, suitability for grazing, climatic conditions, existing and future availability of water for farm irrigation purposes, existing land use patterns, technological and energy inputs required, or accepted farming practices.....” Although these referenced guidelines are substantial in scope and afford considerable protection for intensive cropland agricultural practices, such is determined not adequate to insure the desired and necessary preservation and protection of the large-scale range livestock operation and base resources common and important to the county, and particularly to the Ochoco and Post-Paulina areas of the county. The full recognition is that the mere preservation of “all” irrigated and cultivatable lands in the area “will not” preserve the “total” agricultural economy. Neither will such minimize the detrimental effects on agriculture from increased property value assessments, land use conflicts, trespass, and numerous other problems derived from the mixing of non-compatible farm and non-farm uses in the Post-Paulina and Ochoco areas of the county. Therefore, realizing that present regulations realistically only afford protection to certain “Agricultural Lands” identifiable by the standard Soil Conservation Classification, it is imperative that agricultural lands preservation policies, for the Post-Paulina area primarily, include a range, and preservation goal.

7. As defined in the afore-referenced guidelines, “Agricultural Lands” involve a large part of the total county area, but only a relatively small portion, approximately 5% are classified as agricultural cropland of which only 60% are under irrigation, the remaining cropland being dry land farming. Agricultural cropland in the county is restricted generally by soil capabilities, a short growing season, and limited sources and supplies of water for irrigation. Despite these general limitations, however, agriculture is an important and substantial part of the county’s total economy.
8. As set forth by Oregon Revised Statutes, Chapter 215.253, the application of Exclusive Farm Use Zoning pursuant to ORS 215.203 prohibits any state agency, city, county or political subdivision of the state from exercising any powers to enact local laws or ordinances or impose restrictions or regulations within said EFU Zones in a manner that would unreasonably restrict or regulate farm structures or that would unreasonably restrict or regulate accepted farming practices because of noise, dust, odor or other materials carried in the air or other conditions arising therefrom if such conditions do not extend beyond the boundaries of the established EFU Zone.
9. It is recognized that a limited amount of land division is necessary when directly associated with the predominate and accepted agricultural practices of the area and specifically when directly attributable to the continuance of the “family farm”. ORS 215 also provides for the allowance of farm accessory structures and uses and frequently construction financing of such mandates minor land divisions

for that specific purpose. Although it is recognized that a limited amount of land division is necessary even in areas designated for maximum agricultural protection and preservation and thereof zoned EFU, ORS 215.263 does set forth some limitations. Any proposed division of land in an EFU Zone resulting in the creation of one or more parcels of land of less than 10 acres in size must be reviewed, and approved or disapproved by the county ORS 215.263(2). Further, any such divisions creating one or more parcels of 10 acres or more may require county review, and approval or disapproval. ORS 215.263(1). These approvals are deemed necessary by Crook County in the interest of promoting orderly growth and efficient land use.

10. The provisions of ORS 215 also recognize and set forth certain non-farm uses which may be conditionally carried out with little or no conflict with area agricultural uses. Such uses may be established separately or in conjunction with farm use, are primarily commercially, industrially, or recreationally oriented, and in many cases may provide a means for secondary economic benefits to an agricultural enterprise. ORS 215.213.
11. Public lands and resources managed by the U. S. Forest Service (USFS) and the Bureau of Land Management (BLM) are vital to the economic base and assets of the county, and relative hereto, specifically to the range-livestock sector and the Post-Paulina areas of the county. Thereof, said agencies' resource management programs and policies are directly effective. Further, unlike USFS lands in the county which are held in large contiguous units, BLM lands are more scattered and isolated in small tracts. This sporadic pattern of ownership poses problems, both publicly and privately, to effective management and public vs. private uses.
12. To a semi-arid county like Crook County, water resources are a primary base factor and surface water resources the major supplier of needs. Agriculture and recreation are the two prime users in the county, both highly dependent upon quality and quantity. Agriculturally, water is a necessary factor for intensive cash crops like potatoes, mint and alfalfa, and for the range-livestock sector. The production of winter forages is governed by available irrigation waters and managed summer grazing is dependent upon water availability and distribution. Further, whereas most of the cash crop areas can rely heavily on storage from the Ochoco and Prineville Reservoirs, the majority of the range-livestock sector, particularly the Post-Paulina and upper Ochoco areas, must rely on natural sources. Recreationally, surface water qualities and quantities are the basis for fishing and other outdoor activities. Relative hereto, it is recognized that problems of water quality and quantity are inseparable; problems of water pollution are not restricted to urban areas; and improved land use and resource planning and management are an essential ingredient to the maintenance and improvement of water quality and quantity. It is inevitable that demand will undoubtedly exceed the available supply, and that the competition among users will reach critical levels. Recognition of two possible courses of action is noted; develop additional sources or more efficiently utilize sources. There is an urgency to take steps

which will ensure adequate supplies of high quality water for primary users at the least possible cost.

13. Exclusive Farm Use Zoning (referenced hereinbefore), as provided by law, substantially limits alternatives to the use of rural lands (particularly agricultural lands), and with the importance of such lands to the public and the county, incentives and privileges offered to encourage owners of these lands to hold such in EFU Zones are justified. Thereof, State Planning Goal No. 3 provides that services that need to pass through agricultural lands should not be connected with any use that is not allowed under EFU Zoning, should not be assessed as part of the farm unit, and should be limited in capacity to serve specific service areas and identified needs.

OBJECTIVES

To maintain a viable agricultural base, preserve agricultural lands for agriculture, and to protect agriculture as a commercial enterprise. In order to maintain a viable agricultural economic base and develop and adopt realistic land development policies, it is necessary to recognize a distinction between rural development (which includes those area outside the Urban Growth Boundary of the City of Prineville) and urban and suburban development (which includes those areas lying within the adopted Urban Growth Boundary of the City of Prineville).

To conserve natural resources constituting important physical, social, aesthetic and economic assets through the development and adoption of realistic land use and development policies intended to achieve an economic-environmental balance, minimize public costs, and maximize energy conservation.

To minimize detrimental effects of land use and development relative to wildlife, natural hazards, public costs, resource carrying capacities, and livability.

To minimize and actually prevent conflicts between farm and non-farm uses and resultant increased economical costs to the agricultural sector.

To provide maximum opportunity for optimum management and operational practices, and provide adequately efficient supportive resources and services.

To encourage development of rural lands in a proper and orderly manner as need necessitates only in the best public interest of the people of each planning area and the county as a whole with the preservation of as much agricultural land as possible, and with absolute “low” densities in the rural areas of the county.

To ensure that: (1) The goals, policies and proposals of the County’s Comprehensive Plan be complied with; (2) The provisions of State Planning Goal No. 3 and other relevant goals are adhered to; and (3) The provisions of ORS Chapter 215 are implemented.

To achieve a balance between energy, environmental and economical considerations.

To encourage a proper balance between the needs for agriculture, residences and open space.

To develop and implement a realistic and comprehensive criteria for use and development of the rural areas of the county.

To maintain a program of citizen involvement in the planning program at a level commensurate with the need and desires in each planning area of the county.

AGRICULTURAL POLICIES

It shall be the policy of Crook County, Oregon, to preserve agricultural lands, to protect agriculture as an economic enterprise, to balance economic and environmental considerations, to limit non-agricultural development, to maintain a “low” population density, and to maintain a high level of livability in the county.

It shall be the policy of Crook County to concentrate the major portion of the county’s population growth within the Urban Growth Boundary (UGB) of the City of Prineville. Development outside the UGB will be permitted only where conflicts with productive agricultural areas are minimal and only when in compliance with the factors set forth in ORS 215.213 and the Comprehensive Plan. Subdivision developments in rural areas shall be directed to non-productive agricultural land and such conversion shall be based upon the factors set forth in Goal No. 3 of the Statewide Planning Goals and Guidelines, and other applicable policies, and developments with a Planned Unit Development concept and design are preferred over “standard” subdivision designs. The county, subject to proper zoning (exclusive farm use zoning) and in compliance with this policy, the county’s Comprehensive Plan, State Planning Goal No. 3, and ORS Chapter 215, may permit subdivisions, land partitionings, and orderly development in rural areas on non-productive agricultural lands. In order to encourage flexibility and diversity in lot size and arrangement and the highest level of improvements and services, the county shall encourage a Planned Unit Development concept where it is demonstrated to be necessary, appropriate, in the best public interest, in balance with resource carrying capacities and in compliance with this policy and the overall Comprehensive Plan.

It shall further be the policy of the county that nonagricultural development in the rural areas shall be based, whenever possible, upon a demonstrated public need; and in all cases, such development shall avoid conflicts with the agricultural community. Therefore, the county shall not permit subdivisions on agriculturally productive lands; and in the case of such developments on non-agricultural lands in close proximity to said lands shall require setbacks, restrictions, and minimum lot sizes as deemed necessary to afford the greatest protection for said agricultural lands.

It shall be the policy of the county to develop and implement a comprehensive and definitive criteria for the evaluation of all non-farm developments to ensure that all objectives and policies set forth herein are complied with to the maximum level possible.

In order to afford maximum economical and regulatory incentives for agriculture, Exclusive Farm Use (EFU) Zoning pursuant to ORS Chapters 215.203 and 215.213 shall be applied to all agricultural areas of the county; such includes all of the county except those areas identified as the Ochoco and Prineville Reservoir areas and those areas constituting the three developed Rural Service Centers of Post, Paulina and Powell Butte (See page 75). Those areas associated with the two major reservoirs in the county cannot be considered agricultural because of the following factors: 1) Predominance of soil types with SCS Classification Ratings of VII and VIII relative to soil depth, slope, rock content and fertility; 2) Areas have not historically been agriculturally productive; 3) Relationship to and reliance on major recreational resources relative to the Recreation Goal; 4) Unavailability of water for irrigation either from surface or ground water sources, present and future; and 5) Said areas are already 30 percent developed in recreational-residential uses. Those areas identified as Rural Service Centers are presently more than 90 percent developed, are limited to the existing platted areas, and are essential to the agricultural areas that each serves.

It shall further be the policy of the county to encourage private and public land exchanges where such is deemed to be in the best interest of resource management and development, and it shall be the policy of the county to encourage coordinated resource management development to achieve maximum efficient benefits under a multiple use concept.

It shall be the policy of the county to encourage the establishment of a standing advisory committee of a cross-section of local residents in each planning area to advise the County Planning Commission in planning and development proposals applicable to each respective planning area.

RANGELAND POLICIES

Rangelands shall be preserved and maintained for rangeland uses compatible with multiple resource management. These lands shall be inventoried and preserved by adopting exclusive rangeland zones consistent with this goal's guidelines. Conversion of rangeland to urban land shall follow the procedures and requirements set forth in the Land Use Planning Goal (Goal No. 2) for goal exceptions. In addition to criteria in Goal No. 2, such conversion must be consistent with multiple resource management. Development of commercial or public facilities to support rangeland uses, such as rural service centers, resorts, fish hatcheries and organizational camps, should be located to minimize interference with other rangeland uses and maintain the geographic and productive integrity of the resource.

FOREST LANDS

FINDINGS

1. Forest lands in Crook County are lands composed of existing and potential forest lands which are suitable for commercial forest uses and other forested lands needed for watershed protection, wildlife and fisheries habitat and recreation.
2. Primary forest land uses in the county include the production of trees and the processing of forest products, the provision of open space, watershed protection and wildlife and fisheries habitat, soil protection from wind and water, outdoor recreational activities and related support services and wilderness values compatible with these uses, and grazing for livestock.
3. The forest land base of the county comprises a total of approximately 1,016,870 acres of which 100,000 acres is classified as commercial timber land in private ownership, 600 acres is State owned commercial timber land, 352,630 acres are Federally owned commercial timber land, and 563,590 acres are classified as non-productive timber lands of which the majority are juniper scablands.
4. The production of timber for the utilization in the forest products industry is vital to the economy of the county. Such production presently occurs on approximately 453,000 acres of which the majority, 353,280 acres, is in public ownership and is the primary contributor to the Annual Allowable Cut set forth by the U.S. Forest Service and B.L.M. Said allowable cut is approximately 94,000,000 board feet and is considered less than adequate to sustain the total forest products industry of the county at “full production”.
5. The grazing of livestock currently exists on the majority of all forest lands and is a vital key to the continued existence of the county’s livestock operations. Such is particularly true relative to those livestock operations relying on grazing permits on public lands.
6. Forest lands in the county are the primary source for the production of more than 360,000 acre feet of surface water that is utilized largely for irrigation, domestic, industrial, and recreational purposes.
7. On those forest lands owned and managed by the U. S. Forest Service, 443,870 acres, there exists one (1) Research Natural Area (Ochoco Divide), Streamside management units are established along all major drainages encompassing 34,812

acres, there are 26 developed recreation sites and three (3) water impoundments. Visual management areas are established along all major roads to protect the scenic quality, totaling 50,920 acres, and there are many well established Rockbound sites which are available for public use, many of which are on claims held by the Prineville-Crook County Chamber of Commerce.

8. On those forest lands owned and managed by the U. S. Forest Service, there are major items, which by law or Forest Service policy must supercede any other use of the land. These constraints include the National Historic Preservation Act of 1966, the Wild Horse and Burro Act, Forest Service Snag Policies, the Endangered and Threatened Species Act of 1973, water quality management policies and regulations, and soil conservation policies.
9. Forest lands in the county support a variety of habitat for wildlife from which more than 488 thousand visitor days are spent annually in hunting, fishing, trapping, and viewing wildlife.
10. The forest lands of the county contain more than 200 miles of Class I streams which support a cold water fishery, primarily trout. There are also more than 600 miles of Class II streams that directly influence Class I streams.
11. Recreational opportunities on the forest lands of the county vary from rockhounding to snowmobiling and include such things as horseback riding, driving for pleasure, camping, fishing and hunting.

OBJECTIVES

1. To conserve the forest land base in the county to provide for the continued availability of these lands for forest uses.
2. To encourage the application of management practices that maximize the continued productivity of timber lands, such as addressed by the Oregon Forest Practices Act.
3. To ensure that there is an economic-environmental balance in decisions affecting the utilization of forest lands in the county.
4. To encourage forest land use practices which are not detrimental to the vitally important watershed protection and fish and wildlife habitats.
5. To encourage forest land uses in such a manner as to maximize soil conservation and protection from wind and water erosion hazards.
6. To maintain a high level of recreational opportunities on forest lands in the county as an integral part of the total management framework, but that such usage be kept in a proper perspective.

7. To ensure that management and development decisions and actions relative to forest lands do not exceed the carrying capacities of such resources.
8. To ensure that developments that are allowable under forest land zoning and other regulations be limited to those activities for forest production and protection and other land management uses that are compatible with forest production.
9. To encourage forestation or reforestation on forest lands determined suitable for such purpose.
10. To encourage and support management practices which support existing use levels, particularly as related to the forest products industry, the dependent livestock sector, and the dispersed recreational user.
11. To support resource management practices directed at achieving a balance of forest uses as set forth in Multiple Use concepts.

FOREST LAND POLICIES

It shall be the policy of Crook County, Oregon, to conserve forest lands for forest uses. Multi-use, rather than single use, shall be stressed on all forest lands. Forest uses such as timber production, fish and wildlife habitat, livestock grazing, dispersed recreation, and the production of high quality water for agriculture and domestic use shall be stressed.

It shall be the policy of the county to emphasize the development and maintenance of a full stocking and high growth rate of commercial timber species on all available commercial forest land. Such practices as prompt reforestation, development and use of genetically superior planting stock, pre-commercial and commercial thinning, and protection from fire, insect, disease, and animal damage shall be encouraged.

It shall be the policy of the county to support the harvest of trees in a manner which protects the long-term productivity of the land, and to the maximum extent possible, utilizes all wood fiber and minimizes the short-term adverse environmental impacts such as air, water and other pollution.

It shall be the policy of the county to ensure that before forest lands are changed to another use the productivity of the land shall be considered and evaluated.

It shall be the policy of the county to support forest land use and management decisions which maximize the present level of benefiting uses; specific emphasis shall be on timber production to sustain the existing forest products industry, forage production to maintain at least the existing levels of livestock and wildlife habitats, protection of water quantities and quality and to maintain existing dispersed recreation level in coordination with USFS planning and management programs.

Crook County will map the cubic foot site class of forest lands when the soil survey for the County is completed. (Ordinance No. 45; 3/20/91)

RECREATION

It is the goal of Crook County to satisfy the recreational needs of the citizens of Crook County and visitors by providing for human development and enrichment with recreation areas, facilities, and opportunities. These include, but are not limited to, open space and scenic landscapes; recreational lands; historical, archeology and natural science resources; scenic roads and travelways; sports and cultural events; camping, picnicking and recreational lodging; tourist facilities and accommodations; trails; waterway use facilities; hunting; angling; winter sports; mineral resources; active and passive games and activities.

“Recreation needs” refers to existing and future needs by citizens and visitors for recreation areas, facilities and opportunities.

ROLES AND RESPONSIBILITIES

The Federal Government has two major roles:

1. To provide technical, financial and other forms of assistance for state and local recreation projects.
2. To develop and manage outstanding natural, cultural and historic resources of national importance.

Bureau of Land Management (Dept. of the Interior) - Owns 493,290 acres or 26% of the total county. The only active area that the bureau manages for recreational use is the Chimney Rock area of the Crooked River Gorge down stream from the Bowman Memorial Dam. Picnic tables, garbage cans, wastewater sumps and basic restroom facilities are provided with emphasis on day use. Nevertheless, overnight camping is allowed. Rather than expand these basic facilities in the future, the policy will be to reduce recreational facilities in Crook County.

Bureau of Outdoor Recreation (Dept. of the Interior) - Since 1967, the City of Prineville has matched BOR monies for the acquisition of five parcels of land for park use and has developed restrooms, tennis courts, basketball courts, a picnic shelter and automatic sprinkler irrigation on its park system, plus the purchase of benches and picnic tables. The next priority is to use BOR funds for the development of softball fields on the newly acquired Boston land. It appears that BOR monies will be available in greater quantities to city and county recreation departments in the future.

Bureau of Reclamation (Dept. of the Interior) - Owns 15,960 acres around the perimeters of Prineville Reservoir. Its responsibilities involve flood control and allocation of storage water,

preservation of fish and wildlife, outdoor recreation and water quality control. The Bureau of Reclamation shares the responsibility of fish and wildlife management with the Oregon Fish and Wildlife Commission on the upstream half of the reservoir and shares jurisdiction of the downstream half with Crook County for recreational management purposes. The Bureau assisted with the installation of a drinking water system at a county designated boat ramp area.

Department of Housing and Urban Development - Assists the City and County for funding comprehensive planning studies regarding parks, recreation and open space.

Economic Development Administration (Dept. of Commerce) - Currently recreational facilities are being designed for the Crook County Fairgrounds, funded by a grant awarded by this administration. This project was selected in order to spur economic and social growth because of Crook County's record of high unemployment and low family incomes.

U.S. Forest Service (Dept. of Agriculture) - Owns 434,792 acres in Crook County, 22.8 percent of the total county. The greatest recreational impacts on the Ochoco National Forest stem from hunting, fishing, rockhounding and camping; but due to the lack of lakes, large streams and wilderness areas, this forest does not compete with heavy recreational uses as in the Winema and Deschutes National Forests. Their planning objectives are to maintain inventories of potential recreational sites and to develop them as demand increases.

The State Government has two major roles:

1. To coordinate and assist local, regional, and to some degree private recreational efforts.
2. To direct the development and preservation of large-scale recreation facilities, trails and waterways of statewide significance.

Fish and Wildlife Department - The primary responsibility is preserving habitat for game and non-game mammals, birds and fish on all lands within the county and state. Policies and programs are developed in cooperation with public agencies and private ownerships alike. Hunting/fishing season regulations are administered by the commission as a means of maintaining a balance between game population and recreation demand. A special management area unique to Crook County is an upstream portion of Prineville Reservoir. Programs have been developed there to improve geese nesting sites, bass reefs and crucial deer winter range. Additional fish and wildlife programs are road closures during deer hunting season in the Marks Creek burn area (approximately 4,500 acres) and the Paulina Ranger District (approximately 225,000 acres). Angler access points along Crooked River between Prineville and Stearns Dam have been negotiated with private land owners.

Oregon State Parks - Owns 871 acres in Crook County, including Prineville Reservoir State Park, Ochoco Reservoir State Park and Ochoco Wayside Viewpoint. There is a great demand for more overnight camping facilities, especially at Prineville Reservoir. Thirty additional camp sites have been designed for Prineville Reservoir State Park, but cutbacks in the state budget have placed the priority on maintenance and upgrading present facilities.

City and County Parks - Refer to Parks and Recreation and Open Space Study regarding the city park system. Within the Crook County Planning Department are plans for a forty (40) camp site development at Prineville Reservoir near the boat ramp areas where the Bureau of Reclamation assisted in the installation of a drinking water system. However, a questionnaire survey conducted during Memorial Day weekend, 1975, at this camping area demonstrated that over eighty (80) percent of the users were from outside the county. Because of this low percentage of local participant use and because users appreciate the park in its present state, the county presently cannot justify local tax money for recreational development.

Outdoor Games - The following facilities are located within the City:

Tennis courts	6
All purpose courts	1
Ball fields	7
Tot lot area	1

The total of 53.31 acres of city park land represents largely open field acres for outdoor games. One facility in short supply is ball fields. The city league consists of 16 men's, 12 women's and 16 little league teams. The recent acquisition of twenty acres, formerly belonging to Boston Ranches, Inc. is planned for ball field expansion. Four public schools in Prineville along with the Crook County Fairgrounds also contain open space area for outdoor games. For further detail refer to Parks and Recreation and Open Space Study.

Angling - The inventory of streams (table C-17) of the Central Oregon Open Space Recreation Study indicates that Crooked River is 82 miles long. Thirty-four additional trout streams feed the Crooked River; a total stream mileage of 477.6. Not all of the stream banks are accessible to the public. In fact, the only sections of the Crooked River with public access points are between Prineville and Bowman Dam; the major portion of remaining river flows through private property, as do most of the other streams. However, the National Forest and BLM lands, which comprise about 50 percent of the county, provide public access to streams flowing through such lands.

Four lakes and reservoirs provide active angling opportunity; Prineville Reservoir, Ochoco Reservoir, Walton Lake and Antelope Reservoir offer a total surface acreage of 4,297 for such activity.

Winter Sports - Crook County has no ski lift facilities; however, the Statewide Comprehensive Outdoor Plan lists 100 trail miles available for snowmobile recreation and 100 trail miles available for cross-country snowshoe and ski activity. Actually no designated trails exist because these are low intensity uses in the Ochocos. Forest Service roads and the open timber environment facilitate easy access.

Picnic Areas - The primary picnic areas are city parks (20 tables), BLM recreation area on upper Crooked River (46 tables), Prineville Reservoir State Park (50 tables) and forest service picnic areas (34 tables). Total picnic tables for all campground and day use areas in the county

are 239. The greatest need for picnic areas is in the Prineville vicinity where there is a special need for picnic shelter facilities.

Camping - Two state parks in the county are the most popular campgrounds. Prineville Reservoir State Park has 48 tent sites and 22 trailer sites with the latter including utility hook-ups. The Ochoco Reservoir State Park has 22 camp sites without sewage disposal. Another popular campground is Jasper Point Resort located on Prineville Reservoir. It has 50 trailer sites and 25 tent sites, and is privately operated.

The U.S.F.S. has 19 designated campgrounds in the county; the BLM has ten areas along upper Crooked River below Bowman Dam; the county has jurisdiction over 16 camp areas around Prineville Reservoir, one served by a well and five water faucets.

Prineville Reservoir has the greatest apparent need for developed campgrounds, but only on the three major summer holidays Memorial Day weekend, the 4th of July, and Labor Day weekend. However, research relative to area carrying capacities is deemed necessary prior to additional development.

Rockhounding - A recreational activity unique to most Oregon counties, rockhounding, is widespread in Crook County. Some twenty-one (21) designated areas for digging gemstones are available, most of which are Chamber of Commerce free claims. (See recreation appendix.)

Bike Paths, Scenic Highways and Trails - The City of Prineville has about three (3) miles of designated bike path. It extends from the intersection of Knowledge and Third Streets west along Ochoco Creek to Ochoco Grade School and then north along the Madras Highway for a distance of a quarter (1/4) mile. The Trans America Bikeway crosses 48 miles of Crook County entering along the O'Neil Highway and exiting along Highway 26 to Mitchell. It is currently in the second year of active use.

A total of 132.94 miles of highway in Crook County are designated Oregon Scenic Highways. They are as follows:¹

OR-27	37.92 mi.	US 26	5.73 mi.
OR-126/US 26	36.80 mi.	Paulina Hwy.	52.49 mi.

The Ochoco National Forest Service actively maintains six (6) trails in Crook County totaling 40.7 miles. These trails were constructed in the 1930's by the Y.C.C. boys for fire fighting purposes. Therefore, they were built the shortest distance from point A to point B and have steeper grades than backpacking trails. They do not pass the most scenic areas. About forty-one (41) miles of the proposed east-west Oregon Recreation Trail connecting the Pacific Crest Trail and Desert Trail pass through the Ochoco National Forest. However, a short 1.5 mile trail that would give hikers access to Stein's Pillar is the most immediate priority.²

¹Statewide Comprehensive Outdoor Recreation Plan.

²Pete Harkey, Ochoco National Forest, personal interview, Prineville, Oregon, June 1, 1977.

The greatest need in this category is more bicycle paths in the greater Prineville area as referenced in the Parks and Recreation and Open Space Study and in the Transportation chapter of this document.

Off-Road Vehicle Use - The U.S.F.S. developed an Off-Road Vehicle Use Management Plan for the Ochoco National Forest and Crooked River National Grasslands in January, 1977. The primary restrictions include the following: 1) Prohibit any off-road use of vehicles within the 600 acre Antelope Reservoir recreation area; 2) Prohibit any wheeled motor vehicle in the 10,000 acre Mill Creek Roadless Area except for trail vehicles under 40 inches wide along the eastern boundary trail; 3) Prohibit motor vehicles over 40 inches wide along all other U.S.F.S. designated trails; and 4) Restrict all ORV travel to designated travel routes from three days prior to deer hunting and through the end of elk hunting seasons within the 4,500 acre Marks Creek Burn Area and the 225,000 acre Paulina Ranger District. Fourteen non-designated sites distributed throughout the forest (totaling 2,160 acres) will be closely monitored to ensure that disturbance will not exceed acceptable levels. Guidelines that help the user recognize sensitive situations or conditions were also adopted by the management plan.

The Bureau of Land Management is currently inventorying existing situations and analyzing desirability of various physical features. The BLM plans to complete a management plan for off road vehicle use in Crook County by winter of 1978-79. Until then, they have no authority to legally close or regulate existing ORV sites. The County shall coordinate with this planning activity.

RECREATION POLICIES

1. Energy consequences shall be considered by all recreation plans to the extent that non-motorized types of recreational activities shall be preferred over motorized activities. Facilities directly serving the recreational needs of Prineville shall be built as close to the population center as possible in order to conserve energy of transportation to the site.
2. Planning for recreation facilities and opportunities shall also give priority to meeting the needs of the Prineville metro area and all Crook County citizens, persons of limited mobility, and handicapped individuals.
3. Unique areas and potential recreation sites capable of meeting specific recreational needs shall be protected or acquired. In addition to fee acquisition, easements, cluster developments, preferential assessments, development rights acquisition, subdivision park land dedication, land leases and tax relief shall be considered as ways of protecting or acquiring these areas. See NATURAL/ SCENIC AND HISTORICAL chapters for reference to specific areas in Crook County.
4. The City-County Planning Department shall be responsible for coordinating local, state and federal agency recreation plans.

5. The development of recreation facilities by private enterprise shall be encouraged and governmental recreation plans coordinated with private developments.
6. That section of the Crooked River between the Palisades and the Bowman Memorial Dam should be recognized as a natural reserve area. Other sections of the Crooked River, the North Fork of Crooked River from the head at Big Summit Prairie to the intersection with the South Fork at the L.S. Ranch (47 miles), and the South Fork of Crooked River from the head at G.I. Ranch to the intersection with Beaver Creek (40 miles), should be evaluated for feasibility of natural and scenic designation.
7. No recreational use shall be allowed to exceed the carrying capacity of the air, water and land resources of a recreational area. All recreational uses, including ORV uses specifically shall minimize environmental deterioration.

Insert Map
Recreation : Historical : Natural : Scenic

INDUSTRY

The goal in providing for industrial use in Crook County and the City of Prineville is to provide for the needs of existing industries and to direct future industrial growth to concentrated areas away from residential neighborhoods through zoning and other planning regulation.

Two of the greatest industrial needs in Crook County are a diversified economy and greater employment opportunities. The timber industry employs more than half of the total labor force of the area. Seasonal lay-offs of the work force due to snow in the mountains and limited forest resources cause an unstable economy. The absence of new industrial developments the past 10-20 years has created record high unemployment for a gradually expanding population. Because there are few employment opportunities for young people, many migrate out of the community. Industries (other than timber processing industries) have not developed in Crook County due to a lack of diversified raw materials and isolation from active markets. The community has in the past been reluctant to entice interested business through incentives such as special rail service to markets, low cost financial assistance, or preliminary site development. Current development of recreational facilities at the Crook County Fairgrounds is expected to boost the economy of existing retail outlets and may inadvertently attract new industry to the community. Past delays to expand the city's sewage treatment facilities (in order to satisfy DES and EPA standards) may force a moratorium on all new construction, including industrial development.

HEAVY INDUSTRIAL USE

Utilizes the railroad, highway or airport for distribution of raw materials and/or finished products.

Stores wholesale and retail merchandise transported by rail, highway or air. Includes chemical and petroleum storage and auto wrecking yards.

Processes wood, metal, chemical, agriculture or animal products, including compounding and packaging.

Manufactures building components, machinery, concrete ready mix, or asphalt paving.

Excavates raw material from the earth's surface or its depth.

Generates power and super structures used for transmission of utilities and communications.

Recycles waste products.

LIGHT INDUSTRIAL USE

Is compatible with commercial and residential uses. Low impacts from noise, smell, vehicular traffic and machinery.

INDUSTRIAL SITE

Includes a general area with arbitrary boundaries selected on the basis of the following criteria:

1. Has available undeveloped or under-developed land in the vicinity to allow industrial expansion.
2. Does not infringe upon the expansion or modification of an existing residential, commercial or transportation use that is vital to the community.
3. Is economically feasible to extend public utilities and services to the area or in some other way satisfy requirements for water, sewage and other waste disposal, plus energy service and fire protection.
4. Is economically feasible to develop the site so that its value will be competitive with other industrial sites in the community and neighboring communities.
5. Is accessible to at least one major transportation link, either railroad, airport, state highway or local arterial.
6. Will not create major traffic problems on existing streets or roads resulting from increased employee, customer and service traffic unless it is located near a proposed collector or arterial street.

INDUSTRIAL SITE ALTERNATIVES

Pros and cons of development of the Railroad Industrial Site and five other industrial sites are as follows:

1. Prineville Railroad Industrial Site - This site has a severe physical limitation of unstable, super saturated soil which may cause it to be an expensive site to develop. Other problems with this site are that it lies within the Ochoco Creek flood plain and has no city water or sewer, roads or railroad spurs developed on the site. In spite of these minuses, its location along the railroad and Lamonta Road and its proximity to existing industrial concentration and the Terrace site make it a high priority site for development.

2. Terrace North of Lamonta Road - High Priority - Reasons for: access by railroad, direct access to the Madras Highway via Lamonta Road, adjoins existing industry and there is room for expansion. Reasons against: upwind from the population center and slope may cause erosion problems.
3. Pine Products Vicinity - High Priority - Reasons for: located between the Madras Highway and the railroad, facilitating prime access, adjacent to present industry and industrial zoning and small existing fields not economical to farm. Reasons against: upwind from population center and isolated from city services.
4. Les Schwab Vicinity - Medium Priority - Reasons for: available water and proximity to the sewage lagoon would facilitate sewer expansion, good access to the Madras and Redmond Highways and present industrial uses exist in the area. Reasons against: encroachment upon existing dwellings (most tax lots recording low improvement assessments), and separation from the railroad.
5. American Forest Products Vicinity - Medium Priority - Reasons for: stable soil, connections with existing railway spur, near city water and sewer and is adjacent to existing industry. Reasons against: displacement of agricultural land, encroachment on residential neighborhood and isolated from state highway.
6. Ochoco Lumber Vicinity - Low Priority - Reasons for: access to the end of railroad, near a city water well, down wind from population center, access to Highway 26 and Combs Flat Road, high alkaline content make land undesirable for agriculture use and adjacent to existing industry. Reasons against: encroachment upon residences along Willowdale Drive and resultant increase in truck-train transport through the city core, causing congestion.

Table VIII AREA COMPUTATION OF INDUSTRIAL SITES (Approximations)						
SITE	AREA PRESENTLY ZONED INDUSTRIAL			AREA NOT PRESENTLY ZONED INDUSTRIAL		
	TOTAL ACRES	% UNDVLP	UNDVLP ACRES	TOTAL ACRES	% UNDVLP	UNDVLP ACRES
Ochoco Lumber	80	20	16	40	20	8
American Forest Products				120	80	96
Terrace				140	80	112
Pine Products	344	75	258	340	80	272
Les Schwab				180	33	59
Airport				1000	33	59
Railroad Ind.	54	100	54			
Other	380	30	114			
TOTAL	858		442	1820		606

Table IX AREA AVAILABLE FOR INDUSTRIAL DEVELOPMENT WITHIN URBAN GROWTH BOUNDARY (Approximations)		
SITE	AREA PRESENTLY ZONED INDUSTRIAL (ACRES)	AREAS NOT PRESENTLY ZONED INDUSTRIAL (ACRES)
Ochoco Lumber	16	8
American Forest Products		96
Terrace		112
Les Schwab		59
Railroad Ind.	54	
Other	114	
Total	184	275
GRAND TOTAL		459

INDUSTRIAL PERFORMANCE STANDARDS

Some light industrial uses are compatible with commercial and residential uses. In order for greater flexibility of land use to occur, performance standards may be a tool for evaluating the compatibility of light industry with other uses. Performance standards quantitatively measure impacts of noise, smell, dust traffic congestion and overall appearance of proposed uses.

Recommendations for industrial performance standards for purposes of limiting heavy industrial locations, ensuring high density, ensuring access safety, screening parking and open storage, eliminating nuisances, preserving natural character, preventing erosion and isolating heavy industry are as follows:

1. Industry shall not locate on any lot or adjoining lots within a commercial or residential neighborhood that are greater than 9,000 square feet in area.
2. Industry that generates more than 20 auto-truck trips to and from the premise during the busiest hours of the day shall not locate in a residential neighborhood.
3. Industry located within commercial and residential neighborhoods shall use at least half the lot for parking, service area, landscaping or other open space.
4. Off street parking shall be provided for every employee. The parking layout shall permit cars and/or trucks to turn around or drive through so that all streets may be approached head-on rather than forcing vehicles to back out onto the street.

5. All outdoor parking, storage, loading and service areas shall be screened from view of all arterial streets and highways, plus adjacent commercial and residential lots.
6. There will be no odor, dust, fumes, glare, flashing lights or noise which is perceptible (without instruments) more than 200 feet from any industrial lot boundary located within a commercial or residential area. Major pollutant industries shall locate at industrial sites south or east of the city.
7. Where possible, the site design shall preserve and enhance existing trees greater than 12-inch caliper, water courses, hills and other natural features.
8. The industrial use shall not cause continued erosion of the land nor increase surface drainage from the lot.
9. Industry that exceeds any of the following standards shall locate on a designated heavy industrial site:
 - (a) Occupies one acre of land.
 - (b) Generates thirty (30) truck-trailer or other heavy equipment trips per day, including to and from the site.
 - (c) Emits odor, dust, fumes, glare, flashing lights or noise that is perceptible 500 feet from the property line.

The feasibility of establishment of a dry land port district for the purpose of developing an industrial park should be investigated. Formation of a dry land port district is regulated by Oregon Revised Statutes, but must be approved by the County Court with voter approval preferable. Such a district would be autonomous, separate from city and county governments, and administered by a five member commission. This district would be eligible to levy taxes and to receive low cost loans and grants the same as any municipality.

INDUSTRIAL POLICIES

1. Protect existing industrial development and establish the Airport and Railroad Industrial Sites as a high priority for industrial expansion.
2. Direct future industrial growth to the following designated sites:
 - (a) Terrace across Lamonta Road from Consolidated Pine, west of Buckaroo Acres, including Crooked River Meat Company.
 - (b) Pine Products vicinity between the railway and Madras Highway and from McKay Creek to the railroad trestle.

- (c) Airport vicinity between Houston Lake Road and the Redmond Highway.
 - (d) American Forest Products vicinity, primarily north and east of present mill facilities.
 - (e) Les Schwab vicinity between the Madras Highway and O'Neil Highway and from the Crooked River Bridge to and including the sewer lagoon.
 - (f) Ochoco Lumber vicinity north and east of present mill facilities as is practical.
3. Allow heavy and light industry on these sites, except for the Les Schwab site which shall be limited to light industrial uses only.
 4. Prohibit new residential and commercial development on these sites with the exception of Les Schwab, Ochoco Lumber, Airport and American Forest Products sites which shall allow commercial development in fringe areas.
 5. Facilitate industrial development on designated sites by reducing permit procedure, delaying site improvement requirements and providing public utilities in advance.
 6. Encourage the concept of an industrial park complete with platted streets, railroad spur and lots, and with utility hook-ups for development on at least one designated site by local government, private enterprise or dry land port district.
 7. Preserve buffer zones between industrial sites and residential and commercial neighborhoods. (See Natural/Scenic/Buffer Areas, Chapter VI).
 8. Allow light industrial development outside designated industrial sites if in accordance with strict development standards and compatible with pre-existing uses.
 9. Prohibit non-railroad users from locating adjacent to a railroad right-of-way.
 10. Give preference to industries hiring from the local labor force over those importing large numbers of employees.
 11. Give preference to diversified industry that is non-competitive with existing businesses.
 12. Limit industrial development by available resources and public utilities and service capabilities.
 13. Encourage clean industry having low pollution impact on air, water and land.

Insert Map

Industrial Sites: Prineville Metro Area and Prineville Valley

RURAL SERVICE CENTERS

The communities of Powell Butte, Post and Paulina are shown on the plan as rural service centers in recognition of their primary functions of service to surrounding agricultural areas. It is anticipated that the economic forces which are responsible for their existence today will, with little change, remain the primary cause for their continued existence. At the present time, little basis can be found to anticipate additional population and urban growth of these rural service centers and therefore to warrant the immediate preparation of plans for its accommodation. The principal planning task for these areas is to seek and develop ways to overcome existing problems within these centers in order to provide the best possible environment for their residents. But while plans in detail for these communities may not be warranted at this time, it should be recognized that the relationship of Powell Butte to the urban communities of Bend, Redmond and Prineville has increased its attractiveness as an area of permanent residential development.

Existing problems of the rural service centers largely concern inadequate public facilities and services and incompatible land use arrangements. Their solutions will require a sensitive approach by county government and will not be possible without the organized interest of local residents. Through its continuing planning program, the county should develop plans for these and the other rural service centers which will be in scale with current problems and limitations on economic and physical growth, while retaining flexibility to accommodate additional permanent residential development which may be generated by employment opportunities in the cities of the area.

Development of rural service centers shall be as described in the rural service centers as contained in the Crook County Exception Areas (attached as Appendix "B"). The document is by reference made part of the Comprehensive Plan. (Ordinance No. 45; 3/20/91)

Ordinance No. 45 adopted a number of exception areas in addition to the Rural Service Centers listed above. Because of the voluminous nature of the material, Ordinance No. 45 and subsequent exceptions, including Ordinances No. 73, 78, 82, 106, and 107, are contained in Appendix "B". Ordinance No. 45 describes the following exception areas:

- | | |
|-------------------------------------------|--------------------------------------------------|
| 1. Powell Butte #1 | 13. Lofton/Turner Creek |
| 2. Powell Butte #2 | 14. McKay Development |
| 3. East Powell Butte Rural Service Center | 15. Airport Development Zone |
| 4. Twin Lakes | 16. Northwest Prineville Industrial Zone |
| 5. Rockview III | 17. Post Rural Service Center |
| 6. Grimes Flat/Lamonta | 18. West Powell Butte Rural Service Center |
| 7. O'Neil Highway | 19. Paulina Rural Service Center |
| 8. Westwood Rimrock Area | 20. Ochoco Reservoir Recreation Residential Area |
| 9. McKay Acres | 21. RR (M-2) Zoned Land |
| 10. Ochoco West | 22. Park Reserve |
| 11. Ochoco/Johnson Creek | |
| 12. Marks Creek | |

Subsequent Amendments include:

- **Ordinance No. 59** modifies the area in the exception taken for Ochoco/Johnson Creek by removing Tax Lots 500 and 600 in Township 15 South, Range 16 East, Willamette Meridian, Section 1. Further, it amends some of the language within the exception statement which has been done in Appendix “B”.
- **Ordinance No. 73** adds Crook County fairgrounds parking to the City of Prineville’s Urban Growth Boundary.
- **Ordinance No. 78** adds additional lands to Powell Butte #1.
- **Ordinance No. 82** adds more lands to Powell Butte #1.
- **Ordinance No. 99** takes an exception to the agricultural goal to establish an R-5 Zone to approximately 310 acres of property lying south of the O’Neil Highway.
- **Ordinance No. 106** is a State required analysis of existing Rural Service Centers and provides a Goal 14 analysis of Post, Paulina, and East and West Powell Butte Rural Service Centers.
- **Ordinance No. 107** completes a Goal 14 analysis of the remaining 18 exceptions areas adopted by Ordinance No. 45. The Goal 14 worksheets are simply placed in the appropriate exception area of Ordinance No. 45.

POWELL BUTTE

In 1997 and 1998, the County commissioned a general study of the Powell Butte area in southwestern Crook County. The result of that study was the adoption of a series of amendments to the Comprehensive Plan in Ordinances No. 126, 127, 128, 130, 131, 132, 133, and 134, as individual sections of the Powell Butte area were redesignated from Exclusive Farm Use to other land uses through the exceptions process. These amendments were challenged in the Land Use Board of Appeals by interested parties and the Land Use

Board of Appeals remanded a number of the ordinances back to the County for further work. This resulted in a number of minor amendments, including Ordinance No. 127, Amendment #1; Ordinance No. 131, Amendment #1; Ordinance No. 132, Amendment No. 1; Ordinance No. 133, Amendment #1, which resulted in the outright appeal of Ordinances No. 131, 133, and 134, and some modified policies governing the Powell Butte area which are reproduced below.

The following policies are adopted as a part of the Crook County Comprehensive Plan. These policies supplement and amend the Powell Butte Study to the extent that the Study is inconsistent with these policies and the Agreement. To the extent that there is any conflict between the Study and these policies or the Agreement, the Study shall automatically be modified to the extent necessary to conform the Study with these policies and the Agreement.

- 1. The Comprehensive Plan as amended provides that rural residential and nonresource development shall occur south of Highway 126 and generally north of Powell Buttes, and west of Stillman Road and east of Study Area 2-2.**

The specific areas to be reclassified and rezoned are those areas designated as Areas 1-2, 2-1 (as amended), 2-2 (as amended), 2-3 (as amended), and 2-4 (as amended). These areas are specifically described in Ordinances 126 (Area 2-3); 127 (Area 2-4); 128 (Area 2-1); 130 (Area 1-2); and 132 (Area 2-2). The land contained within these areas is hereinafter referred to as “the Area to be rezoned.”

Except of uses permitted outright and by conditional use in the EFU-3 Zone, other lands shall be maintained as exclusive farm uses consistent with Policy 2 below. Rezoning of land other than “the Area to be rezoned” are inconsistent with the Comprehensive Plan. In this regard, Ordinances 131 (Area 1-1) and Ordinance 133 (Area 3-1) are repealed by separate ordinances because the rezoning of that land is inconsistent with this provision of the Comprehensive Plan. Ordinance No. 134 which pertains to Area 3-2 is being repealed as that area is being reserved for the City of Prineville’s future industrial growth.

- 2. The County will not initiate additional exceptions or nonresource designations within the Powell Butte Study Area until the next periodic review. The foregoing does not create an expectation that rezonings will necessarily occur at the next periodic plan review and does not create an obligation on the part of the County to rezone any EFU land at any time. The County may, however, consider a proposal(s) to expand the urban growth boundary of the City of Prineville in conjunction with an annexation into Area 3-2 for the purpose of providing an adequate supply of industrial land prior to the next periodic review.**

3. **The land north of Highway 126 shall be retained as exclusive farm use as that land is composed of large parcels and contains less rural residential development than the area south of the highway. For the purpose of this policy, all of Area 1-2 is deemed to be located south of the Highway 126, notwithstanding that a small portion of Area 1-2 is physically located to the north of that Highway.**
4. **The County shall adopt a new rural residential zoning district for Area 2-3 which imposes a minimum lot size and density consistent with Section Two of this Ordinance.**
5. **The zoning ordinance for Area 2-3 shall contain a 250-foot setback requirement from adjacent exclusive farm use zoned land.**

This setback shall not apply when the adjacent land is owned by a governmental entity, e.g. the Bureau of Land Management, or is adjacent to land already approved for non-farm use.

In those cases, the minimum setback shall be the setback already established for dwellings in an EFU zone or if no such setback has been established, then the setback shall be and hereby is established as one hundred (100) feet.

The 250 foot setback shall be adopted simultaneously with adopting the new zoning ordinance. If the imposition of this setback makes land undevelopable, then Crook County shall require the maximum achievable setback.

The County shall investigate declaring an ordinance violation to be a “nuisance” thereby allowing a private party to bring suit enforcing the county’s ordinance provisions.

6. **The County shall require, as a condition of development approval, that all new rural residential development in the Powell Butte area pay system development charges (SDC’s) necessitated by Powell Butte rural residential development. The County currently funds road improvements from the earnings it receives from invested timber receipts. Prior to using property tax receipts for road improvements, the County shall adopt SDC’s sufficient to cover one hundred percent (100%) of the applicable road capital improvements required to support new rural residential development in Powell Butte.**

In this regard, the County shall promptly adopt a system development charge ordinance to assess a road system development charge on new development. The amount of this system development charge shall be sufficient to recover a significant portion of the capital costs of road improvements required as a result of rural residential development in Powell

Butte. Nothing in this ordinance shall preclude the County from applying system development charges to other classes of property or in other areas of Crook County. In the event that a developer desires to proceed with development prior to the adoption of the system development charge ordinance, he or she shall pay the sum of \$2,000 per single family dwelling at the time of building permit issuance. In the event that the adopted system development charge is less than \$2,000, the difference shall be refunded to the developer without interest. In the event that the adopted system development charge exceeds \$2,000, the developer shall be obligated to pay the difference.

- 7. The County shall comply with the transportation planning rule when it adopts the zoning ordinances.**
- 8. The zoning ordinances shall require developers to execute covenants of nonremonstrance in respect to all farm operations in favor of adjacent EFU land. These covenants shall be in the form of equitable servitudes and shall be binding on all heirs, devisees, legatees, vendees, and successors in interest of the developers. The County shall require such covenants to be executed and recorded at the time the building permit is issued.**
- 9. The County will develop its zoning and land development ordinances utilizing the Gannet Study (“Groundwater Availability In The Powell Buttes Area, Central Oregon” Groundwater Report No. 32) recommendations on accessibility of groundwater in the Powell Butte Areas, and will require access to the regional water supply as a condition of development, or use of water from a district or public utility. Private exempt wells in existence prior to March 1, 2000 shall be exempt from the requirements contained in the zoning and land development ordinances pertaining to wells.**

DESTINATION RESORT

The following material, Exhibits A and B were added by Ordinance No. 52 on May 22, 2002. Ordinance No. 53, also adopted on May 22, 2002, adopted four inventory maps, along with a composite map and the Crook County Comprehensive Plan Destination Resort Map.

EXHIBIT A

Destination Resort. A self contained development providing visitor-oriented accommodations and developed recreational facilities in a setting with high natural amenities. To qualify as a Destination Resort under Goal 8, a proposed development must meet the following standards:

1. The resort is located on a site of 160 or more acres.
2. At least 50 percent of the site is dedicated to permanent open space, excluding yards, streets and parking areas.
3. At least seven million dollars (\$7,000,000) (in 1993 dollars) is spent on improvements for on-site developed recreational facilities and visitor-oriented accommodations, exclusive of costs for land, sewer and water facilities, and roads. Not less than one-third of this amount shall be spent on developed recreational facilities.
4. Visitor oriented accommodations are provided, including meeting rooms, restaurants with seating for 100 persons, and 150 separate rentable units for overnight lodgings. Accommodations available for residential use will not exceed two such units for each unit of overnight lodging. Rentable units may be phased in with at least 75 units of overnight lodging, not including any individually owned homes, lots, or units, constructed or guaranteed through surety bonding or equivalent financial assurances prior to the closure of sale of individual lots or units. The remainder of the overnight lodging units shall be provided as individually owned lots or units subject to deed restrictions that limit their use to overnight lodging units. The deed restrictions may be rescinded when the resort has constructed the required 150 separate rentable units for overnight lodging. The number of units approved for residential sale shall not be more than two units for each unit of permanent overnight lodging provided under the phased approach. The development approval

shall provide for the construction of other requested overnight lodging units within five years of the initial lot sales.

5. Commercial uses limited to those types and levels necessary to meet the needs of visitors to the development. Industrial uses are not permitted.

To qualify as a Small Destination Resort under Goal 8, a proposed development must be sited on land that is not defined as agricultural or forest land under any statewide planning goal and meet the following standards:

1. The resort shall be located on a site of 20 acres or more.
2. At least \$2 million (in 1993 dollars) shall be spent on improvements for on-site developed recreational facilities and visitor-oriented accommodations exclusive of costs for land, sewer and water facilities and roads. Not less than one-third of this amount shall be spent on developed recreational facilities.
3. At least 25 units, but not more than 75 units, of overnight lodging shall be provided.
4. Restaurant and meeting room with at least one seat for each unit of overnight lodging shall be provided.
5. Residential uses shall be limited to those necessary for the staff and management of the resort.
6. The primary purpose of the resort shall be to provide lodging and other services oriented to a recreational resource which can only reasonably be enjoyed in a rural area. Such recreational resources include, but are not limited to, a hot spring, a ski slope or a fishing stream.
7. The resort shall be constructed and located so that it is not designed to attract highway traffic. Resorts shall not use any manner of outdoor advertising signing except:
 - a. Tourist oriented directional signs as provided in ORS 377.715 to 377.830; and
 - b. On-site identification and directional signs.

Developed Recreation Facilities. With respect to destination resorts, Developed Recreation Facilities means improvements constructed for the purpose of recreation. These include, but are not limited to, golf courses, tennis courts, swimming pools, marinas, equestrian trails and facilities, ski runs, and bicycle paths.

High Value Crop Area. With respect to destination resorts, High Value Crop Area means an area in which there is a concentration of commercial farms capable of producing crops or products with a minimum gross value of \$1,000 per acre per year. These crops and products include field crops, small fruits, berries, tree fruits, nuts or vegetables, dairying, livestock feedlots or Christmas trees as these terms are used in the 1983 County and State Agricultural Estimates prepared by the Oregon State University Extension Service. The “high value crop area” designation is used for the purpose of minimizing conflicting uses in resort siting and does not revise the requirements of an agricultural land goal or administrative rules interpreting the goal.

Open space. With respect to destination resorts, Open Space means any land that is retained in a substantially natural condition or is improved for recreational uses such as golf courses, athletic fields, hiking or nature trails or equestrian or bicycle paths or is specifically required to be protected by a conservation easement. Open spaces may include ponds, lands protected as important natural features, lands preserved for farm or forest use and lands used as buffers. Open space does not include residential lots or yards, streets or parking areas. Open Space may include farm lands where farming or ranching activities would be consistent with pre-existing open space uses.

Overnight Lodging. With respect to destination resorts, Overnight Lodging means permanent, separately rentable accommodations that are not available for residential use. Overnight lodgings include hotel or motel rooms, cabins and timeshare units. Individually-owned units may be considered overnight lodgings if they are available for overnight rental use by the general public for at least 45 weeks per calendar year through a central reservation and check-in service. Tent sites, recreational vehicle parks, mobile homes, dormitory rooms and similar accommodations do not qualify as overnight lodgings for the purpose of this definition.

Self Contained Development. With respect to destination resorts, means community sewer, water and recreational facilities provided on site and limited to meet the needs of the resort or provided by existing public sewer or water service as long as all costs related to service extension and any capacity increase are borne by the development. A "self contained development" shall have developed recreational facilities provided on site.

Tract. With respect to destination resorts, means a lot or parcel or more than one contiguous lot or parcel in a single ownership. A tract may include property that is not included in the proposed site for a destination resort if the property to be excluded is on the boundary of the tract and constitutes less than 30 percent of the total tract.

Visitor Oriented Accommodations. With respect to destination resorts, means overnight lodging, restaurants and meeting facilities designed to provide for the needs of visitors rather than year-round residents.

EXHIBIT B

Destination Resorts

I. Introduction

The numerous beneficial impacts of destination resorts are recognized by Statewide Planning Goal 8 and ORS 197.435 to 197.467. The development of destination resorts can serve as an important element to diversify the economic base of the County. Tourism is currently the second leading industry in the State of Oregon, trailing only wood products in total employment and payroll contribution. (See Hobson Ferrarini and Associates Report: Economic Viability and Economic Impacts of Huntington Ranch, A Proposed Destination Resort in Deschutes County Oregon, September 2000, pp. 10-19). Destination resorts have proven to be the most dynamic growth component of the local and national tourism industry in recent years. Destination resorts have positive impacts on local economies in the form of increased payroll contributions (the portion of expenditures that are paid for employment purposes in the form of a salary or wage) and short and long term private sector employment opportunities. The net fiscal impact of destination resorts on local jurisdictions is also positive due to the high assessed valuation of resort properties relative to the intensity of land use and the disproportionately low number of students per residential dwelling unit. Short-term public expenditures relating to infrastructure improvements are generally recovered from the developer and from occupants and visitors of the resort. The disproportionate tax burden assumed by resorts can either lower resident tax rates or increase revenues to local jurisdictions.

Recognizing the importance of tourism to the economy of the State of Oregon, the state legislature and LCDC have taken steps to make it easier to establish destination resorts on rural lands in the state. Statewide Planning Goal 8, the recreation goal, was amended in 1984, 1987, and 1993 to create a process for locating destination resorts on rural lands without taking an exception to Goals 3, 4, 11 and 14, which govern development on rural resource lands. This was followed by legislation incorporating Goal 8 into Oregon's land use statutes (ORS 197.435 to 197.467). By these actions, the State of Oregon recognized destination resorts as a legitimate rural land use. The Destination Resort Handbook published by LCDC emphasizes that Oregon supports siting new destination resorts because the resorts help expand and diversify the State's economy.

Any county wishing to implement Goal 8 must adopt a map showing which lands in the county are available for destination resort development. The purpose of the map is to provide greater certainty concerning destination resort siting than is available under the exceptions process. To protect forest and farm resources, Goal 8 prescribes that certain classes of lands are off limits to destination resort development. The final map must reflect exclusion of such areas. A county may also exclude additional areas not otherwise excluded by Goal 8. A detailed

description of the mapping process engaged in by the County is set forth below. Once adopted, the map may not be amended except in connection with periodic review.

Goal 8 and the state statute also recognize that destination resorts can have negative impacts on neighborhoods and the rural quality of life. These impacts can be substantially mitigated, however. The County recognizes the importance of balancing protection mechanisms for resource lands and rural land uses with the economic benefits destination resorts provide. The County further recognizes that this balance can be struck by the manner in which areas are designated as being available for destination resort development and by developing balanced siting criteria.

II. Destination Resort Mapping Process

Goal 8 and ORS 197.455 set forth the destination resort mapping standards as follows. The Crook County Destination Resort Map was prepared consistent with these standards, as detailed below. The Destination Resort Map was prepared by W&H Pacific, a consulting company with extensive experience in destination resort mapping. W&H Pacific acquired electronic copies of United States Geological Service (USGS) quadrangle maps in an electronic format to serve as the base drawing for the Crook County Destination Resort Map. The USGS quadrangle maps provide a sectional grid, including sections, townships, and ranges, which constitute the primary framework for the Destination Resort Map. The USGS maps also provide the location of major highways, streams, communities, and other topographical information to orient and check subsequent mapping efforts.

Although not required to do so by Goal 8, Crook County elected to exclude publicly-owned lands from eligibility for destination resort siting. A significant portion of Crook County is federally-owned land managed by the Bureau of Land Management (BLM), the United States Forest Service (USFS), and the Bureau of Reclamation (USBR). Additional public lands are owned by the State of Oregon and managed by various state agencies. W&H Pacific digitized public land maps for these State and Federal agencies to establish the location for all publicly-owned lands in Crook County. The location of public lands was transferred to the sectional base map to create the first layer of exclusions from destination resort siting.

W&H Pacific then mapped the following exclusions pursuant to state law, submitted each exclusion layer to various state and federal agencies for review, and revised the maps per the state and federal agency comments. To provide the required level of detail, W&H Pacific created a separate map for each layer of exclusions (i.e. High Value Crop Areas, Big Game Habitat Areas, etc.). W&H Pacific then produced one map showing all exclusions, and a final “mirror-image” map identifying all land eligible for resort siting (the Destination Resort Map).

Pursuant to Goal 8, the Crook County Destination Resort Map shall be the sole basis for determining whether tracts of land are eligible for destination resort siting.

A destination resort shall be sited on lands mapped as eligible for destination resort siting by the affected county. A map adopted by a county shall not allow destination resorts approved pursuant to ORS 197.435 to 197.467 to be sited in any of the following areas:

(a) Within 24 air miles of an urban growth boundary with an existing population of 100,000 or more unless residential uses are limited to those necessary for the staff and management of the resort.

By reviewing the most recent population data, the county determined that the largest city within Crook County is Prineville, with a population of approximately 6,000. There are no cities with an existing population of 100,000 within Crook County or within 24 air miles of the boundaries of Crook County.

(b)(A) On a site with 50 or more contiguous acres of unique or prime farmland identified and mapped by the United States Natural Resources Conservation Service, or its successor agency.

To locate tracts with 50 or more contiguous acres of unique or prime farm land identified and mapped by the Natural Resource Conservation Service (“NRCS”), W&H Pacific obtained the most current soil survey map from NRCS. The NRCS also provided a list of the relevant soil profiles identified by its soil classification system as unique and prime soils, when irrigated. Because NRCS mapping in Crook County is limited to approximately the westerly one-third of the County, Crook County officials elected to exclude all areas of Crook County not mapped by the NRCS. W&H Pacific then digitized and mapped all potentially prime and unique soils within the areas surveyed by NRCS.

To determine which lands within the potentially prime and unique overlay actually qualified as prime or unique based on their irrigated status, W&H Pacific obtained maps of currently irrigated soils from the Central Oregon Irrigation District and the Ochoco Irrigation District. The irrigated lands from the two districts were mapped and overlaid with the NRCS prime and unique soils maps, all aligned on the USGS sectional grid. The areas that were currently irrigated and within the potentially prime and unique soil overlay were then identified as prime and unique soils. Unirrigated land within the potentially prime and unique soil overlay were identified as eligible for destination resort siting if not otherwise excluded by a Goal 8 parameter.

Because Goal 8 does not require the exclusion of all prime or unique soils but instead requires only the exclusion of tracts which have 50 or more contiguous acres of prime or unique land, W&H then completed the final phase of the unique and prime soil mapping process by investigating ownership patterns within the prime

and unique soil areas. To locate parcels and tracts with 50 or more contiguous acres of prime or unique soil, W&H Pacific examined all parcels with prime or unique soils on an ownership by ownership basis. W&H Pacific also obtained Central Oregon Irrigation District ownership records for all lands in the vicinity of prime or unique soils that were not otherwise excluded by the High Value Crop Area criterion, discussed below. W&H Pacific then determined whether single parcels or contiguous parcels in the same ownership contained 50 or more contiguous acres of prime or unique soils. Generally, all Ochoco Irrigation District lands were otherwise excluded by the High Value Crop Area analysis, leaving the Central Oregon Irrigation District lands in the vicinity of Powell Butte to be analyzed for prime and unique soils.

Based on this methodology, the County excluded parcels or tracts with 50 or more contiguous acres of irrigated land within the NRCS prime or unique soil overlay from destination resort mapping.

(B) On a site within three miles of a high value crop area unless the resort complies with the requirements of ORS 197.445 (6) in which case the resort shall not be closer to a high value crop area than one-half mile for each 25 units of overnight lodging or fraction thereof.

Goal 8 and the Destination Resort Statute define High Value Crop Area as follows:

An area in which there is a concentration of commercial farms capable of producing crops or products with a minimum gross value of \$1,000 per acre per year. These crops and products include field crops, small fruits, berries, tree fruits, nuts or vegetables, dairying, livestock feedlots or Christmas trees as these terms are used in the 1983 County and State Agricultural Estimates prepared by the Oregon State University Extension Service.

The DLCD Destination Resort Handbook further explains that this standard does not include land that routinely fails to produce High Value Crops, but has an exceptionally productive year. However, the standard does include areas that consistently produce High Value Crops but fails to do so due to a bad year. The Handbook emphasizes that individual or isolated operations are not a “concentration of commercial” farms as that term is used in the definition. The Handbook further clarifies that a “concentration” consists of several farms producing High Value Crops in relative proximity to one another. High Value Crop Areas include lands not used for High Value Crops if such lands are located between and among the High Value Crop lands.

To locate land within three miles of a High Value Crop Area, Crook County relied upon research by Mr. Stanley D. Miles, a consultant and Agricultural Economist Emeritus at Oregon State University. To summarize his findings

regarding High Value Crop Areas in Crook County, Mr. Miles prepared a document entitled “Assessment of High Value Agriculture Crops in Crook County, Oregon” in December 2001 and a supplemental report entitled “Supplemental Assessment of High Value Crop Areas in Crook County, Oregon,” dated May 2002 (collectively referenced as the “Miles Report”). The findings and conclusions in the Miles Report are based upon data from the Census of Agriculture, Agricultural Statistics of the Economic Information Office at Oregon State University, the USDA Soils book for the agricultural area of Crook County (Prineville Area), and consultation with agents from the Crook and Jefferson County OSU Extension Offices.

To locate High Value Crop Areas, Mr. Miles first located concentrations of commercial farms by analyzing historical production of agricultural products in Crook County from agricultural economics reports provided by the Oregon State University Extension Offices in Crook and Jefferson Counties. In addition, Mr. Miles also identified the type and location of High Value Crops currently or periodically under production. Finally, Mr. Miles identified additional areas with a concentration of commercial farms that were located on soils that could potentially accommodate High Value Crops.

High Value Crops identified in Crook County include roughstock blue grass, vegetable and flour seed, garlic, and other field crops. Mint is potentially a High Value Crop, but the data in the Miles Report illustrates that mint has met or exceeded the \$1,000 per acre per year minimum threshold during only one of the last five years. Furthermore, not only has the gross value of mint failed to meet the minimum standard for High Value Crops under Goal 8, the acreage in production has also decreased significantly, from 6,900 in 1997 to 1,350 in 2001. Thus, the County Court found that mint is not a High Value Crop in Crook County under Goal 8.

The Miles Report illustrates that the concentrations of commercial farms growing High Value Crops in Crook County are located north and northwest of Prineville and in the northwest corner of Crook County. The Miles Report did not identify a concentration of High Value Crops in the Powell Butte Area (generally defined as Range 14 East, Townships 16 South and 15 South). Following production of the initial December, 2001 report, Mr. Miles conducted additional research on the Powell Butte Area and prepared the supplemental May 2002 report to respond to comments regarding presence of High Value Crops in the Powell Butte Area.

To explain why the Powell Butte Area is not a High Value Crop Area, the Miles Report explains that, under Goal 8 and the Destination Resort Handbook, the definition of “High Value Crop Area” emphasizes the productivity of commercial farms and does not focus solely on the potential productivity of a farm based upon soil type alone. Rather, the definition takes into account all factors relevant to the *consistent* production of crops with a minimum gross value of \$1,000 per acre per year. The Miles Report shows that the unique factors such as the high elevation,

high risk of frost, short growing season, and relatively unproductive soil profiles within the Powell Butte Area limit farmers' ability to cover the costs of production and therefore render the area unsuitable for consistent High Value Crop production. Therefore, the Powell Butte Area does not support a concentration of commercial farms that are capable of producing High Value Crops on a regular or routine annual basis due to climate and topography. Because the High Value Crop Area standard "does not include land that routinely doesn't produce high value crops, but has an exceptionally productive year," the Powell Butte Area is not a High Value Crop Area.

Based upon the High Value Crop Areas identified in the Miles Report, W&H Pacific digitized the boundary of the High Value Crop Areas in Crook County and then imposed an additional three-mile buffer around the perimeter of those lands, as required by the State Destination Resort Handbook. The High Value Crop Areas and the three mile buffer were then transferred to the sectional base map, creating an additional layer of exclusions. Pursuant to this methodology, all land within the High Value Crop core and buffer areas is excluded from destination resort eligibility.

Because Jefferson, Wheeler, Grant, and Harney Counties have not identified High Value Crop Areas through the destination resort siting process, Crook County chose to exclude all land within three miles of the Crook County borders adjacent to these counties. Because Deschutes County analyzed High Value Crop Areas through its destination resort mapping process, the County relied upon Deschutes County's data to determine if there are any High Value Crop Areas in Deschutes County within three miles of the Crook County border. The Deschutes County data indicates that there are no High Value Crop Areas within three miles of the Crook County border (Deschutes County Ordinance 92-002, incorporated herein by this reference). Therefore, parcels within three miles of the Crook-Deschutes border were identified as eligible for resort mapping if not otherwise excluded by a Goal 8 parameter.

(c) On predominantly Cubic Foot Site Class 1 or 2 forestlands as determined by the State Forestry Department, which are not subject to an approved goal exception.

As stated in the Destination Resort Handbook, cubic foot site class 1 and 2 lands are limited to western Oregon. This factor does not limit destination resort siting in counties in central and eastern Oregon. Generally, the western boundaries of Wasco, Jefferson, Deschutes and Klamath Counties form the boundary between western and eastern Oregon. Because Crook County is located in eastern Oregon, this factor did not disqualify any property within the county from destination resort mapping.

(d) In the Columbia River Gorge National Scenic Area as defined by the Columbia River Gorge National Scenic Act, P.L. 99-663.

The National Scenic Area does not extend into Crook County. Therefore, this factor did not disqualify any property within the county from destination resort mapping.

(e) In an especially sensitive big game habitat area as determined by the State Department of Fish and Wildlife in July 1984 or as designated in an acknowledged comprehensive plan.

To locate especially sensitive big game habitat mapped by the Oregon Department of Fish and Wildlife (ODFW) in 1984 and refined by Crook County, W&H Pacific reviewed the Crook County big game habitat maps and established the boundaries of habitat areas on the sectional base map. The ODFW and Crook County big game habitat areas include the Elk Winter Range, Antelope Winter Range, Deer Range, and Deer Winter Range. W&H Pacific identified all land within the big game overlays as ineligible for destination resort mapping. As illustrated by the attached maps, these overlays exclude large portions of central and eastern Crook County.

III. Destination Resort Goals and Policies

1. Goals

To provide for development of destination resorts in the County consistent with Statewide Planning Goal 8 in a manner that will be compatible with farm and forest uses, existing rural development, and in a manner that will maintain important natural features, such as habitat of threatened or endangered species, streams, rivers and significant wetlands.

2. Policies:

Mapping for Destination Resort siting

A. To assure that resort development does not conflict with the objectives of other Statewide Planning Goals, destination resorts shall be sited only in areas mapped as eligible for destination resort siting on the Crook County Destination Resort Map. Pursuant to Goal 8, destination resorts shall not be sited in Crook County in the following areas:

(1) Within 24 air miles of an urban growth boundary with an existing population of 100,000 or more unless residential uses are limited to those necessary for the staff and management of the resort;

- (2) On a tract with 50 or more contiguous acres of unique or prime farm land identified and mapped by the Natural Resource Conservation Service or within three miles of farm land within a High Value Crop Area;**
 - (3) On predominantly Cubic Foot Site Class 1 or 2 forest lands which are not subject to an approved Goal exception;**
 - (4) In the Columbia River Gorge Scenic Area;**
 - (5) In an especially sensitive big game habitat area, as generally mapped by the Oregon Department of Fish and Wildlife in July 1984 and as further refined through development of the Crook County Big Game Habitat map.**
- B. Federal lands not otherwise excluded under these policies shall not be mapped as eligible for destination resort siting. Federal land not otherwise excluded that becomes privately owned through land exchanges or other federal disposition can be considered for destination resort siting consistent with these policies and mapped as available for destination resort development when the destination resort map is amended during periodic review.**
- C. The County shall adopt a map showing where destination resorts can be located in the County. Such map shall become part of the Comprehensive Plan and Zoning Ordinance. The Destination Resort Map shall be incorporated into the Zoning Map as a Destination Resort Overlay (DRO).**

Ordinance Provisions

- A. The County shall ensure that destination resorts are compatible with the site and adjacent land uses, particularly farming and forestry operations, through enactment of land use regulations that, at a minimum, provide for the following:**
- (1) Maintenance of important natural features, including habitat of threatened or endangered species, streams, rivers, and significant wetlands; maintenance of riparian vegetation within 100 feet of streams, rivers and significant wetlands. Regulations may allow for alterations to important natural features, including placement of structures, provided that the overall values of the feature are maintained;**

- (2) Location and design of improvements and activities in a manner that will avoid or minimize adverse effects of the resort on uses on surrounding lands, particularly effects on intensive farming operations in the area. A destination resort should not cause a significant change in farm and forestry practices on surrounding lands or significantly increase the cost of accepted farm or forest practices;**
- (3) Preservation of County-designated significant Goal 5 resources located on the tract used for the destination resort through avoidance, open space designation, or conservation easements recorded with the property records for the tract.**
- (4) Preservation of farmland through the prohibition of destination resort development on “High Value Farmland.” High Value Farmland is defined by OAR 660-033-0020(8)(a) as “land in a tract composed predominantly of soils that are: (A) Irrigated and classified prime, unique, Class I or II; or (B) Not irrigated and classified prime, unique, Class I or II.” The destination resort siting ordinance shall require applicants to demonstrate that tracts proposed for resort siting are not composed predominantly of prime, unique, Class I, or Class II soils. A tract is composed predominantly of such soils if more than 50% of the acreage within the tract is classified as prime, unique, Class I, or Class II.**

B. Minimum measures to assure that design and placement of improvements and activities will avoid or minimize the adverse effects noted in Policy A, above, shall include:

- (1) The establishment and maintenance of buffers between the resort and adjacent land uses, including open space, natural vegetation, and where appropriate, fences, berms, landscaped areas, and other similar types of buffers.**
- (2) Setbacks of structures and other improvements from adjacent land uses.**

C. The County should adopt additional land use restrictions to minimize the adverse environmental effects of destination resort development, particularly in areas subject to natural hazards. The County ordinance should prohibit or discourage alterations and structures in the 100 year flood plain and on slopes exceeding 25 percent, unless the applicant submits a geotechnical report that demonstrates adequate soil stability and implements mitigation measures designed to minimize adverse environmental effects. Alterations and structures

permitted in these areas should be adequately protected from geologic hazards or of minimal value and design to minimize adverse environmental effects. Uses and alterations which are appropriate for these areas include:

- (1) Minor drainage improvements which do not significantly impact important natural features of the site;
- (2) Roads, bridges, and utilities where there are no feasible alternative locations on the site; and
- (3) Outdoor recreational facilities including golf courses, bike paths, trails, boardwalks, picnic tables, temporary open-sided shelters, boating facilities, ski lifts, and runs.

D. Uses in destination resorts shall be limited to visitor-oriented accommodations, overnight lodgings, developed recreational facilities, commercial uses limited to types and levels necessary to meet the needs of visitors to the resort, and uses consistent with preservation and maintenance of open space. Accessory uses may also be permitted.

E. The zoning ordinance shall include measures that assure that developed recreational facilities, visitor oriented accommodations, and key facilities intended to serve the entire development are physically provided or are guaranteed proportional to the level of development through surety bonding or substantially equivalent financial assurances prior to closure of sale of individual lots or units. In phased developments, developed recreational facilities and other key facilities intended to serve a particular phase should be guaranteed through surety bonding if not constructed prior to sales in that phase.

IV. Transportation

ALTERNATE TRANSPORTATION MODES

RAILROAD

The City of Prineville Railroad provides a vital support in the form of revenues to the operations of the local government, as well as, the transport for the timber products industry. With Prineville's connection to major north-south and east-west lines, customers can ship goods to almost anywhere in the United States at rates comparable with other Central Oregon communities. Although commercial passenger service is remote and liability and insurance is too costly to utilize the railroad for social and cultural events, there seem to be no real limitations on the railroad's potential for growth.

The following are potential and existing problems associated with the Prineville Railroad:

1. The grade level crossing at 10th and N. Main Streets could become a hazard with increased auto and rail activity.
2. Morning commuters are delayed as much as 15 minutes at the Lamonta Road grade crossing due to close proximity of the railroad car weighing facility. Increased industrial activity would prolong delays.
3. Summer can create a visibility hazard for motorists (particularly those who are not familiar with Prineville) at the Seventh Street and Third Street crossings.

It shall be the objective of the City of Prineville to maintain Prineville City Railroad's existing status and potential for growth.

RAILROAD POLICIES

1. To insure input from the Prineville Railroad upon plans for road construction adjacent to, or affecting, the railroad tracks.
2. To provide appropriate measures (i.e. signals, gates, grade separation) as part of a long-range capital improvement program for all crossings.
3. To relocate railroad car weighing scale facilities when conditions create longer delays of automobile traffic on Lamonta Road than the current maximum delays.
4. To present the value of the railroad and its transport capabilities to industries evaluating Prineville's location.

5. To insure safe “sight distances” upon rebuilding of the Madras Highway grade crossing.
6. To be prepared for increased demand for all rail transport of oil, agricultural products, merchandise and passengers.

TAXI AND BUS

Users of Prineville’s alternative modes of transportation are the “transportation disadvantaged”. These persons consist of the elderly population, the physically or mentally handicapped and the economically disadvantaged.

Prineville’s cab service is radio dispatched. Main destinations are the city center, and the area east of Combs Flat Road. The busiest times for the service are Friday and Saturday nights. Prineville is served by two (2) bus lines, Hammon Stage Lines with service to Portland, Albany and Eugene, and Pacific Trailways serving Central Oregon and Boise, Idaho via John Day. Ridership is low consisting mainly of the young and elderly. The major source of income is freight. The bus facility in Prineville has no maintenance facilities and owns no adjacent properties for expansion.

The Soroptomists Club and Neat Repeat Store sponsor the Senior Citizen Mini Bus. The bus operates six (6) days a week (and Sundays on special occasions) by means of volunteer drivers and a two-way radio. Destinations for the increasing number of riders are oriented towards health services and shopping.

Needs are recognized for improved education about the service among the transportation disadvantaged, a wheel chair lift, more wheel chair ramps (curb cuts), designated parking spaces of wider widths for disabled persons and possibly a second bus. It shall be the objective of the City of Prineville to recognize and accommodate the needs of the “transportation disadvantaged”, and to recognize the importance of conserving energy.

TAXI AND BUS POLICIES

1. To investigate the possibility of a shuttle bus and staggered shifts with Prineville’s major employers.
2. To place curb cuts on all corners at street intersections or where pedestrian paths meet corners.
3. To provide extra wide parking spaces in parking lots and near destination entrances to meet the needs of the handicapped.
4. To encourage private efforts to supply forms of inter and intra city transit to the commuter and the transportation disadvantaged.

(NOTE TSP)

BICYCLE AND PEDESTRIAN

A lack of marked routes and a gridiron pattern prevent any clear-cut bicycle and pedestrian routes. Sidewalks are more extensive, and along with alleys, more intensively used toward the center of town and near schools. They become sporadic and nonexistent away from the core area. Pedestrian crossings along major streets, particularly near schools, and activity centers, present hazards where there are no stoplights. Prineville's bicycle way serves several activity centers, among which are the public parks, schools and central Prineville. The path is aesthetically pleasing and is crossed by only five streets. However, it fails to provide direct access to the commercial and industrial activities in north Prineville, and the Fairgrounds complex in south Prineville. The majority of Prineville's commercial and public activity is south of Ochoco Creek, and because of the bike path's location on the creeks north side, it is impossible for those pedestrians and bicyclists originating south of Third Street to avoid mixing with motorized vehicles.

It shall be the objective of the City of Prineville to encourage pedestrian and bicycle movement as a safe, feasible alternative to the automobile for the metro area.

BICYCLE AND PEDESTRIAN POLICIES

1. To insure routes are safe and convenient.
2. To avoid conflicts (combining intersections) among differing transportation modes.
3. To require that all proposed subdivisions consider bicycle and pedestrian paths, integrated with the Metro Area bicycle and pedestrian path network, within the plat design, and to encourage these paths outside of the street right-of-ways preferably along preserved open spaces.
4. To insure that bicycle and pedestrian paths, not along street right-of-ways are well lighted and provide visual surveillance from the street.
5. To preserve space along existing and proposed principal and minor arterial and demand at least one combined bicycle and pedestrian path. Wherever possible, space shall be preserved along the right-of-way for a bicycle path on one side and a pedestrian path on the other. Both shall be separate from the pavement edge.
6. To require all proposed activity centers generating large amounts of traffic to provide safe and convenient off-street bicycle parking space and routes in their design.
7. To insure neighborhoods and activity centers, including public loading and pickup areas, are served by pedestrian and bicycle routes.

8. To provide curb cuts at all corners, intersections, or locations where bicycle and pedestrian routes and paths intersect with streets.
9. To provide for paving of pedestrian and bicycle ways as deemed necessary and feasible with applicable state regulations.
10. To preserve existing irrigation ditch right-of-ways for pedestrian and bicycle movement upon development of adjacent properties.
11. To encourage that OID donate irrigation ditch right-of-ways to development of the construction of bicycle paths of adjacent properties when feasible.
12. To consider bicycle and pedestrian paths among the improvements for properties to be annexed to the city.
13. To improve signs and markings on existing bicycle paths.
14. To designate areas in city parks for overnight camping of bicyclists.

AIRPORTS

There are approximately 500 take-offs and landings per month with over 20,000 people per year using the Crook County airport. Approximately 25% of the landings and take-offs are Forest Service related. (15% for fire protection, 10% for the movement of personnel; 75-85% are business oriented including the 10% designated as Forest Service related, and 5-10% classified as other.)

There are two (2) runways and improved taxiway, which is sufficient to handle corporate jets and general use aviation aircraft. The runways are on oil-finished 4,000' x 60' runway and an asphaltic 5,000' x 60' runway. (Ordinance No. 65; 5/14/92)

Executive Air, a Portland based air carrier service, currently use Prineville and other Central and Eastern Oregon airports to pick up bank receipts. Plans have been approved to allow Executive Air to carry small numbers, no more than six, passengers.

To date, most of Crook County's large business, commercial and heavy industrial firms use the airport. Airport development and expansion is important for Crook County's overall economic growth. Despite capacity of 15 light planes, there is insufficient room on busy weekends for aircraft parking space. In addition restroom, lounge and restaurant facilities are not offered.

There are a total of six (6) other airstrips in Crook County; five (5) personal use airports in farm zones and one Forest Service airstrip at Rager Ranger Station. (Ordinance No. 65; 5/14/92)

Helicopter transport of injured persons from outlying areas to Pioneer Memorial Hospital, or from Prineville to Bend's Hospital, would save time and lives. **There are two helicopter pads in the County; the BLM maintains a facility at the County Airport and there is a second landing pad at Pioneer Memorial Hospital. (Ordinance No. 65; 5/14/92)**

It shall be the goal of Crook County to upgrade Crook County's Airport facilities thereby increasing its viability for attracting new industry and business to Crook County by improving the runway capabilities to handle larger aircraft; providing restrooms and a small lounge area for visiting air travelers; constructing additional hangers and aircraft parking space; maintaining the existing Airport Approach Zone and preserving space sufficient for the construction of a helicopter landing pad in close proximity to Pioneer Memorial Hospital.

Crook County and the City of Prineville have an Airport Master Plan (AMP). The AMP was approved by Crook County on March 14, 1979 and the Federal Aviation Administration (FAA) on March 30, 1979. The County amended the Airport Layout Plan Map on September 25, 1981 and was approved by the FAA on October 21, 1981. The Airport Layout Plan Map of the AMP was again amended by Crook County in September 1986. This amendment was approved by the FAA on October 9, 1986. The AMP is hereby made a part of this Comprehensive Plan and all the policies and provisions contained in the AMP are hereby incorporated into this Plan document. It shall be the policy of the County to improve and develop the airport in compliance with the AMP (within fiscal capabilities) and to regulate all area land uses in compliance with the AMP. (Ordinance No. 65; 5/14/92)

V. Public Facilities and Services

PUBLIC FACILITIES AND SERVICES

It is the goal of the city and county to develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. This includes a plan that coordinates the type, location, and delivery of public facilities and services in a manner that best supports the existing and proposed land uses and refers to water supply systems, sewage systems, storm drainage, solid waste disposal system, electric power, natural gas, telephone service, fire protection, police protection, health services, recreation facilities and services and schools and governmental services.

POLICIES

1. Designation of urban growth boundaries shall be coordinated with utility companies and with long-range development plans for extending public facilities and services.
2. **Service connections to either the community sewer or community water system currently serving Ochoco West Subdivision shall be prohibited unless there is a demonstration that there is adequate water availability and sewer capacity to accommodate additional service connections.
(Ordinance No. 122; 6/25/97)**
3. Public facilities and services in urban areas shall be provided at levels necessary to support optimum development (maximum density).
4. Providing public facilities and services to rural areas being changed to urban use shall be based upon: 1) the least time required to provide the service; 2) most reliable service; 3) lowest financial cost; and 4) adequate levels of service that satisfy long range needs.
5. A public facility or service shall not be provided in an urbanizable area unless there is provision for the coordinated development of all the other urban facilities and services appropriate to that area.
6. All utility lines and facilities shall be located on or adjacent to existing public or private right-of-ways to avoid dividing existing farm units.
7. **The establishment of new sewer systems outside the City of Prineville's acknowledged Urban Growth Boundary and any unincorporated community**

adopted pursuant to OAR 660, Division 22, shall be prohibited unless an appropriate exception is adopted. (Ordinance No. 122; 6/25/97)

8. To maximize public facility and service coordination; development proposals inside the UGB, but outside the City, shall be reviewed by the City prior to approval by the County.
9. **New extensions of sewer lines from within the City of Prineville's acknowledged Urban Growth Boundary, any unincorporated community adopted pursuant to OAR 660, Division 22, or Ochoco West Subdivision to lands outside those boundaries and said subdivision shall be prohibited, unless an appropriate exception is adopted. (Ordinance No. 122; 6/25/97)**
10. All utility companies and irrigation companies affected by any and all land partitionings and subdivisions shall be notified and requested to make recommendations regarding compliance with long-range development plans and specific utility easements.
11. Scientific data defining underground and surface water capacities shall be determined within five (5) years for the Prineville vicinity, Grimes Flat, Ochoco Reservoir, Prineville Reservoir, and Powell Butte. This data shall be used to establish growth limits within a time frame. Low water years shall be the critical determinant.
12. **The establishment or extension of a water system shall not be relied upon to authorize a higher residential density than would be authorized without the water system on lands outside the City of Prineville's Urban Growth Boundary and any unincorporated community adopted pursuant to OAR 660, Division 22. (Ordinance No. 122; 6/25/97)**

WATER SUPPLY SYSTEM

The sole source of pipe distributed water for the Prineville vicinity is provided by Pacific Power and Light Company. The current total pumping capacity of five (5) wells is 2.4 mgd. The past total storage capacity was 1.15 mg. A new reservoir with the capacity of 500,000 gals. was built at the base of Barnes Butte in the spring of 1978, bringing capacity to 1.65 mg.³

The current annual peak demand of this pipe distributed water system is 2.4 mg during the summer. This is an integrated system; when reservoir water reaches critical levels, the pumps recharge the supply. Water is chlorinated at each pump and much of the water is pumped directly to the outlets, bypassing storage reservoirs. See Street Function-Utility Boundaries Map showing the main distribution lines located at the outer limits of the total metropolitan area. An existing

³ Art Thomas, Water Superintendent, Pacific Power and Light Company, personal interview, Prineville, Oregon, Dec. 14, 1976.

water system map located at City Hall shows sizes and locations of all pipes (Existing Water System Map for Pacific Power and Light Company, Date: June, 1973, by Robert E. Meyer Engineers, Inc., Beaverton, Oregon).

The State Watermasters office located in Bend, Oregon, has information regarding primary and supplemental water rights. Legally, all water above or below the ground belongs to the people. However, the State of Oregon has the responsibility of appropriating the use of all water for private use. Any private individual must file water rights with the State Watermaster for the use of natural stream flow, impoundment storage, wells, springs or sumps with the only exception being wells serving a house and a half-acre garden. The state set .01 cubic feet per second as a maximum volume for domestic usage. Since about 1950 the state has required well logs to be filed for all wells, so there is some record of well depths and capacities. Primary water rights were the original rights on river, stream and spring water filed by early day settlers. Supplemental water rights are storage water (private or irrigation district), wells (irrigation and stock use) and sumps. The majority of water rights, both primary and supplemental, are for irrigation purposes. These rights specify the number of acres to be irrigated or the cubic feet per second to be utilized for stock use, but do not reflect actual usage or capacity. Nevertheless, the state has the authority to enforce the volume of water specified by all water rights.

During the summer of 1977, due to the drought conditions and the allocation of Prineville Reservoir water to the North Unit Irrigation District, the watermaster's office for the first time measured all the water pumped and diverted from the Crooked River below Bowman Dam. If drought conditions worsen, the watermaster's office legally can require all water users to install meters on all pumps and weirs in all canals to facilitate measuring and regulating all water. These installations are at the user's expense. If a water user doesn't comply within a specified deadline, then the state will install the apparatus and bill the user.⁴

SEWAGE SYSTEM

The original system for the City of Prineville was installed shortly before World War II. The total number of current sewer connections number 1,644 with 1,407 residential connections and the remainder being commercial, services, cultural, recreational and manufacturing. The total number of people on the system is estimated to be 4,915. Design for a population of 8,820 by 1987 and 11,755 by 1992 for sewer use is recommended.

The city treatment facility consists of a stabilization or lagoon consisting of a 37-acre primary cell and a 13-acre secondary cell. Flow is currently retained during summer months to the maximum extent possible; then effluent is discharged to the Crooked River during fall and winter months. The facility was designed for a biological loading of 100 persons per acre of lagoon surface area. However, present lagoon standards allow 175 persons per acre of surface area. Applying this latest criteria to the existing 50-acre lagoon results in a capacity of 8,750 people.

⁴Department of Water Resources, 1507 E. 1st Street, Bend, Oregon, 97701 (1976).

Average daily sewage flow is 0.71 mgd. (145 gallons per capita per day) or an annual flow of 259.2 mg. Infiltration of ground water through loose pipe connections and manhole walls plus inflow of water from street drains and roof drains is estimated for nearly 31 percent of the total flow. The pumping capacity of two (2) 1,000 gpm pumps is 1.94 mgd. These pumps are adjacent to the lagoon and discharge the sewer system to the lagoon.

The City of Prineville's waste discharge permit issued by the Department of Environmental Quality required more stringent controls on effluent quality effective July 1, 1977. These standards require secondary treatment from November 1 through March 31 and no greater than 10 mg/1 of Biochemical Oxygen Demand (BOD) and suspended solids (SS) from April 1 through October 31 for discharge to Crooked River. The present facilities are not capable of attaining these limits so an engineering firm has been retained by the city to study alternative solutions. The original cost effective alternative was disposal of effluent for irrigation use on farm land adjacent to the lagoon. However, this alternative is not feasible because soil tests show that shallow soil and a high water table endanger domestic well water and Crooked River contamination. The present alternative selected is aerated facultative lagoon and polishing pond with tertiary treatment and disposal to Crooked River.

Preliminary design was completed for sewer extension the Laughlin-Melrose area. These cost estimates were, however, expensive for landowner participation. As a result, the project was reduced in scope to include the final design only for the Laughlin area.⁵

SOLID WASTE DISPOSAL SYSTEMS

The only sanitary landfill in the county is operated by Crook County and is located near the airport. Two open pits are privately owned, one at Paulina and the other at Jasper Point. The Department of Environmental Quality issued Crook County a sanitary landfill permit on January 27, 1975 for twenty years of operation of the present site. The Bend office of DEQ reports that the capacity remains feasible as long as the operation is managed to its maximum efficiency. Approximately 75 cubic yards of waste are disposed daily at the county landfill site; about 19 percent of this is compacted waste and the remainder is loose. The total mixed residential and commercial waste disposed at the county landfill from July 1, 1976 to June 30, 1977 was approximately 26,986 cubic yards. No records are maintained for the Paulina or Jasper Point open pits; however, the 1974 COIC Solid Waste Management Plan estimates 4,500 cubic yards of waste per year at the Paulina site. These small quantities of waste haven't created serious problems. The Solid Waste Management Plan, however, recommends that the Paulina pit be improved to modified landfill status and that the Jasper Point pit be closed and replaced with a drop box that in turn would be dumped at the county sanitary landfill.

Val Toronto and Associates, Comprehensive Water and Sewer Plan, Crook County, Oregon, 1972.

Robert E. Meyer, Engineers, Inc., Laughlin-Melrose Facilities Plan, Facilities Plan for Sewage Treatment and for Sewage Treatment and Disposal, City of Prineville (June, 1977).

Mitchell, McArthur, Gardner, O'Kane, Associates, 1985 Prineville Area Comprehensive Plan (December, 1972).

There are no records kept of daily quantities of waste recycling or resource recovery at the county sanitary landfill; however, some recycling is occurring. The landfill attendant has all salvage rights. All household appliances and junk automobiles hulks are piled separately and then sold to metal salvagers who flatten the scrap and transport the scrap by truck to Portland or California. Baling wire, mattress springs, or other wire is recycled if clean of other trash. Salvage businesses in Bend buy copper, brass, radiators, aluminum batteries, die cast aluminum, auto transmissions, dirty aluminum, and soft lead. The attendant strips and cuts up these materials during spare time, although most of his time is spent collecting county dump fees from visitors. Approximately 98 percent of all wood waste generated from Prineville mills is recycled for production of particleboard or box manufacture. A sizeable quantity of mill clean-up scrap and cardboard are, however, brought to the landfill. Private individuals recover some of the wood waste for fuel and the remainder is buried. Any usable materials or tools can be left at the office and the attendant either sells or gives them away.⁶

ELECTRIC POWER

Electric power is provided by two (2) companies in the county, Pacific Power and Light (PP&L) and Rural Electrification Association (REA), which is served locally by Central Electric Co-op (main office located at Redmond, OR).

Central Electric Co-op - Benchmark data and company policies for extending service for Central Electric Co-op are as follows: a post card survey conducted during December, 1975 and adjusted to reflect 100% of all residential customers shows 146 residences without electric heat; 29 mobile homes without electric heat; 106 residences with electric heat; 103 mobile homes with electric heat for a total of 384 residential accounts in Crook County.

During March, 1977, the Co-op estimates that the average residence consumed 1675 KWH of electricity. If the 384 residences are adjusted for March, 1975 at the rate of 8% increase per year, 422 residences consumed approximately 706,850 kwh during March, 1977. It must be noted that these figures are only rough approximations. March does not represent a peak demand month and no irrigation accounts are included in these figures.

Central Electric Co-op is a preferred customer of the Bonneville Power Administration. All policies are governed by REA, which are more liberal than the State Public Utilities Commission Regulations. The Co-op has short to long-range development plans for future locations of transmission lines and substation facilities, but growth has been so rapid the past five years that many plans are outdated.

⁶Stevens, Thompson and Runyan, Inc., Solid Waste Management Plan: Central Oregon Intergovernmental Council (Crook, Deschutes & Jefferson Counties, 1974).

A major problem in the past has been that the Co-op hasn't been aware of proposed land partitionings and subdivisions until land purchasers appear at the Co-op office and request power for a new home construction. This last minute notice frustrates fiscal programming and overall planning of utilities for new development. Recently a new policy was adopted that requires land developers to deposit a sum of money that will cover the cost of installing the entire backbone system for a new development. The Co-op will refund the money within seven (7) years as revenues are collected from land owners who hook up to the system. This policy protects the Co-op in the case that a development does not succeed in selling lots.⁷

Pacific Power & Light Company - As of April, 1976, the total number of accounts in Crook County numbered 4,480 with the following breakdown:

Apartments	353
Single Family	2855
Mobile Homes	672
Uncoded	<u>10</u>
Total Residential	3890
Commercial	572
Industrial	15 (over 100 kwh/demand)
Other	3

Two transmission lines supply Prineville's PP&L customers. The original one comes from Redmond past Houston Lakes and is 69 kv capacity. A recent addition is a 69 kv line from the Pilot Butte Substation near Bend which crosses the base of Powell Buttes. This line is insulated for 115 kv to facilitate future expansion.

The Public Utilities Commissioner of Oregon sets forth the following policies regarding line extension: the applicant for extended service other than for irrigation does not pay anything if the cost of extension does not exceed eight (8) times the annual revenue anticipated from the hook up. The limit for irrigation hook up is four (4) times the anticipated annual revenue. In either case, the applicant must advance the excess cost to PP&L.⁸

See the Electrical Power Map in order to locate the service boundaries between the two power companies and to locate all primary transmission lines in the county. This map shows zone three districts that are served jointly by the two companies. Also included are the Oregon-California direct and alternating current inter-ties and the two PP&L feeder lines originating in Deschutes County. The lines were taken from more detailed engineering maps, but cross-country lines are accurate to the nearest quarter section.

⁷Don Hinman, Chief Engineer, Central Electric Co-op, Redmond, Oregon, 1976.

⁸Chuck Boyden, Manager, and Ron Fox, Pacific Power & Light Company, personal interview, Prineville, Oregon (Dec. 14, 1976).

NATURAL GAS

As of December 7, 1976, Cascade Natural Gas reported approximately 1,100 customers in Prineville. About two-thirds of this number is residential users. The supply is purported good and new customers are welcome. The Public Utilities Commission prohibits advertising the sale of natural gas and limits the cost to the applicant for pipe extension (not to exceed three (3) times the anticipated annual revenue from the hook up; excess cost must be paid in advance to construction).⁹

See Natural Gas Map showing the location of the Western States natural gas inter-tie and the Cascade Natural Gas feeder line serving Prineville. See Electric Power Map showing the main distribution lines located at the outer limits of service of the entire Prineville area. See map located at City Hall for detailed location of all gas pipelines.

TELEPHONE SERVICE

The county is served by three telephone companies, Pacific Northwest Bell, United Telephone Company and Blue Mountain Telephone Company.

Pacific NW Bell will extend service free of charge up to one-half mile along a public road providing two or more telephones will be served and up to one-tenth mile onto private property. Cost to the applicant becomes \$1,600 per mile beyond these limits. All customers have the privilege of one or two party service, but the cost becomes prohibitive beyond the base rate area. Ten to twenty different requests over a year's period may constitute a legitimate reason for a major line extension to an outlying area.

All of Powell Butte is four party service because of the long distance from the base rate area located at Redmond.¹⁰ (See Rural Fire Protection District/School Bus Routes /Utilities (telephone, natural gas) Map. This map shows the service boundaries separating the three utility companies along with all primary overhead and underground transmission lines in the county. Cross country lines are accurate to the nearest quarter section and lines following public roads may be misplaced from one side of the road to the other.

⁹Gerald Liabraaten, District Manager, Cascade Natural Gas, 800 NE Third, Bend, Oregon 97701, personal interview (Dec. 7, 1976).

¹⁰Ed Peters, Pacific Northwest Bell Telephone, 841 NW Bond, Bend, Oregon 97701, personal interview (December 7, 1976).

Andy Zacherl, Forecaster, United Telephone Company, 1927 S. First, P.O. Box 867, Redmond, Oregon 97756, personal interview (May, 1977).

Ed Asher, Manager, Blue Mountain Telephone Inc., Fossil, Oregon 97830, personal interview (May, 1977).

FIRE PROTECTION

The Rural Fire Protection District/School Bus Routes /Utilities (telephone, natural gas) Map shows boundaries of Prineville Rural Fire Protection.

SCHOOLS

The total enrollment for school year 1976-77 for all primary and secondary educational institutions in Crook County was 2,550. The current total capacity for all primary and secondary educational institutions in Crook County is 2,750. No additional school facilities are under construction at the present time. During winter and spring of 1977, school bus passengers averaged 1,303 passengers per day. The total capacity of all buses is 1,226, allowing three students per seat. Several buses make double runs. See Rural Fire Protection District/School Bus Routes/Utilities (telephone, natural gas) Map.¹¹

PIPELINES

An underground natural gas pipeline runs from Madras, through the Lone Pine area, to Bend. The Prineville feeder line runs parallel to the railroad tracks from the grade crossing at the Madras Highway into Prineville. On June 1, 1977, the Crook County Court adopted a resolution supporting the Artic Gas delivery route system (as presented by the Pacific Gas Transmission). This, a major natural gas pipeline (running from Alaska to San Francisco) might be constructed parallel to the existing line running through the Lone Pine area. There are no imports or exports to and from Crook County that would substantiate the use or construction of any other pipelines at this time.

¹¹George Hamburger, School Supt. Office, Prineville, Oregon 97754, personal interview (July 7, 1977).

Eric Forster, Transportation Supervisor, School Bus Garage, Prineville, Oregon 97754, personal interview (May 17, 1977).

Insert Map

Street Function – Utility Boundaries

Insert Map

Electric Power

Insert Map

Rural Fire Protection District/School Bus Routes/Utilities
(telephone, natural gas)

VI. Natural/Scenic/Buffer Areas

NATURAL/SCENIC/BUFFER AREAS

It is the goal of Crook County to ensure continuity of the open space character that has always existed in Crook County, to promote landscape buffers within the man-made environment that are in harmony with the natural landscape and which will aid in reducing major impacts such as air pollution, making a healthier environment and enhancing the value of neighboring property; and to protect the following natural resources for the use and enjoyment of future generations:

1. Mineral and aggregate resources
2. Energy sources
3. Fish and wildlife habitats
4. Ecologically and scientifically significant natural areas, including desert areas
5. Outstanding scenic views and sites
6. Water areas, wetlands, watersheds, and groundwater resources
7. Wilderness areas
8. Historic areas, sites, structures and objects
9. Cultural areas
10. Potential and approved Oregon recreation trails
11. Potential and approved Federal wild and scenic waterways and state scenic waterways
12. Potential park and recreation sites

Cultural Areas - An area characterized by evidence of an ethnic, religious or social group with distinctive traits, beliefs, and social forms.

Natural Area - Includes land and water that has substantially retained its natural character and is important as habitats for plant, animal, or marine life. These areas are reserved for scientific research and educational value.

Open Space - Consists of lands used for agricultural or forest uses, and any land area, which if protected, would conserve the above natural/scenic resources.

LAND NEEDED OR DESIRABLE FOR OPEN SPACE (Ordinance No. 71; 7/28/92)

Crook County abounds in Open Space. The County, while moderate in size when compared to other Eastern Oregon Counties, contains nearly 3,000 square miles of territory with a population of slightly over 14,000. Nearly one-half of that area is publicly owned. There is only one incorporated city, Prineville, with a population of a little over 5,500, located in Crook County. The majority of the privately owned lands within Crook County are used and planned and zoned for agricultural and forest purposes, creating a rural lifestyle within the County with an immense amount of Open Space protected by resource planning and zoning.

The major public ownerships include the U.S. Forest Service with a total of 434,792 acres, the Bureau of Land Management with 493,290 acres, and the Bureau of Reclamation with 15,960 acres. Total ownership of federal lands is 944,042 acres. State agencies account for 28,274 acres, and local government agencies account for 11,479 acres. Thus, public ownership accounts for a total of 944,042 acres. Private ownership is listed at 923,405 acres. This information was taken from previously drafted documents contained within the Crook County Planning Office. One specific document, entitled "Parks and Recreation and Open Space Study for the Greater Prineville Area, Crook County, Oregon" completed in June, 1976, is of particular interest. The study was completed by the City/County Planning Department at that time and contains essentially an inventory of the recreational opportunities available in Crook County. It is noted that the study was completed before the Crook County Comprehensive Plan was acknowledged in 1978. The emphasis of the study is improvement plans for existing park developments within the City of Prineville and in the Prineville Urban Growth Boundary. Chapter 3 of the document utilizes an overlay technique of the entire County to indicate general areas desirable for Open Space. No site specific recommendations are made in the study for Open Space designations. A floating Open Space zone for the County is proposed. Again, no site specific areas are indicated.

Other Programs

The County's Natural Resource zones, including EFU-1, EFU-2, EFU-3 and F-1, provide for large minimum lot sizes ranging from 40 to 160 acres, including 320 acres being required for Critical Elk Habitat. Other categories of Goal 5, the Natural Resource Goal, also achieve the preservation of Open Space through implementation measures required by the other Goal 5 categories. This would include Big Game Habitat, Riparian Areas, and Natural Areas. Through these programs, the County maintains and preserves generalized Open Space throughout the County.

Conclusion

Based upon the above facts, including the significant public ownerships of lands within the County, the maintenance of generalized Open Space by the County Resource zones, and other programs required by Goal 5, the County finds there are adequate lands available for generalized Open Space within the County. No further action is required.

Scenic Areas - Lands that are valued for their aesthetic appearance.

SCENIC VIEWS (Ordinance No. 71; 7/28/92)

The Crook County Comprehensive Plan notes a number of scenic resources, including Ochoco Wayside Viewpoint, approximately 133 miles of Oregon Scenic Highway, Barnes Butte, the Rimrocks, and the Palisades of the Crooked River.

Ochoco Wayside Viewpoint

The Ochoco Wayside Viewpoint is a State of Oregon owned and operated viewpoint lying west of Prineville on the bluff overlooking Prineville. The viewpoint offers outstanding views of the City of Prineville and its environs. The sharp bluff drops dramatically to the valley floor. This is a State of Oregon facility and the State owns lands surrounding the viewpoint. There are no conflicting uses and it is designated a 2-A resource.

Oregon Scenic Highways

Crook County has a total of 132.94 miles of State of Oregon designated Scenic Highways. These are as follows:

Oregon 27	32.92 miles
Oregon 126/U.S. 26	36.8 miles
U.S. 26	5.73 miles
Paulina Highway	52.49 miles

These scenic highways are protected by Oregon Statutes and no conflicting uses are identified. They are designated as a 2-A resource.

Barnes Butte

No information was available at the time this document was researched. This site is designated as a 1-B resource. The County will complete the Goal 5 process when the information becomes available, in accordance with Revised Policy 1 of the Natural Resource Goal.

Rimrocks

Crook County is noted for large plateaus, or rimrocks, surrounding the valley floors in the Prineville area. The specific locations of the rimrocks are difficult to pinpoint. The County has specific policies to protect and preserve the scenic and aesthetic values of the rimrocks, requiring a site development plan for all land uses or development proposals. The County has unofficially required a setback from the edge of a rimrock for any development proposed; however, this needs to be carried over into the Zoning Ordinance. Therefore, a conflicting use would be a proposed development which breaks the skyline when viewed from the valley floor and an ESEE analysis is required.

ESEE Analysis

Economic Consequences: Loss of scenic views or sites by development locating at the edge of rimrocks would be detrimental to the aesthetic quality of the Prineville area and could cause loss of tourism interest in the area.

Social Consequence: Loss of scenic views or sites by development locating at the edge of the rimrocks could cause a degradation of the rural lifestyle of Crook County.

Environmental Consequences: Loss of aesthetic views and sites cause a degradation of the environmental quality of the Prineville Valley.

Energy Consequences: No specific energy consequences are foreseen in the differential between requiring a setback or locating the edge of a given rimrock.

Program to Achieve the Goal. In order to preserve scenic views along the rimrocks, the Comprehensive Plan Policy must be carried over into the County Zoning Ordinance to be utilized when reviewing specific development proposals. Setbacks from the rimrock edge shall be 200 feet for structures. A site plan review showing the proposed structure location shall be required.

Palisades of Crooked River

The Palisades of Crooked River lie below Bowman Dam. No detailed information nor an accurate description was available at this writing and this resource is designated as a 1-B resource to be addressed when the information becomes available, through revised Natural Resource Goal Policy 1.

Wilderness Areas - Areas where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. It is an area of undeveloped land retaining its primeval character and influence, without permanent improvement or human habitation, which is protected and managed so as to preserve its natural conditions and which generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable, has outstanding opportunities for solitude or a primitive

and unconfined type of recreation, may also contain ecological, geological, or other features of scientific, educational, scenic or historic value.

Buffer Areas - Areas between residential and industrial neighborhoods. Property within open space zones qualifies for reduced tax assessments under ORS 308.740 - 308.790 passed by the 1971 State Legislature. The following shall be buffer areas:

1. Terrace north of Lamonta Road - Buffers the west and south boundaries of the Buckaroo Acres area. The natural drainage area north of Crooked River Meat Company is the urban growth boundary and shall be reserved as a buffer for future development to the north.
2. American Forest Products Vicinity - The natural drainage area descending from Hudspeth's pond to Clear Pine Moulding was designated as proposed open space in the 1972 Prineville Area Comprehensive Plan and shall serve as a buffer between industrial expansion around American Forest Products and residential expansion southeast of the drainage. The area east of Hillcrest subdivision and south of American Forest Products shall be designated a buffer area because additional residential and/or industrial development here would result in additional conflict. The north boundary of this industrial site shall serve as a buffer for future residential development in that direction.
3. Ochoco Lumber Vicinity - Residential development along Willowdale Drive has created a barrier for continuous expansion of Ochoco Lumber to the east of Willowdale Drive. There shall be a buffer area along the east and south boundaries of Ochoco Lumber. Ochoco Lumber plans to expand on their property north of Ochoco Creek, but has no plans to purchase and develop new property east of their present site.

Recreation Trails - Proposed recreation trails lie within the Ochoco National Forest and, as such, are protected by federal rules and regulations. They are designated as 2-A resources by the County. It is noted the prior submittal indicated private land may be involved in the Pacific Crest to the Desert Trail. No information is readily available. The County designates this as a 1-B resource and utilizes the proposed 1-B resource policy to be adopted as Goal 5, Policy 1. (Ordinance No. 71; 7/28/92)

Natural Areas - The U.S.F.S. has the following natural areas under consideration in the RARE II Inventory-Green Mountain (6,630 acres), Mill Creek (15,950 acres), Bridge Creek (6,325 acres), Lookout Mountain (15,260 acres), Rock Creek (9,286 acres) and Broadway (8,680 acres) for a total of 62,131 acres.

The BLM has two natural areas under consideration for primitive area management-North Fork of Crooked River (approx. 7,360 acres) and South Fork of Crooked River (approx. 34,080 acres, considered secondary potential) and of this 9,280 considered primary potential. There is a total of 16,640 acres prime natural area.

The Oregon Natural Heritage Program (office in Portland) is a non-profit organization established to collect inventory data on remaining natural areas in the site. Until LCDC requested data, this inventory data was reviewed only by the Nature Conservancy, a national non-profit conservation organization whose privately donated resources are solely devoted to the preservation of ecologically and environmentally significant natural areas throughout the country. Recently, the Oregon Natural Heritage Program was funded by LCDC for publication of a complete natural area inventory of Western Oregon for the use of country planning agencies. A similar document was to be funded by LCDC for Eastern Oregon planners and published in January, 1978.

No site at this time should be interpreted as a mandatory area to be protected by stringent natural area requirements. Currently, there are no Research Natural Areas (RNA's) designated within Crook County. The closest one being Ochoco Divide Natural Area across the Wheeler County boundary near Marks Creek Lodge. Currently a site report has only been completed for Grizzly Mountain (see appendix). However, site reports are to be included for Big Summit Prairie, G. I. Ranch, Big Houston Lake and Crooked River Gorge (Palisades) in the completed inventory report in January. The twenty-one site preliminary inventory included in this Comprehensive Plan has been subdivided into the three categories of natural area, geological area and wildlife area. The following Oregon Natural Heritage Program sites (see Recreation: Historical: Natural: Scenic Map) mapped as natural areas are "Painted Hills" Butte (Gerry Mt.), Powell Butte, Little Summit Prairie, Grizzly Mt., West Butte, Big Summit Prairie, G.I. Ranch ("Miniature Malheur"), "Island" in Prineville Reservoir, Gray Prairie, Twelve Mile Creek Grassland and Mill Creek Roadless Area.

Big Summit Prairie is probably the most unique of those natural areas. It is a large mountain meadow that was settled in the late 1800's. From a historical standpoint, the original log cabin school remains (built before 1897), the "new" Summit Prairie School (1896 or 1897); four large homes including the Lowrey Place (1885), Merritt House (1906), Summit Prairie Schmidt House (1906) and the Muddy Company Headquarters (approximately 1887) which currently are headquarters for Boston Ranch Company (current owner of most of Big Summit Prairie). This prairie was also a summer encampment of various Indian tribes before the white man settled there. Active grazing on the prairie for nearly one hundred years has reduced herbaceous vegetation below its natural capacity. However, wildflowers grow in abundance here. The BLM has identified one species of wildflower there (Long-Bearded Mariposa Lily) that is rare and has been recommended for endangered classification.

NATURAL AREAS (Ordinance No. 71; 7/28/92)

The County has identified a number of natural areas on which location, quality and quantity information is available. The following discussion lists those identified areas.

Powell Buttes

Powell Buttes is located in Sections 25 and 26, Township 16 South, Range 14 East, Willamette Meridian, within the County. It contains approximately 1,300 acres and is predominately a south facing slope which contains several excellent examples of plant communities. Plant communities contain Western Juniper/Big Sage Brush, Blue Bunch Wheat Grass, and Western Juniper/Blue Bunch Sheat Grass. The site has been proposed for Research Natural Area designation. The Nature Conservancy points out that this would fill a high priority cell need in the Oregon Natural Heritage Plan. The property is owned and managed by the Bureau of Land Management. BLM designated 520 acres in 1989 as a Research Natural Area, officially known as ACEC/RNA Powell Buttes. The County supports the BLM management plan and designates this site as a 2-A resource and that no conflicting uses are identified.

Twelve Mile Creek Grassland

Twelve Mile Creek Grassland is located 45 miles southeast of Prineville in Section 21, Township 19 South, Range 23 East, Willamette Meridian. It contains approximately 300 acres. It is described as a low rolling flatland south of Twelve Mile Table with sagebrush/bunch grass communities over a wide area.

The grassland is at approximately 4,500 feet elevation and is used as a winter range by pronghorn antelope and other wildlife. Twelve Mile Creek is a slow shallow stream about three feet wide flowing along the south side of this grassland. The property is owned and managed by the Bureau of Land Management. BLM has no special designation for this site. No conflicting uses are identified. The County designates this as a 2-A resource.

Green Mountain

Green Mountain lies 12 miles north-northeast of Prineville in Sections 25 and 26, Township 13 South, Range 16 East, Willamette Meridian, and Sections 7, 11, 16, 20, 29 and 31 of Township 13 South, Range 17 East, Willamette Meridian. It contains approximately 6,700 acres. Terrain in the Green Mountain area is rough and broken with elevations varying from 3,500 to 5,600 feet at the crest of Green Mountain. Because of its roadless character and vegetative mosaic, the area provides excellent habitat for deer and elk. Approximately 50 percent of the area is located within big game winter range. Plant communities range from juniper/bunch grass, Ponderosa/Douglas Fir, elk sedge to Ponderosa/fescue. The property is owned and managed by the United States Forest Service and, as such, no conflicting uses are identified. The County designates this as a 2-A resource.

Lookout Mountain

Lookout Mountain lies approximately 21 miles east of Prineville in Township 14 South, Range 19 East, Township 14 South, Range 20 East, and Township 15 South, Range 20 East. It contains approximately 15,260 acres. The Lookout Mountain area has unique

topographic features that make it easy to distinguish from surrounding land forms. From a low point near Big Summit Prairie of 3,793 feet, the land rises towards the southeast through dense vegetation of mixed conifer forests to a high point of over 6,926 feet. At this elevation there are a number of plant species, including Bebb's Willow and the Sierra Onion, existing in this area. These species were considered threatened in Oregon (Oregon Natural Heritage Data Base, March 1985) but have since been removed from the threatened species list. (Phone conversation with Lisa Croft, USFS, July 24, 1992. It is noted there is a rare lily established in this area.) Lookout Mountain lies entirely within lands under the administration of the National Forest Service and, as such, no conflicting uses are identified. The County designates this as a 2-A resource.

Grizzly Mountain Site

The Grizzly Mountain site lies in Sections 15, 18, 20, 22, 27 and 29 and Section 7, Township 13 South, Range 15 East, Willamette Meridian. It contains approximately 1,300 acres. Grizzly Mountain is the prominent feature in this part of Central Oregon, with an elevation of 5,635 feet. Vegetation consists of scattered junipers and sagebrush on the lower slopes to a Ponderosa pine forest on the upper elevations. The area is under the ownership and management of the Bureau of Land Management and, as such, no conflicting uses are identified. BLM has no specific designation for this site. The County designates this as a 1-B resource.

Gray Prairie

Gray Prairie is located in Sections 15, 22 and 23, Township 15 South, Range 20 East, Willamette Meridian. It is part of a 22,000 acre federally owned property in the area. A check with the Crook County Assessor's Office determined the ownership, via phone call on July 16, 1992. The site is described as being a mid-elevation prairie in the Ochoco Mountains. The U.S. Forest Service reports the presence of lithic scatters. A phone conversation with Lisa Croft indicated the presence of Peck's Mariposa Lily in this area and some scattered private property inholders on this site. Information on the amount of private property is not currently available. The County designates this site as a 1-B resource.

Forest Creeks

BLM has recently identified 405 acres, known as Forest Creeks, in Townships 15 and 16 South, Ranges 21 and 22 East, Willamette Meridian, in Crook County. The area contains two stream segments near the North Fork of the Crooked River. The segments have significant willows plant communities and the area has been designated as an area of Critical Environmental Concern/Research Natural Area by BLM. It is owned and managed by BLM and as such is designated a 2-A resource by Crook County.

NOTE: Big Summit Prairie, GI Ranch, and West Butte will be covered under the County's planning program in the Fall of 1992. In addition, there may be more research required on sites identified by the Nature Conservancy which will have to be conducted during the Fall of 1992 due to time limitations on this short term effort. (Ordinance No. 71; 7/8/92)

Geological Areas - The most popular geological landmarks of the county are Barnes Butte, Rimrocks around Prineville and the “palisades” of Crooked River Gorge below the Bowman dam. The Parks and Recreation and Open Space Study of Greater Prineville Area designates 51 acres of Barnes Butte located above cultivated crop land and 4,156 acres of Rimrock area (including 200 feet setback from rim edge) for scenic preservation.

The Open Space Study addresses the rimrock from the intersection of Elliot Road and O’Neil Highway, including Westwood Subdivision and Ochoco Wayside Viewpoint, to the Steams Ranch. The report also includes rimrocks paralleling Juniper Canyon, Combs Flat Road and Ochoco Creek out to Ochoco Reservoir. Further consideration should be given to scenic value of Crooked River rimrocks all the way to Smith Rock Road.

The BLM has also designated land under their ownership atop Barnes Butte for geological value. BLM designated four additional sites for geological value as follows: 1) Logan Butte located along Camp Creek (approximately 9,600 acres). This is the southern most exposure of the John Day Formation. Bentonite is mined from the clays of this formation and palentological evidence can be discovered. 2) Eagle Rock and ridge extending west along Prineville Reservoir (approximately 9,600 acres). This also is designated for rockhounding value because of two agate quarries. (See Recreation, Chapter III regarding further rockhound sites.) 3) Bear Creek Buttes known for mineral exploration and 4) Powell Buttes.

Geological sites inventoried by the Oregon Natural Heritage Program include the following: Crooked River Gorge (Palisades) from Steams Dam to Prineville Reservoir (approximately 1, 280 acres). This tall, narrow canyon is one of the best exposures of columnar, extensive and pillon (lake type) forms of lava existing collectively. Near Suplee on the Weberg Ranch is an exposure of the oldest rock found in Oregon, believed to be 450 million years old. Fossil remains also occur here. Professor Bob Lawrence of O.S.U. has studied this unique feature; more detailed information of his findings can be found on Pg. 150-151, Comparative Evaluation of ERTS-I, O.S.U., 1974. Another site inventoried by ONHP is White Rock located near Mill Creek within the U.S. National Forest Service boundaries.

Three other sites of geological value located within the Forest Service boundaries are Evans Creek Area, Steins Pillar and Twin Pillars. Twin Pillars are protected within the Mill Creek Roadless Area. Steins Pillar is rated high for scenic value by the U.S.F.S.; in fact, a trail to its base is a high trail construction priority.

Wildlife Value - The following sites are designated by Oregon Natural Heritage Program for wildlife value: 1) Big Huston Lake (waterfowl); 2) G.I. Ranch, “Miniature Malheur” (waterfowl breeding); 3) Paulina Strutting grounds (grouse); 4) Twelve mile Table (deer and grouse); 5) Dry Creek Reservoir (waterfowl); 6) Wiley Creek Homestead (birds); 7) Merwin’s Reservoir (waterfowl); and 8) Prineville Reservoir Wildlife Management area (3,360 acres managed for fish, deer and bird nesting by the Department of Fish and Wildlife).

The Department of Fish and Wildlife designates the following additional sites as waterfowl nesting habitat: Crooked River from Jap Creek to Steams Ranch, lower and upper Ochoco Creek, mouth of Bear Creek, mouth of Birch Canyon, Crooked River from Prineville Reservoir through Post and up the south fork, Beaver Creek and Camp Creek. The following reservoirs and wetlands are also designated as waterfowl nesting habitat: Big Summit Prairie, Little Huston Lake, Fischer Reservoir, Hudspeth Reservoir, Johnson Creek Reservoir, Lillard Reservoir, Freezeout Reservoir and Pringle Flat Reservoir. See Wildlife, Chapter IX and Wildlife Map for further information. The Wildlife Map designates approximately 215,200 acres of crucial deer winter range. It also outlines elk and antelope habitats.

Natural/scenic buffer areas may also include Historic Areas as referenced in the following chapter and AGGREGATE AND MINERAL RESOURCES as referenced in Chapter IX, NATURAL RESOURCES. Additional features to be considered for natural/scenic value are Dry River (possibly a marker at the crossing of Redmond Highway 126) and the geographical center of Oregon, located near Post.

FEDERAL WILD AND SCENIC RIVERS (Ordinance No. 71; 7/28/92)

The following portions of the Crooked River and the North Fork of the Crooked River are designated as Wild and Scenic Rivers.

<u>Name</u>	<u>Location</u>	<u>Management (Agency)</u>
N. Fork Crooked River	T 16, 15 R 21, 22	B.L.M.
Crooked River R 16	T 16, 17	B.L.M.
S. Fork Crooked River	T 17-20 R 22	B.L.M.
N. Fork Crooked River Rec. Corridor	T 15, R 21 T 14, R 21-22	Forest
N. Fork Crooked River Scenic Corridor	T 14, 15 R 22, 23	Forest

It is noted there may be private property interspersed along the banks of portions of these rivers. These lands are still subject to the Wild and Scenic Rivers Act and are protected from development or conflicting uses by that Act. As such, all identified resources are designated as 2-A resources. It is noted the Bureau of Land Management and the Forest Service are in the process of identifying outstanding remarkable values

associated with these rivers and developing management plans for these resources. For that reason, the County will adopt the following Goal 5 Policies to comply with Goal 5.

NATURAL/SCENIC/BUFFER AREA POLICIES

1. **As soon as information becomes available which indicates the location, quality, and quantity of an identified Goal 5 Resource that was designated as a 1-B resource in the Goal 5 Inventory, the County will complete the Goal 5 process for that identified resource. (Ordinance No. 71; 7/28/92)**
2. ~~Where conflicting uses have been identified, economic, energy, environmental and social consequences shall determine designation. (Ordinance No. 71; 7/28/92)~~
2. Agriculture, grazing, forestry, parks and recreation uses shall be considered consistent with natural/scenic values dependent on resource carrying capacities.
3. Construction of impoundments or any other stream facility shall not reduce stream flow, water levels, or the carrying capacity of down stream areas to support fish, wildlife, agriculture, recreation, pollution abatement or visual aesthetics.
5. **Deleted by Ordinance No. 51; 9/16/91.**
4. Crucial deer winter range and waterfowl nesting habitat shall be protected and preserved. Elk and antelope habitat shall also be protected in accordance with Oregon Fish and Wildlife management plans.
5. Three areas of Crooked River, namely the “palisades” below Bowman Dam, North fork and South fork shall be protected. In addition to the Green Mountain, Mill Creek, Lookout Mountain Roadless Areas and Boardtree Special Management Area protected by the U.S.F.S., the Big Summit Prairie Area shall also be given special consideration for protection as a natural area.
6. Barnes Butte shall be protected against development of any structures except for transmission lines or communication towers, either by the existing park reserve zone or by adopting an open space zone similar to the one described in the Parks and Recreation and Open Space Study for the greater Prineville area.
7. Rimrocks from the intersection of Elliot Lane and O’Neil Highway, including Westwood Subdivision and Ochoco Wayside Viewpoint, to Stearns Ranch; and those rimrocks paralleling Juniper Canyon, Combs Flat Road and Ochoco Creek to Ochoco Reservoir shall be protected against manmade structures by such zoning restrictions as deemed necessary. Restrictions addressing setbacks and building restrictions shall be applied to protect scenic values.

8. The Ochoco Creek and Crooked River floodplains lying within the urban growth boundary shall be protected as greenway by such zoning restrictions as deemed necessary.
9. Subdivision development along all streams and rivers shall be required to provide public access deemed necessary.
10. Buffer zoning restrictions shall be adopted for the Terrace industrial site north of Lamonta Road, American Forest Products industrial site and Ochoco Lumber industrial site. Such regulations shall encourage park and open space development; an intermingling of commercial, light industrial and low density residential uses; and stringent landscaping requirements for all industrial development within such a zone.
11. Landscape buffers shall be provided along major arterial street right-of-ways in order to mitigate the negative impacts of air and noise pollution and the unsightliness of rapid, concentrated traffic. Such buffers can be broad open space, change in grade, trees, etc. depending upon the level of impact to be mitigated.
12. “Outdoor” advertising signs as described in ORS 377.710 (23) shall only be allowed within commercial and industrial zones.
13. Designated natural, scenic, or buffer areas shall serve a valid public purpose and property owners shall be duly compensated for the right of public use if deemed justifiable.
14. Local, state and federal agencies shall coordinate and cooperate in natural/scenic/buffer resource management.
15. Relative to the protection and preservation of the scenic and aesthetic values of the Prineville Valley “rimrock” a site development plan shall be required for all land use/ development proposals. **A specific procedure shall be incorporated into the Zoning Ordinance to provide clear and objective criteria to review all proposed land use development proposals. (Ordinance No. 71; 7/28/92)**
16.
 - A. **As soon as the U.S. Fish & Wildlife Service completes the National Wetlands Inventory, the County will identify these wetlands as a special category in the Plan Inventory and complete the Goal 5 process when additional information is made available on the location, quality and quantity of the resource; and**
 - B. **As soon as the Division of State Lands has provided the County with a copy of applicable portions of the Statewide Wetlands Inventory, the**

**County will develop notice procedures as set forth in ORS 215.418.
(Ordinance No. 71; 7/28/92)**

- 17. The following federal Wild and Scenic River segments are included in the Comprehensive Plan as significant Goal 5 resources:**

Crooked River (Chimney Rock segment from Bowman Dam down to Dry Creek)

North Fork Crooked River (From its source at Williams Prairie downstream to the upper end of Big Summit Prairie, and from the lower end of Big Summit Prairie downstream to one mile from its confluence with the Crooked River.

- (A) For the North Fork Crooked River, above Lame Dog Creek, the County will notify the Ochoco National Forest of any change in land use within the proposed administrative boundary.**
- (B) For the Crooked River and the North Fork Crooked River, below Lame Dog Creek, the County will notify the Prineville BLM District Office of any change in land use within the proposed administrative boundary.**
- (C) Within six months after BLM and the Forest Service complete the management plan for the river, the County will (1) evaluate the outstandingly remarkable values, (2) identify conflicting uses, and (3) based on an ESEE analysis develop a program to achieve Goal 5. Until this work is completed, the County will rely on the Riparian Protection Ordinance as proposed to protect the resource. (Ordinance No. 71; 7/28/92)**

VII. Historic Areas

HISTORIC AREAS

It is the goal of Crook County to protect the historic areas of Crook County for future generations. This includes sites, structures and objects that have local, regional, statewide or national historical significance for future generations. Structures may be classified historical due to unique building, materials, construction technique or architectural style.

Historical resources are non-renewable and are of lasting interest to a community and society as being able to see and walk through homestead houses and barns, windmills and mine tunnels, can explain history better than history books. Historical sites always remain but the glamour is lost when all evidence is burned or otherwise destroyed (for example, the old Ochoco Inn site). Man's diligent workmanship is quite fragile and is endangered by fire, flooding, abandonment and natural weathering, relocation change in use or ownership, failure to meet building codes, vandalism and theft caused by uncontrolled public access. Archaeological sites are of extreme importance because these are often the only record of primitive man; these sites, however, are steadily being destroyed by amateur artifact hunters.

The Oregon State Historic Preservation Office, Parks and Recreation Branch of the Department of Transportation, holds the inventory of state archaeological sites. During review processes of state or federally funded projects, the state may take action to protect archaeological sites. Sources of grants-in-aid for historic preservation include: (1) State Highway Commission (matching funds for maintenance and operation of museums); and (2) Department of Housing and Urban Development (Historic Conservation Program, Open Space Land Program, and Urban Beautification Program).

The complete historic inventory includes pictures, specific locations, dates, names of builders and discoverers, present ownership, usage and condition, and references encompass more than 120 historic areas. This complete inventory was the basis for selecting the thirty-six (36) designated areas. The complete inventory is filed by the Crook County Historical Society in the A. R. Bowman Memorial Museum.

The following inventory information was added by Ordinance No. 71, July 28, 1992.

McCall Ranch - The McCall Ranch lies approximately three miles off O'Neil Road, northeasterly of Prineville. Originally constructed in 1911-15, it features the house, dairy barn, and horse barn. It is the boyhood home of former Governor Tom McCall and was built as a wedding present for Al and Dorothy Lawson McCall by Mrs. McCall's father, Thomas Lawson, who was widely known as the Copper King. The house was called Westernwold. Detailed information on this resource is available at the State Historic Preservation Office and the Crook County Planning Office. (Ordinance No. 71; 7/28/92)

The McCall Ranch has been determined to be a significant “IC” historic resource. (Ordinance No. 86; 12/8/93)

The following was also included in Ordinance No. 86, but the sections in which the information was to be placed do not exist. However, both paragraphs involve the McCall Ranch, and are appropriate to be placed here.

“Overall, demolition and exterior alterations are conflicting uses regarding historic structures, sites, and areas. The following ESEE analysis will apply to the McCall Ranch.”

“Conclusion. Based on the above ESEE analysis, the County designates the McCall Ranch as a “3-C” historic resource (limit the conflicting uses) under Goal 5.” (Ordinance No. 86; 12/8/93)

(Ordinance No. 71; 7/28/92)

Big Summit Prairie Historic Homes - There are a number of structures located on Big Summit Prairie, including the original log cabin school (built before 1897), the new Summit Prairie School (built in 1896 or 1897), and four large structures including the Lowrey Place (1985), the Merrit House (1906), Summit Prairie House (1906), and the Muddy Company Headquarters (approximately 1887) which currently serves as the headquarters for the Boston Ranch Company, the current owner of most of Big Summit Prairie. All information exists regarding the location and dates of construction of these structures.

No information currently exists on the current condition of these structures or whether or not they will still be considered historic structures. Therefore, they are designated as a 1-B resource and the Goal 5 process will be completed by the County when information becomes available, in accordance with Revised Goal 1, the Natural Resources Goal.

Prineville Railroad - The City of Prineville owns and operates the Prineville Railroad which runs from the City of Prineville to main railroad lines at Prineville Junction near the incorporated community of Terrabonne. The Prineville Railroad was constructed in 1917 to tie the City of Prineville into the newly constructed railroad lines running south along the banks of the Deschutes River to Bend from the City of The Dalles. Conversations with the Prineville City Administrator by phone on July 21, 1992, indicate the structures in the railroad lines have been modernized over the years and while the roadbed is essentially the same as it was in 1917, most of the facilities have been updated and the railroad should not be considered an historic resource. (Ordinance No. 71; 7/28/92)

Structures located within the Prineville Railroad line have been determined to be insignificant “1A” sites under the Goal 5 rule. (Ordinance No. 86; 12/8/93)

Additional Structures and Sites - The following structures and sites have been identified as potential historic resources; however, detailed information on quality and quantity is not available. Therefore, these are designated as 1-B resources.

Ranches and Houses:

Templeton House - T. 14 S., R 15 E., Sec. 26. On Gumpert Road, one (1) mile southwest of Lamonta, Prineville area.

The David Templeton House is a one and one-half story, wood frame building with a gable roof. This "T" shaped building has been altered significantly. New wings and additions have been made. The home was built in 1876 and is in excellent condition. Recorded on the state historical site inventory.

Bill Brown Ranch - T. 21 S., R. 24 E., Sec. 18. 30 miles south of Paulina, two (2) miles upstream from the mouth of Buck Creek.

Built in 1908. Was probably the largest individually owned and operated livestock ranch in the Northwest for its time (sheep and horses).

G.I. Ranch - T. 20 S., R. 23 E., Sec. 30. 25 miles southwest of Paulina, at the headwaters of the South Fork of Crooked River.

Settled in 1877 by John William Gilchrist. The Lost Wagon Train of 1845 passed through this area and camped here. This extensive ranch operation has continued, with some of the older buildings still standing.

Old Sugar Creek Ranch - T. 16 S., R. 24 E., Sec. 13. Nine miles northeast of Paulina at the confluence of Sugar Creek and Beaver Creek.

Included on the state inventory of historic sites. The William Noble family established the ranch in 1871, moving from Linn County. They lived in a crude log cabin until 1888 when Thomas Brennan hand hewed timbers for this house.

Faulkner Ranch House - T. 16 S., R. 23 E., Sec. 34. Near the Town of Paulina.

Was the first homestead in Paulina.

Castle Cabin - T. 18 S., R. 19 E., Sec. 32. Located on Bear Creek.

Owned and restored by the Bill McCormack family, dated 1882.

Summit Prairie Schmidt House - T. 14 S., R. 21 E., Sec. 18. Located on Big Summit Prairie, 30 miles northeast of Prineville.

Built approximately 1902 and was one of the most elaborate homes in Crook County. Contains six bedrooms, kitchen, dining room, sitting room, and smoking room. Sitting room was decorated with hand fashioned paneling.

Merritt House - T. 14 S., R. 21 E., Sec. 14. Located on Big Summit Prairie, 30 miles northeast of Prineville.

Built in 1906. A unique feature of this large, two-story home is two stairways to the second floor, without a single door connecting the two upstairs sections. The large back room was the community dance hall.

Cram or Breese Ranch - T. 14 S., R. 16 E., Sec. 2. Located three miles east on the Ochoco Highway.

Insufficient information.

Shumway Ranch - T. 16 S., R. 14 E., Sec. 28. Located on the south side of Powell Buttes on Shumway Road.

One of the largest sheep ranges in Central Oregon. An 800 foot long flume built in 1904 crosses a ravine on this ranch and is one of the last remaining examples of early irrigation superstructures.

Century Farm - T. 14 S., R. 16 E., Sec. 34. One (1) mile east of Prineville on the north side of Ochoco Highway.

Settled in 1868 by Samuel R Slayton. Only recorded Century Farm located in Crook County.

McCall Horse Barn - T. 14 S., R. 14 E., Sec. 21. Near O'Neil along Crooked River.

The horse barn on the former McCall Ranch (now the Schlosser Ranch) circa 1911-15, is a rectangular wood frame building with a gambrel roof. Two tall cupolas with louvers and four small gables are mounted on the roof. The exterior of the barn is narrow, lapped siding. The barn has bays on the north and south elevations. Both this barn and the dairy barn discussed previously are of Dutch-Colonial design.

Schoolhouses: Of the remaining old-time schools, Barnes Conat Basin, Combs Flat, Houston Lake, Suplee, Summit Prairie, Upper McKay, and Howard, the latter is the most structurally sound and located on the most protective site.

Howard School - T. 14 S., R. 18 E. Sixteen miles northeast of Prineville along Ochoco Creek, on the left hand side of the road to the Ochoco Ranger Station, about three miles from Highway 26 junction.

Built in 1879.

Mill Creek (First Schoolhouse) - T. 14 S., R. 17 E. Ten miles east of Prineville along Mill Creek.

The log schoolhouse was constructed in 1868. A frame schoolhouse, built in 1875, replaced the drafty log structure.

Summit Prairie - Thirty miles northeast of Prineville, on Big Summit Prairie.

The old Summit Prairie School was built in 1897(8).

Early Day Mining:

Mayflower Mine - T. 13 S., R. 20 E. Twenty-two miles northeast of Prineville, three miles northeast of the Ochoco Ranger Station.

Discovery of gold in 1871 and Crook County's only productive gold mine. Skeleton of the stamp mill remains. The town of Scissorsville was built at the base of the mine and reached a population of 1,700 people.

Maury Mountain Mines - On the north slope of the Maury Mountains about five miles south of Post.

Discovery in early 1930s. Best producing quicksilver mine in the area.

Stage Stops and Roads:

Beckman Place - T. 16 S., R. 14 E., Sec. 3. In the Powell Butte area, at the end of the Powell Butte-Bend highway where Shumway Road intersects.

The old red barn was a livery stable in the early 1900s.

Mark Carson or Glenn Place - T. 17 S., R. 21 E., Sec. 12. Approximately 30 miles southeast of Prineville, along the Paulina Highway at the confluence of Camp Creek and Crooked River.

Recorded on the state historic site inventory. The house is hand hewn log with a stone and clay fireplace built in 1884. The farmstead, complete with barn and other outbuildings, is a good example of early day homesteads. This was a stage stop and post office along the Willamette Valley and Cascade Mountain Wagon Road.

Camp Maury - T. 17 S., R. 21 E., Sec. 20. Thirty miles southeast of Prineville.

In 1864, three companies of the First Oregon Cavalry, under the command of Captain John M. Drake, explored the Crooked River Basin in the vicinity of Paulina for the purpose of establishing a supply depot for the protection of immigrants. It seems that renegade Paiute bands, including those led by Chief Paulina, had taken to harassing the newcomers. Three successive supply depots were established: Camp Maury, Camp Gibbs, and Camp Dahlgren. Only the site remains for Camp Maury. Colonel Watson was originally buried here after he was killed in battle against Chief Paulina. State Historical Inventory listing.

Prineville-Canyon City Road -T. 14 S., R. 18, 19, and 22 E.

1860s, the Canyon City Road was used as a shortcut by the pioneers and miners headed for the John Day region. This route was first known as the Ochoco and Canyon City Road. The road followed the Willamette Valley and Cascade Mountain Military Road east out of Prineville to the vicinity of the Keystone Ranch. At that point, the road to Mitchell continued up the south side of Ochoco Creek a mile or so before crossing to the north side. In T. 14 S., R. 18 E., Sec. 22, U.S. 26 follows Marks Creek up a grade, while the pioneer road continues up Ochoco Creek toward the Ochoco Ranger Station. The Ochoco and Canyon City Road leaves Ochoco Creek and goes up Canyon Creek just beyond the Ranger Station. The road went up Allen Creek Horse Camp in the Ochoco National Forest at the northeast edge of the prairie. While the old road is not visible from the present day horse camp, it can be seen about a quarter mile northeast of the camp, just below Forest Service Road No. 22. The old road closely follows Forest Road No. 22 to Scott Camp and leaves the County area.

Camp Gibbs - Insufficient information.

Farley Farm - Insufficient information.

Camp Watson Military Wagon Road - Part of Willamette Valley or Cascade Mountain Road.

Old Santiam Wagon Road - By the early 1960s, many people wanted to traverse the Cascade Mountains from the Willamette Valley to Central Oregon. Settlers wanted to fatten their cattle on the east side grass. Merchants and freighters desired to get supplies to the newly discovered gold mines of eastern Oregon and Idaho. Military men were asked to stop the murderous escapades of the Smoke Indians throughout the region.

The Willamette Valley and Cascade Mountain Road Company was founded in 1864 and, years later, the route became known simply as the Old Santiam Wagon Road.

The Old Santiam Wagon Road begins west of the Cascades and crosses the west border of Crook County at the level terrain south of the Crooked River all the way to Prineville.

Continuing east, the road went up Ochoco Creek through meadows from Prineville, an area which today is covered with fields which have obliterated the old route. About eight miles east of town, the road crossed the mouth of Mill Creek.

Beyond Mill Creek, near the mouth of Lawson Creek, the road crossed to the south side of the Crooked River about one mile west of the Keystone Ranch.

The road continued up Veazie Creek, Wickiup Creek (T. 14 S., R. 19 E., Sec. 20), Horse Heaven Creek (T. 16 S., R. 19 E., Sec. 2), Meadow Creek, Lost Creek, and Meades Sheep Rock Creek and the present Teaters Road. In about a mile, the old road crossed both Teaters Road and the North Fork of the Crooked River. The old road went over a divide and down a canyon to Old Faithful Reservoir on the Mervin Ranch.

A few miles north of Mervin Reservoir No. 3 (T. 16 S., R. 12 E., Sec. 29) is the site where Lieutenant Stephan Watson and two other soldiers were killed by Indians in 1864. Also north of the reservoir, an old military stockade was once constructed from juniper logs. Precisely who built the stockade is uncertain; one theory suggests it was the site of Camp Dahlgren, which was established by Captain John Drake, Watson's commander, in 1896. The camp was named for Colonel Ulric Dahlgren. The old stockade was also on the early military road which went north via Little Summit Prairie to Camp Watson.

The Old Santiam Road then went along Paulina Creek, Grindstone Creek, Coffee Creek, crosses Twelvemile Creek at the Howdin Ranch, and left the Crook County (current limits). The original parts of the road are visible in the following section (within the County area):

Camp Dahlgren – Camp Watson Road – also part of OLD SANTIAM WAGON ROAD. The only visible part of this road might be seen in the O'Neil area (T. 14 S., R. 14 E., Sec. 29 and 30).

Meek's Cut-Off (Huntington Road) - The route which had been used by Meek's Lost Wagon Train in 1845. This was the party famous for the role of the Lost Blue Bucket Mine, a site reportedly rich in gold nuggets but which has never been successfully rediscovered. By 1865, many of the Indians had been confined to either the Warm Springs Reservation or the Klamath Agency in southern Central Oregon. By treaty, the U.S. Government was obligated to supply the Indians with

supplies. In 1865, P. Huntington built a road from The Dalles to the Klamath Agency in order to get supplies to the reservation. Parts of this road were Indian trails which had already been used as a road. An example was the route from present day Bend to Madras, used by Meek's Lost Wagon Train. The Bend-Madras section was incorporated in Huntington's route which became known as the Huntington Road.

The description of the road begins at the Morrow-Keenan Ranch, 20 miles north-northeast of Prineville and about 15 miles southeast of Madras along Grizzly Road.

The Huntington Road went directly west from the Morrow-Keenan Ranch for over a mile through the fields south of Willow Creek. The old road then turned south and southeast to cross the present road from US. 26 to the site of Grizzly (this county road also is called Grizzly Road). The road intersected the present County road in T. 12 S., R. 15 E., Sec. 36, the old road continued west, passed by the Bonneville Power Administration's electric substation on Grizzly Road, continues along from Pine Creek and crosses the Crooked River at Forest Crossing. After Huntington Road crosses to the south side of the Crooked River, some confusion exists to its location and the exact location of the Huntington Road between the Forest Crossing and present county limits is not known.

The route from Bend to points north of Redmond was first used by part of Meek's Lost Wagon Train of 1845. Meek's party had split at the G.I. Ranch on the South Fork of the Crooked River after experiencing great hardships. One group followed the drainage of the Crooked River to beyond Prineville. The other went west to the Bend area before turning north. The two groups rejoined northeast of Madras.

The original parts of this road might be visible in the following sections of the Crook County area.

(Ordinance No. 71; 7/28/92)

HISTORIC AREA POLICIES

1. The Crook County Courthouse, A. R. Bowman Memorial Museum, Pioneer Log Cabin in Pioneer Park, McCall Ranch, Mill Creek Cemetery area and the Maury Cemetery-Glenn Place area shall be submitted to the State Advisory Committee on Historic Preservation for listing in the National Register of Historic Places.
2. Property owners of the designated sites shall be informed of the historic areas selected and programs shall be initiated on an individual basis in order to preserve the remaining historical structures or objects. Privacy from public trespass on the property owners land is of prime importance. Public agencies should investigate fee acquisition, easements, preferential assessment, development rights

acquisition, or any other technique that will enable preservation of the sites whenever they become endangered.

3. The Planning Department shall alert the Crook County Historical Society whenever a historical area is endangered. In the case that structures or objects will be torn down, the historical society shall be given first privilege to take pictures, record historical data and collect or purchase any artifacts that may be available.
4. The Crook County Historical Society shall make recommendations to the Planning Commission regarding the alterations of historical sites and structures. The recommendations shall be based upon an adopted set of standards pertaining to the preservation of historical areas.
5. Detailed information contained in the historic areas inventory on file at the A. R. Bowman Memorial Museum shall not be disseminated to the public at large, but it shall be available to local decision makers and historical researchers.
6. City and county governments may seek technical and financial assistance from all state and federal sources in order to protect, restore, or purchase significant historic areas that can fulfill the needs for parks, recreation or natural and scenic resources.
7. **The County shall develop and adopt a specific Zoning Ordinance procedure for reviewing proposed alterations or demolition of identified historic structures. (Ordinance No. 71; 7/28/92)**
8. **The County shall seek the aid and financial assistance of the State Historic Preservation Office to survey and analyze identified historic structures and resources within the County. (Ordinance No. 71; 7/28/92)**
9. Crook County Cemetery District shall consider purchase of all cemeteries currently under private ownership; this includes marking any unmarked graves of which there is record (Barnes, Newsome and Roberts).
10. Thirty-six historic areas (listing in Appendix) are designated for historic preservation by the Crook County Historical Society; these include school houses, stage stops, ranches and other historic landmarks and are designated on the Recreation: Historical: Natural: Scenic and Prineville Metro Historic Sites Maps.

Insert Map

Prineville Metro Historic Sites

VIII. Housing – Prineville Metro Area

IX. Natural Resources/Hazards and Development Limitations

NATURAL HAZARDS POLICIES

1. The county shall recognize the development limitations imposed by the carrying capacities of natural resources; i.e. surface and ground water capacities, soils, geology, etc.
2. Natural resource physical limitations shall be one of the primary evaluation factors for development approval. The carrying capacities thereof shall not be exceeded.
3. It shall be recognized that problem areas or hazards do not necessitate disapproval of development, but that higher development standards can be expected in order to minimize problems or hazards.
4. To maintain development costs at a minimum and to encourage the most efficient use of resources by guiding development to low hazard or physical limitation areas.
5. High density development shall be encouraged in areas having high carrying capacities and low physical limitations, and discouraged in areas having low carrying capacities and high or severe physical limitations. Thereof, the following criteria shall be considered:
 - (a) Slopes greater or less than 30%.
 - (b) Safe distance from rimrock scarps, talus debris and fractures.
 - (c) Sufficient quality and quantity of water.
 - (d) Location relative to floodplain channels, high ground water, unstable soils or geology, etc.
6. It shall be the developer/builder's burden of proof for determining the degree of hazard or physical resource carrying capacity.
7. Natural resource evaluations, hazard determinations, development effect and corrective measures shall be determined by a licensed/bonded consultant at the expense of the developer for proposed developments located in recognized hazard areas or areas with severe physical limitations.

WATER RESOURCES

The major sources of domestic and irrigation water for Crook County (excluding the reservoir systems) are the ground water aquifers associated with alluvial deposits (floodplain and terraces) in the Prineville Valley, Paulina Basin, Upper Crooked River Valley, Big Summit Prairie, South fork of the Crooked River (G.I. Ranch vicinity) and Camp Creek.

The Irrigation Suitability: Water Resources Map defines the floodplain and terrace alluvial deposits in Crook County and gives an estimate of the probable extent of the underground alluvial aquifers.

A detailed ground water study has been made for a limited portion (60 square miles) of the Prineville Valley by Robinson and Prince (1963); however, until a complete inventory study of ground water and recharge areas of the upper Crooked River and Ochoco Creek drainage basins has been made, the capacity of these alluvial aquifers remains largely unknown as does their potential to support development of any sort in the county.

Water potential outside of these alluvial aquifers is very limited. The remaining geologic formations are only capable of yielding very small amounts of water (1 to 8 gpm) and these generally occur as perched aquifers. Wells tapping these formations can sustain household use if the density of the development is low (less than 2 dwellings/acre).

Because of the limited water potential of these formations, an extensive system of small reservoirs has been constructed to supplement well water. They are most prevalent in the eastern portion of Crook County and are used primarily for irrigation purposes.

The following map descriptions correlate major geologic formations with water-bearing potential on the Irrigation Suitability: Water Resources Map. These are to be used as general guidelines with well log summaries providing more refinement for detailed site information.

Alluvium (alluvial valleys and terraces) - The most productive aquifer is the water deposited alluvial materials which usually are found at lower elevations and associated with surface water flows. Where these materials are saturated, and consist predominantly of silts, clays and sands, yields range from 20-50 gallons per minute. In areas where sands and gravels are most prevalent, yields of up to 1,000 gallons per minute may be expected.¹⁷

¹⁷David Beech, Hydrogeologist, Water Resources Department, (1976-77).

The most important source of ground water in the Prineville Valley is a single artesian aquifer consisting of a layer of sand and gravel that ranges in thickness from less than 10 to more than 30 feet. This permeable layer underlies the valley floor at depths ranging from less than 100 to about 300 feet and is known to extend through an area of at least 12 square miles.

An indication of the type of problems associated with these formations is stated below:

Pump tests performed on the Jasper Knolls wells indicate that they have developed from perched water aquifers within the Clarno (and John Day) formation. Wells developed within the Clarno (and John Day) formation characteristically are low yielding. Because of poor yielding characteristics, increased demand in the summer months can only aggravate the problem.¹⁸

It is strongly recommended that there be no expanded use of the Jasper Knolls water system over and above the 27 homes presently being served until additional sources of water can be developed. The loss of storage and low yield characteristics of the perched aquifers of the Clarno (and John Day) formation limit the pumpage rate of wells.

Ochoco and Maury Mountain Watershed Areas - To insure compliance with minimum water quality standards (established by DEQ), the U. S. Forest Service has designated 34,000 acres (not broken out in County statistics) of land adjacent to forest streams as Streamside Management Areas (SMU). Streamside management should also be located along areas outside of the U. S. Forest boundaries to insure that the watershed and recharge areas for the overall ground water supply are maintained in quality and quantity.

Watersheds - Research indicates there are five irrigation districts within Crook County which may use surface watersheds. Conversations with the manager of the Ochoco Irrigation District indicate there may be four watersheds used by other irrigation districts in the County; however, extensive research would be required. The other irrigation districts or companies are: People's Irrigation Company, Lowline Ditch Company, Crooked River Central District, and Central Oregon Irrigation District which is headquartered in Deschutes County. Due to time constraints, these are designated as a 1-B resource and the County will complete the Goal 5 process when information becomes available.

Through the Department of Land Conservation and Development and the Water Resources Department, it was learned there may be a surface watershed of the City of Prineville. Conversations with the City Manager of Prineville on July 9, 1992, indicate the city has no knowledge of this watershed and relies on wells for its domestic water. The City decided not to purchase a water right for reservoir water in conjunction with its new wastewater treatment plant. (See attached letter from David Evans & Associates.)

¹⁸Beech

Use and control of water resources in the County is subject to the provisions of the Lower Deschutes River Basin Program, Basin 5, as adopted by the State Water Resources Board on April 4, 1981. (Ordinance No. 71; 7/28/92)

Surface Water System - A general discussion of the surface water system is contained in the Overall Economic Development Plan. In addition, the appendix contains an inventory of water reservoir systems in Crook County; an inventory of stream flow mileage, and game fish species; and an inventory of lakes and impoundments.

Irrigable Lands and Water Resources - The majority of the existing identified irrigated agricultural lands in Crook County occur in the alluvial valleys and adjacent terraces of the Prineville Valley and the Paulina Basin. Major drainages such as the Upper Crooked River, Bear Creek, Camp Creek, McKay Creek, Allen, Mill and Ochoco Creeks all have irrigated lands.

Other potential agricultural lands have been identified by the general and detailed soil mapping. The Irrigation Suitability, Water Resources Map, addresses the ability of general soil types to sustain crops. It does not infer that water is available in sufficient quantity to develop the land or that it is economically feasible. Irrigable lands are shown as those areas presently under irrigated agriculture. Water resources are those surface storage, ground water and stream related water bodies presently developed or assessed for potential development.

The following table estimates the relative quality of irrigable and non-irrigable soils on the basis of irrigation suitability groups.

Table XV	
ACREAGE OF IRRIGATION SUITABILITY GROUPS FOR CROOK COUNTY	
(in thousands of acres)	
Group I – Excellent	49.7
Group II – Good	133.8
Group III – Fair	114.1
Group IV – Poor	293.6
Total	<u>591.2</u>
Group V – Non Irrigable	1,298.5

The purpose of identifying irrigated agricultural lands is to estimate the extent of these lands in Crook County, assuming that all land with available water is or has been recently under agricultural production. Based upon general soil capabilities, the extent of Crook County lands potentially available for irrigation and dry land agricultural use can be estimated. The map also indicates areas of known water reserves, and other areas that have ground water potential. For information regarding irrigation and water rights for land above Prineville Dam and those below but not included in irrigation districts, see BOR Special Report - Deschutes Project (1972).

Water is recharged to the ground water body from rainfall through upper connection with the flow of adjacent streams, old irrigation percolation. A great deal of rainfall may be lost to runoff due to impermeable nature of the Madras, Clarno and John Day Formations. There may be areas so impermeable that little or no recharge is received and even household extraction of

water may result in water level declines. The recharge to the artesian aquifer in the Prineville Valley occurs principally along the north side of the valley floor on the alluvial terrace. A small amount of recharge occurs from a downward leakage from the overlying unconfined aquifers. Water quality from perched zones will be high while that water developed from the ground water body will not be quite as high and in some instances may be unusable. Shallow ground water aquifers, like the alluvial valley fill at Prineville, are especially susceptible to bacteriological and chemical contamination. It is possible that the water quality within this shallow aquifer could deteriorate in time. Because of the varying aquifer characteristics, it is important that large production wells be pump tested for a period of 24-72 hours and recovery measurements made for an equal period. Such tests can provide data about the aquifer's ability to produce water on a sustained basis.

The following guidelines can be used to help curtail potential water problems in new developments.

1. The ground water supply (and its carrying capacity) shall be used as major criteria for evaluation of any growth policies in Crook County.
2. The water potential of major geologic formations can be used as a first approximation for the carrying capacity of the ground water system. It should establish whether or not the population projections to the year 2000 can be realistically supported, and whether or not all support active services needed for that population can be supplied, i.e. industrial, commercial development, housing, utilities, etc.
3. At present, there is insufficient data to estimate either carrying capacity of the county's water supply or the ability of the recharge areas to keep up with the increased demand as the county grows, even at the low estimate of 2% per year population increase. The ground water study of the Prineville valley needs to be updated and expanded to cover the remainder of the county.
4. Knowledge of the water potential of geologic formations will assist in predicting future problems of water supply to any area being developed.
5. Detailed well log information from the Central Oregon Watermaster can help further refine these general predictions of water potential in cases where recent wells have been drilled.
6. The carrying capacity of the water resources shall be determined as this capacity is the key to the survival of the community, its economy and growth potential.
7. The largest carrying capacity exists for the alluvial aquifers; the smallest carrying capacity for the formations outside of the alluvial valleys and terraces.
8. The alluvial valley and terraces are used as a first approximation for estimating the amount of irrigable agricultural land in the county.

Definitions

1. Aquifer - A geologic unit that is capable of transmitting and yielding appreciable amounts of water to a well. Normally, water flows in gravel, sand and silt strata, which have clay strata below (and above) to retain water. These strata act as “channels” for water to flow from the recharge area to major drainages and eventually the ocean.
2. Ground Water - Water that occurs under hydrostatic pressure below the land surface and completely saturates or fills all the pore spaces of the rock material in which it occurs.
3. Water Table – The upper surface of such a zone of saturation, if confined.
4. Confined Ground Water - An aquifer which underlies a less permeable layer that retards the upward movement of water.
5. Perched Aquifer - Closed water basins which are not connected with the regional ground water system. Water is trapped by impermeable strata (clay, etc.) and recharged only by rainfall in the immediate area. Common for the John Day and Clarno Formations.
6. Recharge - Refill of the regional ground water system.

WATER RESOURCE POLICIES

1. Crook County shall be established as a “critical water supply area” in order to initiate a detailed ground water and recharge area study through the Department of Water Resources or some other agency.
2. The Prineville ground water study shall be updated for the purpose of establishing the carrying capacity of the ground water system, especially the alluvial valley and terraces, setting an upper limit on additional development the county can support, and ensuring recharge areas are identified and reserved for water quantity and quality.
3. Population growth shall be encouraged in relation to the carrying capacity established during an average year based on normal precipitation and snow accumulation. Growth based upon maximum carrying capacities established during a high runoff/precipitation year would result in severe water shortages during an average year.
4. Streamside management, i.e. U.S. Forest Service model, shall be incorporated, for all private and public lands to insure the water supply remains in good condition.

5. Present irrigation systems (both agriculture and domestic) which utilize the ground water aquifers, shall be discouraged from utilizing potable water from any alluvial aquifer and required to obtain irrigation water from reservoir systems.

FLOODPLAINS

The 100-year floodplain is considered an area with potential for extreme hazard. Major impacts occur during flood stages in areas not protected by major reservoirs. This occurs especially in the Post-Paulina study area which is unprotected by flood control structures. There are 168 linear miles of classified floodplain along the Crooked River. The Prineville Metro Area has 320 acres within the floodplain. The 100-year floodplain is the minimum area which will be inundated by the base flood, i.e. a flood that has a one percent (1%) change of occurrence in any given years.

Crooked River, Ochoco Creek and their major tributaries comprise 99% of the flood area identified by Flood Hazard Boundary Maps for that portion of the county located on the maps. These maps were generated on the basis of topographic contours only, through a contract issued by the Federal Insurance Administration and its input has been used to date to refine these boundaries; this data is insufficient data to indicate floodplain areas especially in a semi-arid climate. Local knowledge was used to refine these areas; however, many small drainage tributaries of the major streams may have high flood hazard and erosion potential within localized areas. However, these localized flash flood conditions contribute insignificantly to flood conditions when channeled into the larger drainages. It should be recognized that many hazard areas may be partially, or totally, reclaimed through adequate engineering, especially where drainage can be provided within areas of high water tables. Many areas within the original Prineville soil survey have been drained and are no longer considered a problem. The original soil survey data sheets used to locate problems associated with high water tables, and poor foundation soils have been amended on the basis of local experience. High water table problems exist only in the summer months; other times of the year do not have the problem. Flood Rate Maps (not available at this date), will, however, be based upon these maps and could refine the flood hazard boundaries using engineering principles.

The last 100-year magnitude flood occurred in 1965. At that time both Ochoco and Prineville Reservoir dams contained the flood waters and minimized their impact below the dams. The largest flood on record (May 8 & 9, 1956) was used to produce the floodplain map for that portion of Ochoco Reservoir and the Crooked River. A flow of 2,500 cfs was estimated for the flood waters. Ochoco Reservoir dam prevented major flooding downstream during this flood; however, "...should a more intense rainstorm occur in late spring or early summer when the reservoir is nearly full, as happened in the May, 1956 flood, downstream flooding could be expected" (Ochoco Creek Floodplain Study).

In the Prineville area, the Crooked River will contain a flood stage of 8 to 10 feet if no backup is produced by natural debris dams. The most critical areas are approximately three (3) miles south of town where a terrace forces the river channel to the base of the rimrock slope and

at the Crooked River Bridge (West Third). Should a debris dam occur at either of these locations, the town could be flooded. It should be noted that maximum erosion and deposition, and river meandering occur during flood stages. New river courses are formed and old ones abandoned. Bank erosion and water damage must be planned for and can occur more than once per 100 years.

It shall be the purpose of resource information and maps within this document to recognize the 100-year floodplain areas as the minimum areas which could be inundated by flood, and to require strict controls for development near or presently within them. High density development shall occur as far from the floodplain as possible, while building and engineering requirements, such as drainage systems, minimum flow elevations, and diking shall be required within areas that could potentially have high water problems. Construction standards established by the Federal Insurance Agency for Emergency Program Aid shall be observed; these include: 1) proper anchoring of structures; 2) use of construction materials that will minimize flood damage; 3) adequate drainage for new subdivisions; 4) new or replacement utility systems are to be located and designed to preclude flood loss; and 5) all new construction or improved/repai red structures in flood hazard areas are to be elevated or flood-proofed to the 100 year elevation.

It is necessary to identify and maintain floodways in their natural undeveloped condition in order to minimize meander and bank erosion damage, to provide an unobstructed channel for flood waters, to provide conditions for minimum velocity and streams flow, and to reduce flood damage in areas not protected by flood control structures. The portion of the floodplain nearest the stream channel shall be considered best suited for grazing, hay and grain fields, orchards, truck gardens, nurseries or other open space agriculture; parks, playgrounds, golf courses, ball fields, or other recreation not involving structures; locations of utility lines; and for storage during non-flood seasons. Fragile soils and geologic formations subject to high erosion shall be protected. Development, off-road vehicle use, recreation, and overgrazing shall be discouraged. The resource information shall identify areas with high water tables, and soils unsuitable for foundations, and identify areas where problems caused by high ground water and poor foundation soils and subsequent septic failure will result in pollution of ground water supplies. Adequate measures shall be taken in these areas to avoid all problems associated with septic tank disposal.

FLOODPLAIN POLICIES

It shall be the policy of Crook County to recognize the 100-year floodplain areas as the minimum areas which could be inundated by flood, and to require strict controls for development near, or presently within them. The following shall be considered in relation to development in floodplain areas:

1. High density development shall occur as far from the floodplain as possible.
2. Building and engineering requirements such as drainage systems, minimum floor elevations, and diking as set forth by federal regulations shall be required within areas that could potentially have high water problems.

3. Construction standards established by the Federal Insurance Agency for Emergency Program Aid shall be observed; these include:
 - (a) Proper anchoring of structures.
 - (b) Use of construction materials that will minimize flood damage.
 - (c) Adequate drainage of new subdivisions.
 - (d) New or replacement utility systems are to be located and designed to preclude flood loss.
 - (e) All new construction or improved/repaired structures in flood hazard areas are to be elevated or flood-proofed to the 100-year elevation.

It shall be the policy of Crook County to identify and maintain floodways in their natural undeveloped condition in order to:

1. Minimize meander and bank erosion damage.
2. Provide an unobstructed channel for flood waters to provide conditions for minimum velocity and stream flow.
3. To reduce flood damage in areas not protected by flood control structures.

The portion of the floodplain nearest the stream channel shall be considered best suited for:

1. Grazing, hay and grain fields, orchards, truck gardens, nurseries, or other open space agriculture.
2. Parks, playgrounds, golf courses, ball fields, or other recreation not involving structures.
3. Locations of utility lines.
4. Storage during non-flood seasons.

HIGH WATER TABLE - PRINEVILLE AREA

Soils within the Prineville area whose water table is less than six (6) feet from the surface are identified by the Physical Limitations Map. Boyce, Crooked and Forester soils indicate seasonally high water tables. Water is normally encountered at depths between one and three feet during the summer months, July through September. Water may also occur on the surface. The soils predominate in low or nearly level areas on floodplains, old stream channels, sloughs, oxbows and adjacent low terraces. Metolius and Powder soil series also indicate seasonally high

water tables of lesser degree. The existing soil surveys do not recognize these soils as problem areas. However, they are recognized as contributing to high ground water problems because of local experience. These soils are located along the Crooked River Valley, Crooked River Canyon, and at the base of Juniper Canyon. Seasonally high water table problems are caused by spring runoff of snow melt, by flood and sprinkler irrigation, and by soils with high enough clay content to make them impervious to ground water flow.

The general soil boundaries indicating ground water problems have been further modified by engineering practices such as diversion canals, drainage ditches, and interceptor drain tiles. The areas indicated as having extreme, or moderate high water tables present problems for foundations, underground utilities, septic tanks, wells and adequate drainage. These problems may be partly or totally solved by using engineering techniques; consequently, increased development costs can be expected.

POOR FOUNDATION SOILS - PRINEVILLE METRO AREA

There are approximately 760 acres of soils poorly suited for foundations in the Prineville Metro Area. These soils, also located within areas of high water tables, create additional limitations for sewers, water systems, and other underground utilities; severe limitations also exist for roadways because of the soils' high shrink-swell characteristics. Problems associated with these soils include foundation cracking, settling and water damage to structures, and underground utility systems thus resulting in pollution of groundwater.

SLOPE

Slope percent classes have been developed county wide, using slope soil associations (Slope/Soil Composite Map). The Slope/ Soil Composite Map has been derived by mapping topographic contours. The slope classes describe the range of slope and can be used along with the original topographic maps as an aid in identifying landscape limitations /roughness of terrain. Steepest slopes (in excess of 30%) generally pose higher development and maintenance costs for structures and utilities, although modern engineering technology and design may alleviate some or all of these limitations. Steep slopes are commonly characterized by shallow rocky soils, high erosion potential, mass movement, septic tank limitations and low agricultural potential.

SEPTIC TANK SUITABILITY

Septic tank-drainfield system approval by the Crook County Health Department is based on soil type or texture, depth of soil (minimum of 18"), topography, slope (maximum of 25%), depth to restrictive or impervious layers, depth to water table, existence of perched water tables, location of wells, lakes, streams, etc., and general environmental and physical characteristics of the land.

The Crook County Health Department requires an onsite subsurface sewage disposal evaluation, approval and permit whenever an individual sewage disposal system is the proposed method of sewage disposal. An approval and evaluation is required prior to approval of a

partitioning, a subdivision, a building permit, a mobile home installation, etc., if an individual sewage disposal system is the proposed method of sewage disposal.

The septic tank suitability maps give an indication of which areas in the county and Prineville valley do and do not have the probability to support septic tank facilities. They can be used for planning purposes as a determinant for allowed population densities or for expansion of particular areas. Site specific analysis is necessary for indications of suitable septic tank locations. The septic tank suitability maps were derived by identifying specific soils with general soil units and determining suitability of these soils by correlating Health Department criteria with soils information (S.C.S. Oregon I Soil Sheets); percents of soils suitable for septic tanks were thus determined.

AGGREGATE

The inventory of aggregate removal sites included is primarily based upon the inventory submitted to the U. S. Department of Agriculture by George Ross of the Prineville Soil Conservation Service Office. This inventory was conducted during the spring of 1977. Eight removal sites are reported for Crook County Road Department use as follows: 1) Camp Creek owned by Les Schwab; 2) Grass Butte owned by the State of Oregon, Crook County owning mineral right (cinders); 3) Myers Butte (cinder); 4) Juniper Canyon owned by the BLM; 5) McKay Creek owned by Hudspeth and Ovens; 6) Congleton Ranch near Paulina, the county does not plan to use it anymore; 7) Bear Creek (inactive); and 8) Jones Ranch. See Appendix IV for all legal descriptions of sites and Oil: Geothermal: Mineral: Quarry Map.

The City of Prineville has two stockpile sites, but all of their road building material is purchased. The State Highway Department utilizes four primary removal sites. Two are located along the Paulina Highway at mileposts 32 and 38. Grass Butte (cinder) and where the Oregon/California power interite crosses the Redmond Highway are the other two sites. Additional material sites inventoried by SCS are: Spears Meadow, Bandit Springs, Lookout Range, Ochoco Dam, Combs Flat, Eagle Rock, and Beaver Creek. The Ochoco National Forest records 75 abandoned gravel pits and 25 active gravel pits, none of which are plotted on the map. Primary removal sites located on BLM land are: 1) Grote (cinder); 2) Taylor Butte; 3) Horse Butte; 4) Summit Prairie, and 5) Dry River. Four removal sites in the county are privately owned. They are: 1) Lone Pine; 2) O'Neil; 3) Modular crushing plant site and 4) pit at milepost 3-1/2 located on Combs Flat Road.

This aggregate inventory does not reflect an in-depth study of available material site capacities nor does it accurately differentiate between removal and stockpile sites. The office of BLM has more detailed information concerning aggregate sites in Crook County.

Subsequent to the original adoption of this Comprehensive Plan, mineral and aggregate resources became a major land use planning issue in Crook County. As an identified Goal 5 resource, a number of sites were identified and became the subject of numerous ordinance amendments to this plan. Because of the voluminous nature of the text material, that information is contained in Appendix II. What follows is a simple listing of all the sites beginning with Ordinance No. 43 through Ordinance No. 120.

ID NO.	LOCATION NAME
3C3-GRV-7	Williams (Ochoco Ready Mix)
3C3-GRV-8	O'Neil Sand and Gravel
3C3-GRV-3	Prineville Sand and Gravel
3C-SAN-1	O'Neil and Gravel
3C-SAN-2	Prineville Sand and Gravel
3C-CIN-1	Oreg. State Hwy Div. #7-4-4

- c. **The following is a list of 3C sites in Crook County concerning which Crook County has completed a Generic ESEE analysis, and as a result of that analysis has designated them as 3C Sites. The Goal 5 process is completed for these sites.**

These 3C sites have actual or potential conflicting; uses, or conflicting applicable requirements of other statewide Planning Goals:

ID NO.	LOCATION NAME
3C1-BAS-17	Alves #1 (Northwest Basalt)
3C2-BAS-24	Modular Crushing
3C3-BAS-29	Hackelman (County)
3C-BEN-3	Coats
3C-BEN-3	Alaska Pacific
3C-BEN-3	Central Oregon Bentonite (Weaver)
3C-BEN-3	Oregon Sun Ranch (Evergreen Bentonite)

- d. **The following is a list of 3C sites in Crook County concerning which Crook County has completed a site-specific ESEE analysis on each resource site and as a result of that analysis has designated them as 3C sites. The Goal 5 process is completed for these sites.**

These 3C sites have potential or actual conflicting uses, or conflicting applicable requirements of other Statewide Planning Goals:

ID NO.	LOCATION NAME
3CI-BAS-19	Coats #2 (Northwest Basalt)
3CI-BAS-21	Krider #1
3C1-BAS-22	Krider #2

3CI-GRV-10	Pieratt
3C3-GRV-11	Bernard
3C3-GRV-12	Bend Aggregate & Paving
3C3-GRV-13	Raasch
3C3-GRV-14	R & R
3C3-GRV-15	Keudell
3C3-GRV-16	Breese
3C3-GRV-17	Williams
3C3-GRV-18	UCON, INC.
3C3-GRV-19	Phillip Schlosser
3C3-GRV-20	Ty and Linda Fehrenbacher
3C3-GRV-21	Albert R. Kilpatrick
3C-SAN-3	Pieratt

NOTE: The Oregon State Highway Division uses an internal three-part number to designate its sites; the three parts are respectively:

For example Crook County's 1C1-BAS-1 site is an Oregon State Highway Division site that is identified internally by the Division as site #7-3-4. The "7" signifies _____; the "3" signifies _____, and the "4" signifies _____.

B. IC Sand (SAN) Resource Inventory

ID NO.	LOCATION NAME
ICn-SAN-1	O'Neil Sand and Gravel
1Cn-SAN-2	Prineville Sand and Gravel
1Cn-SAN-3	Pieratt
1Cn-SAN-3	Williams
ICn-SAN-3	UCON, INC.
ICn-SAN-3	Phillip Schlosser

C. IC Gravel (GRV) Resource Inventory

ID NO.	LOCATION NAME
IC2-GRV-1	Oregon State Highway Division #7-13-4
1C1-GRV-2	Oregon State Highway Division #7-41-4
ICI-GRV-3	Oregon State Highway Division #7-38-4
IC2-GRV-4	Oregon State Highway Division #7-36-4
IC1-GRV-5	Oregon State Highway Division #7-25-4
ICI-GRV-6	Oregon State Highway Division #7-9-4
IC1-GRV-7	Phillip Schlosser (Ochoco Ready Mix)

IC3-GRV-8	O'Neil Sand and Gravel
1C3-GRV-9	Prineville Sand and Gravel
1C1-GRV-10	Pieratt
1C3-GRV-11	Bernard
1C3-GRV-12	Bend Aggregate and Paving
IC3-GRV-13	Raasch
1C3-GRV-14	R & R
IC3-GRV-15	Keudell
1C3-GRV-16	Breese
1C3-GRV-17	Williams
IC3-GRV-18	UCON, INC.
IC3-GRV-19	Phillip Schlosser
1C3-GRV-20	Ty and Linda Fehrenbacher
IC3-GRV-21	Albert R. Kilpatrick

D. IC Cinders (CIN) Resource Inventory

ID NO.	LOCATION NAME
1Cn-CIN-1	Oregon State Highway
1Cn-CIN-2	Pieratt

E. IC Bentonite (BEN) Resource Inventory

ID NO.	LOCATION NAME
1C-BEN-1	Coats
1C-BEN-2	Alaska Pacific
1C-BEN-3	Central Oregon Bentonite (Weaver)
1C-BEN-4	Oregon Sun Ranch (Evergreen Bentonite)

MINERALS, OIL, GEOTHERMAL & BENTONITE

Historically, the primary mineral exploration in the county has been for quicksilver (Mercury). Five areas have been the most productive: 1) Maury Mountain Mine (see Historic Areas Inventory); 2) Ochoco Creek Area (Byram/Oscar, Staley, Champion and Taylor Ranch Mines); 3) Johnson Creek Area (Independent, Mother Lode, Amity, Blue Ridge and Round Mountain Mines); 4) Kidnap Springs Area (Strickland Butte Mine); and 5) Bear Creek Area (Oronogo and Platner Mines). Three areas referred to in Bulletin 55 entitled Quicksilver in Oregon, published by the State of Oregon Department of Geology and Mineral Industries, are the Humbolt Mine located near the northern county line along Highway 26 to Mitchell, Gray Prairie Prospect located in the Ochoco National Forest south of Lookout Mountain and Moore Prospect located on Riverside Ranch. No area in Crook County is currently active with quicksilver mining.

Ochoco Creek also historically was an active site for gold and silver exploration. However, only the Mayflower Mine was a success. (Refer to Historic Areas Inventory). Traces of Uranium, Manganese and other elements are found in the county also. See Oil: Geothermal: Mineral: Quarry Map. Currently, the most active exploration in the county is for semi-precious gemstones. See “Geological Areas”, Natural/ Scenic Buffer Areas, Chapter VI, and Recreation: Historical: Natural: Scenic Map. Oil exploration has accompanied the search for these minerals. In 1958 an oil well was drilled by Sunray-Midcontinent and Standard Oil of California in the vicinity of Sherwood Creek south of Post. The rotary drill discovered gas deposits at 3980-4020 feet and the drilling operation stopped at 7919 feet. See Oil: Geothermal: Mineral: Quarry Map.

No geothermal exploration has been conducted within the county, but the U.S. Geological Survey records two hot springs on a 1975 revised Geothermal Land Classification Map. These include a 60-87°F spring on the Hackleman Ranch and a hotter spring, 116-122°F spring on the Weberg Ranch at Suplee. The U.S. Geological Survey also designates about 163,200 acres of land between these two hot springs as lands prospectively valuable for geothermal resources.

Bentonite is a very fine particle clay that is refined from clays found in the John Day Formation. The most active processing of Bentonite is done by Central Oregon Bentonite Company, sold for kitty litter, on the Weberg Ranch located on Camp Creek.

MINERAL AND AGGREGATE POLICIES (Ordinance No. 51; 9/16/91)

Goal: To provide for the protection and use, both current and future, of the mineral and aggregate resources of the County consistent with statewide land use planning goals, and its administrative rules, while minimizing any adverse impacts to the surrounding area.

Policies:

- (1) The County shall use the requirements of Goal 5 to conserve and protect, consistent with legal opinions of the State and as Court decisions may dictate. As defined in the statewide planning goals the meanings of:
 - (a) Conserve: is to manage in a way which avoids wasteful or destructive uses and provides for future availability.
 - (b) Protect: is to save or shield from loss, destruction or injury or for future intended use.
- ~~(2) Deleted by Ordinance No. 55; 2/26/92~~
- (2) The County shall review, as part of each periodic review process, the status of mineral and aggregate resources in the County.

- (3) The County shall insure that significant inventory sites are designated for mineral and aggregate.
- (4) ~~In order to be placed in the County's Goal 5 resource inventory list, the site must have received a designation as a "significant site" based on location, quality and quantity of the resource. All significant sites must have an ESEE analysis completed in order to resolve any conflicts. (Ordinance No. 55) An abundance of a Goal 5 mineral or aggregate resource shall not be used as the basis to deny placement on the County plan inventory list.~~
- (5) The County shall participate in a regional needs analysis when adjoining Counties agree upon such an approach and sufficient funding is available to complete such a project. The analysis shall only be used as a tool to assist local governments in determining whether additional inventory sites need to be designated.
- (6) A mineral and aggregate resource site that is not on a Crook County Goal 5 inventory or that is listed as a 1B site shall be placed on the inventory of significant sites and shall be conserved and protected for surface mining after all the following conditions are met:

 - (a) A report is provided by a certified geologist, engineer or other qualified person or firm verifying the location, type, quantity and quality of the resource.
 - (b) The site is determined to be a significant 1C site after reviewing all available evidence the regarding location, quality, and quantity of the mineral and aggregate resource and the site is added by amendment to the comprehensive plan; and
 - (c) There are no conflicting uses of the ESEE analysis results in a determination that the resource is important relative to conflicting resources, uses and thither applicable statewide planning goals and policies.
- (7) Extraction of mineral and aggregate is a temporary consumptive use of land, therefore, it is imperative that not only care is taken in the mining process, but the site is reclaimed for future use.
- ~~(9) Deleted by Ordinance No. 55; 2/26/92~~
- (8) On an interim basis, notification and a conditional use hearing is required for any non-resource dwelling proposed within one-fourth (1/4) of a 1-B site to limit conflicting uses until an ESEE analysis has been completed.
- ~~(11) Deleted by Ordinance No. 55; 2/26/92~~

(9) Crook County’s plan policy is to classify, each significant resource site according to current available data on location, quality and quantity, and regulate each site according to its classification. Crook County will not allow expansion of any site without additional data. Therefore, in order to expand mining operations on a mineral or aggregate site into an area not currently designated for mining, the operator must provide the best information available regarding quantity, quality, and location of the resource in the proposed expansion area to update plan data. An ESEE analysis shall be required if the expansion area is found to be a significant Goal 5 resource based on location, quality, and quantity information.

~~(13) Deleted by Ordinance No. 55; 2/26/92~~

(10) A mineral or aggregate resource site designated for mining in the comprehensive plan ESEE analysis may be mined when a permit is obtained in accordance with the standards of permit review.

~~(15) Deleted by Ordinance No. 55; 2/26/92~~

~~(16) Deleted by Ordinance No. 55; 2/26/92~~

~~(17) Deleted by Ordinance No. 55; 2/26/92~~

(11) Decisions of the County in determining the significance of a mineral or aggregate resource site, identification and analysis of conflicting uses, and development of a program to achieve Goal 5 with respect to the resource site shall be consistent with state law. To the extent feasible, mitigation of the effects of mining on other uses of land shall occur as part of the development of a program to achieve Goal 5 with respect to the resource site. These decisions of the County shall be based on substantial evidence. (Ordinance No. 55)

WILDLIFE

The Oregon Fish and Wildlife Commission provides statistics on population and habitat status to all public agencies in Crook County. This information is used as base data for wildlife resources. Detailed descriptions of populations and habitats are available from B.L.M., U.S.F.S. and Oregon State Fish and Wildlife. The status of wildlife populations in Crook County and the number of acres required for their respective habitats are outlined in Appendix VI. This data was collected in 1970 which is cited as an average population year for most species.

Major big game species are mule deer, pronghorn antelope, and Rocky Mountain elk. Optimum habitat requirements for these species include adequate water, forage and a variety of vegetation cover for thermal protection, hiding and fawning purposes. Detailed habitat requirements for elk, antelope and deer are included in Appendix VI. The general winter range

locations for these wildlife species, as well as for waterfowl nesting habitat, are plotted on the Wildlife Resource Map. Because deer winter range covers most of the county, only crucial winter range was mapped. Even though herds may use only portions of these areas during the year, year-round range condition is essential for survival. Big game herds must have good summer forage to survive even mild winters without substantial loss. A total of 215,200 acres have been designated as crucial deer winter range; 323,200 acres as elk winter range; and 227,840 acres as antelope winter range and 44,800 acres as waterfowl nesting areas.

Data showing nesting locations of endangered bird species has been retained on file in the Prineville City-Crook County Planning Office. The Oregon Fish and Game Commission should be contacted for detailed site analysis. Appropriate wildlife specialists should be contacted if lands under the jurisdiction of other public agencies are involved.

The Peregrine Falcon is the only bird species classified on the endangered list that has been reported on Ochoco National Forest lands. However, the U.S.F.S. suggests that the Veary should also be protected. Even though the Veary has a low vulnerability, it is one of the rarest birds in Eastern Oregon. The Western Spotted Frog, and the Red Tailed Hawk, while considered rare in other areas, are considered common in Crook County by the U. S. Forest Service and B.L.M. However, both agencies favor preservation of the habitat (cool, moist springs), for the large number of species which also utilize it. Bird and mammal species identified as endangered, threatened or highly vulnerable are listed in Appendix III (identified by state and federal agencies).

Information for fisheries is included in Appendix III. Fishery recreational use is discussed in Chapter III on "Recreation".

It is the purpose of the resource maps to identify wildlife resources on a general scale and to delineate species habitat requirements for preservation. The areas outlined are considered potential, as well as existing habitat, even though there may be few, or no species within them at the present time, i.e. elk in the Maury Mountains. All mapped habitat areas could fulfill wildlife needs if animal species were utilizing them. The general nature of the winter range, waterfowl nesting areas, and lack of specific locations on nesting sites, however, requires that the Fish and Game Commission be contacted for any matter which could affect existing or potential wildlife habitat.

FISH AND WILDLIFE AREAS AND HABITATS

The following information was provided by the Oregon Department of Fish and Wildlife in 1990. Big game that are considered sensitive in the County are mule deer, Rocky Mountain Elk, and Pronghorn Antelope. Deer populations have declined during the past few years, primarily because of the drought and severe winter weather conditions. Population levels in the County are currently 45-65 percent of ODFW's management objectives. With improved weather conditions, deer populations are expected to increase and again reach management objectives. Elk and antelope numbers have been increasing at a moderate pace during the past ten years. See the table below for the current (1990) population estimates. Improved aerial surveys, telemetry studies, and personal

communication with various landowners have provided additional information on the distribution of elk in Crook County. This information has been used to update the elk winter range maps for the County. Additional survey information and the use of larger scale maps have also permitted minor modifications on deer and antelope winter range maps to improve their accuracy. Small numbers of Black Bear and Cougar also exist in the County. Their numbers have been increasing slowly over the past ten years.

<u>Species</u>	<u>Number</u>
Mule Deer	12,660
Rocky Mountain Elk	1,500
Pronghorn Antelope	1,400
Black Bear	35
Cougar	14

The Oregon Department of Fish and Wildlife has provided the County with detailed maps indicating big game winter range within the County. These have been compiled onto composites to show the overall impact on the County. There is a vast amount of acreage involved. Rocky Mountain Elk winter range includes 580,685 acres. The antelope winter range includes 280,425 acres. The mule deer winter range includes 861,066 acres with 354,445 acres listed as Critical Winter Deer Range. The methodology in deriving these numbers is simply after the composites were created to use a computerized planimeter to estimate the total acreages involved. It is noted that the big game ranges overlap each other significantly and should not be taken as separate totals.

Crook County in its acknowledged Comprehensive Plan contains policies for the protection of wildlife habitat, including Wildlife Policy 2 which states “Density with a Crucial Wintering Area for deer shall not be greater than one residence per 160 acres and for the General Winter Range not more than one residence per 80 acres.” Wildlife Policy 3 states “Elk wintering areas shall not have more than one residence per 320 acres.” However, these policies are not carried over into the Crook County Zoning Ordinance. Therefore, there is the potential for conflicting uses at the present time.

Conflicting Uses

The most significant conflicting use to big game habitat in Crook County is an increase in density of residential dwellings in the habitat area. There are economic, social, environmental, and energy consequences involved with the potential conflicting use.

Economic Consequences

The Oregon Department of Fish and Wildlife has indicated Crook County generated approximately three million dollars of economic activity for big game hunting in the year of 1987. Loss of habitat will significantly reduce the number of big game and have a direct impact on the economic benefits derived from big game hunting.

Social Consequences

Loss of big game habitat will reduce the social values achieved by Crook County over the long term. The County is famed for its rural lifestyle and the attendant social values that accompany that lifestyle. In the long term, reduction of big game habitat will lessen those social values.

Environmental Consequences

Loss of big game habitat will result in degradation of other factors of the environment with the decrease in numbers throughout the food chain.

Energy Consequences

Increased residential dwelling development in the big game habitat areas generally causes scatteration of distribution systems for energy, resulting in more costly energy prices for the consumer.

Program To Achieve The Goal

In order to protect the big game habitat, the Comprehensive Plan policies must be carried over and enacted directly into the County Zoning Ordinance for the EFU-1, EFU-2, EFU-3, and F-1 zones.

By placing the density requirement standards in the specific resource zone, the acknowledged exception areas are exempted from these requirements.

RIPARIAN AREAS

Riparian areas provides needed habitat for wildlife and fish in the Class I and II streams within the County. The Oregon Department of Fish and Wildlife provided a series of maps showing the riparian habitat areas throughout the County. These have been reproduced on a composite map showing the location within the entire County.

Conflicting Uses

The most significant conflicting use is destruction of existing vegetative cover within the identified riparian areas. This normally happens through residential development within these areas.

ESEE Analysis

Economic Consequences: Loss of riparian habitat would cause a reduction in fish production in Class I and II streams and impact water quality.

Social Consequences: Loss of riparian habitat would reduce recreational opportunities in Crook County for fishing and other small game habitats.

Environmental Consequences: Loss of riparian habitat would diminish water quality, increase erosion potential along Class I and II streams, and diminish the ecology of Class I and II streams.

Energy Consequences: Loss of riparian habitat could cause a degradation of the stream banks which may diminish production of hydro energy downstream.

Program To Achieve The Goal

In order to protect the riparian habitat, a specific riparian habitat protection requirement will be added directly into the County Zoning Ordinance as Section 4.180.

(Ordinance No. 71; 7/28/92)

SENSITIVE BIRD HABITAT (Ordinance No. 124; 5/27/93)

BIRD SITE INVENTORY									
Crook County Sensitive Bird Sites									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
101.00	1	Houston	14-15-20-100	227.17	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.00	1	Houston	14-15-20-400	134.50	Developed	EFU2	Golden Eagle	Nest	Private
101.00	1	Houston	14-15-21-101	253.36	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.00	1	Houston	14-15-21-101	111.10	Developed	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-20-100	227.17	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-20-400	134.50	Developed	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-21-101	253.36	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-21-101	111.10	Developed	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-20-100	227.17	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-20-400	134.50	Developed	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-21-101	253.36	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-21-101	111.10	Developed	EFU2	Golden Eagle	Nest	Private
103.00	4	Powell Buttes	16-14-0-2300	320.00	Undeveloped	EFU-3	Golden Eagle	Nest	Private
103.00	4	Powell Buttes	16-14-0-2303	613.05	Undeveloped	EFU-3	Golden Eagle	Nest	Private
103.00	4	Powell Buttes	16-14-0-300	720.00	Undeveloped	EFU-3	Golden Eagle	Nest	Private
107.00	5	Drake Butte	17-20-0-1700	640.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public
107.00	5	Drake Butte	17-20-0-1800	640.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public
107.00	5	Drake Butte	17-20-0-1900	10641.24	Undeveloped	F-1	Bald Eagle	Roost	Private & Public
107.00	6	Drake Butte	17-20-0-1700	640.0	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public
107.00	6	Drake Butte	17-20-0-1800	640.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public

Crook County Sensitive Bird Sites -- Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
107.00	6	Drake Butte	17-20-0-1900	10641.24	Undeveloped	F-1	Bald Eagle	Roost	Private & Public
111.00	7	Mud Spring	15-24-28				Bald Eagle	Roost	Private
112.00	8	Pilot Butte	15-18-0-100	11837.40	Undeveloped	F-1	Bald Eagle	Roost	Private
112.00	8	Pilot Butte	15-18-0-1600	320.00	Developed	F-1	Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-1100	597.60	Undeveloped		Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-1200	240.00	Undeveloped		Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-132	320.00	Developed	EFU-1	Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-135	1097.85	Undeveloped	F-1	Bald Eagle	Roost	Private
113.00	9	Ochoco River	15-17-5-1000	15.30	Undeveloped	EFU-2	Bald Eagle	Roost	Private
113.00	9	Ochoco River	15-17-5-1000	17.64	Undeveloped	EFU-2	Bald Eagle	Roost	Private
113.00	9	Ochoco River	15-17-5-1100	264.00	Undeveloped	EFU-2	Bald Eagle	Roost	Private
116.00		Hensley Butte	13-16-0-4000	724.50	Undeveloped	EFU2	Bald Eagle	Nest	Private
116.01		Hensley Butte	13-16-0-4000	724.50	Undeveloped	EFU2	Bald Eagle	Nest	Private
118.00	10	Mud Spring	15-24-0-100	17458.35	Undeveloped	FU1 & F1	Bald Eagle	Roost	Private
118.00	10	Mud Spring	15-24-0-101	160.00	Undeveloped	F-1	Bald Eagle	Roost	Private
118.00	10	Mud Spring	15-24-0-400	200.00	Developed	F-1	Bald Eagle	Roost	Private
118.00	10	Mud Spring	15-24-0-401	236.60	Developed	EFU-1	Bald Eagle	Roost	Private
118.00	11	Mud Spring	15-24-0-500	320.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private
121.00	13	Foley Butte	12-16-0-100	11849.24	Undeveloped	F-1	Bald Eagle	Nest	Private
121.00	13	Foley Butte	12-16-0-400	320.00	Undeveloped	F-1	Bald Eagle	Nest	Private
122.00	14	Grizzly Mtn	13-15-0-2000	800.00	Undeveloped	EFU2	Bald Eagle	Nest	Public
123.00	15	Post	16-19-0-100	9647.44	Developed	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	16-19-0-2600	291.14	Developed	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	16-19-0-700	160.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	17-19-0-200	478.78	Undeveloped	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	17-19-0-300	599.20	Undeveloped	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	17-19-0-301	39.30	Undeveloped	EFU-1	Bald Eagle	Roost	Private
125.00	16	Alkali Flat	17-17-0-1106	40.00	Undeveloped	P-R	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-2500	320.00	Undeveloped	EFU-1	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-2700	73.08	Undeveloped	EFU-1	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-2702	721.90	Developed	EFU-1	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-3600	440.00	Undeveloped	EFU-1	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-700	10721.49	Developed	P-R	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-700	0.00	Developed	P-R	Bald Eagle	Nest	Public
126.00	17	Powell Mtn	16-25-16				Sage Grouse	Lek	Private
126.01	18	Powell Mtn	16-25-17				Sage Grouse	Lek	Private
127.00	19	Rabbit Valley	16-20-0-1300	2060.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private
127.00	19	Rabbit Valley	16-20-0-1900	950.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private
127.00	19	Rabbit Valley	16-20-0-300	7301.50	Developed	F-1	Sage Grouse	Lek	Private
128.00	20	West Butte	18-16-0-2800	160.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private & Public
130.00	21	Houston	14-15-27-105	5.21	Undeveloped	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-1404				Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-200	6.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-201	15.08	Developed	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-202	1.39	Developed	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-203	2.14	Developed	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-204	57.00	Undeveloped	EFU2	Golden Eagle	Nest	Private

Crook County Sensitive Bird Sites -- Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
130.00	21	Houston	14-15-27-205	1.39	Developed	R-5	Golden Eagle	Nest	Private
134.00	22	O'Neil	14-14-0-1801	78.86	Undeveloped	EFU2	Golden Eagle	Nest	Private
134.00	22	O'Neil	14-14-0-1804	240.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
134.00	22	O'Neil	14-14-27-100	626.93	Developed	EFU2	Golden Eagle	Nest	Private
134.00		O'Neil	14-14-34-1803				Golden Eagle	Nest	Private
134.01	23	O'Neil	14-14-35-100	319.08	Undeveloped	EFU3	Golden Eagle	Nest	Private
134.01	23	O'Neil	14-14-35-101	141.13	Undeveloped	EFU3	Golden Eagle	Nest	Private
134.01		O'Neil	14-14-35-1801				Golden Eagle	Nest	Private
136.00	24	Houston	14-15-28				Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-100	37.38	Developed	EFU2	Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-200	80.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-300	128.95	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-400	200.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-100	37.38	Developed	EFU2	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-200	80.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-300	128.95	Undeveloped	EFU23	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-400	200.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
138.00	27	Cadle Butte	14-18-0-1805	2236.43	Developed	EFU2	Bald Eagle	Nest	Private
138.00	27	Cadle Butte	14-18-0-2400	548.53	Developed	FU2 & F1	Bald Eagle	Nest	Private
138.00	27	Cadle Butte	14-18-0-2401	5.42	Undeveloped	FU2 & F1	Bald Eagle	Nest	Private
139.00	28	GI Ranch	20-22-0-1300	1754.68	Undeveloped	EFU-1	Sage Grouse	Lek	Private
139.00	28	GI Ranch	21-22-0-400	1568.47	Undeveloped	EFU-1	Sage Grouse	Lek	Private
139.00	28	GI Ranch	21-22-0-500	41.81	Undeveloped	EFU-1	Sage Grouse	Lek	Private
140.00	29	Grizzly Mtn	13-15-0-3300	1388.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
140.00	29	Grizzly Mtn	13-15-0-3700	360.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
140.00	29	Grizzly Mtn	13-15-0-3800	40.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
141.00	30	Prineville	15-16-7				Golden Eagle	Nest	Private
141.01	31	Prineville	15-16-7				Golden Eagle	Nest	Private
142.00	32	O'Neil	14-14-21-100	297.95	Developed	EFU2	Golden Eagle	Nest	Private
142.00	32	O'Neil	14-14-21-300	221.57	Undeveloped	EFU2	Golden Eagle	Nest	Private
143.00	33	O'Neil	14-14-20-100	489.74	Developed	EFU2	Golden Eagle	Nest	Private
143.00	33	O'Neil	14-14-20-300	79.14	Undeveloped	EFU2	Golden Eagle	Nest	Private
143.00	33	O'Neil	14-14-29-100	93.82	Developed	EFU2	Golden Eagle	Nest	Private
143.00		O'Neil	14-14-29-300				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-11-800				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-18-2100				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-7-800				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-8-800				Golden Eagle	Nest	Private
150.00		Alkali Flat	17-17-33				Golden Eagle	Nest	Private & Public
151.00	35	GI Ranch	21-22-0-600	319.87	Undeveloped	EFU-1	Sage Grouse	Lek	Private
151.00	35	GI Ranch	21-22-0-700	1445.66	Undeveloped	EFU-1	Sage Grouse	Lek	Private
151.00	35	GI Ranch	21-22-0-800	360.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private
152.00	36	Prairie Hill	16-20-0-1300	2060.00	Undeveloped	EFU-1	Golden Eagle	Nest	Private
152.00	36	Prairie Hill	16-20-0-1900	960.00	Undeveloped	EFU-1	Golden Eagle	Nest	Private
152.00	36	Prairie Hill	16-20-0-300	7301.50	Developed	F-1	Golden Eagle	Nest	Private
155.00	37	O'Neil	14-14-20-100	489.74	Developed	EFU2	Golden Eagle	Nest	Private
155.00	37	O'Neil	14-14-20-300	79.14	Undeveloped	EFU2	Golden Eagle	Nest	Private
155.00	37	O'Neil	14-14-29-100	93.92	Developed	EFU2	Golden Eagle	Nest	Private

Crook County Sensitive Bird Sites -- Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
155.00		O'Neil	14-14-29-300				Golden Eagle	Nest	Private
158.00	38	Ibex Butte	20-23-0-100	4403.32	Undeveloped	EFU-1	Sage Grouse	Lek	Private
159.00	39	Ochoco River	14-17-31				Golden Eagle	Nest	Private
160.00	40	Ochoco River	15-17-12				Golden Eagle	Nest	Private
171.00	42	GI Ranch	20-23-0-200	13455.95	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-200	5514.96	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-500	82.92	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-600	78.98	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-700	238.50	Undeveloped	EFU-1	Sage Grouse	Lek	Private
173.00	43	Houston	14-15-35-2800	100	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-35-2902	2.30	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-35-2903	6.45	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-3700	35.42	Undeveloped	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-3701	0.58	Undeveloped	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-5000	15.46	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-5001	12.30	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-5002	1.00	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped		Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	2.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped		Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	1298.80	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	80.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	458.32	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	811.64	Developed	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-500	38.86	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-600	5.70	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-601	13.59	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-602	4.00	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-603	13.58	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-700	1.53	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-800	3.75	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-900	1.00	Undeveloped	A-A	Golden Eagle	Nest	Private
178.00	44	Prineville	15-16-2-200	40.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.00	44	Prineville	15-16-2-300	18.50	Undeveloped	EFU-2	Golden Eagle	Nest	Public
178.00	44	Prineville	15-16-2-301	20.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.00	44	Prineville	15-16-2-400	1.50	Developed	EFU-2	Golden Eagle	Nest	Public
178.00		Prineville	15-16-1-1004				Golden Eagle	Nest	Public
178.00		Prineville	15-16-1-904				Golden Eagle	Nest	Public
178.00		Prineville	15-16-1-1000				Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-200	40.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-300	18.50	Undeveloped	EFU-2	Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-301	20.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-400	1.50	Developed	EFU-2	Golden Eagle	Nest	Public

Crook County Sensitive Bird Sites -- Continued

Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
178.01		Prineville	15-16-1-1004				Golden Eagle	Nest	Public
178.01		Prineville	15-16-1-904				Golden Eagle	Nest	Public
178.01		Prineville	15-16-1-1000				Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-200	40.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-300	18.50	Undeveloped	EFU-2	Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-301	20.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-400	1.50	Developed	EFU-2	Golden Eagle	Nest	Public
178.02		Prineville	15-16-1-1004				Golden Eagle	Nest	Public
178.02		Prineville	15-16-1-904				Golden Eagle	Nest	Public
178.02		Prineville	15-16-1-1000				Golden Eagle	Nest	Public
182.00	47	Pilot Butte	17-18-0-500	278.38	Undeveloped	EFU-1	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-100	639.53	Developed	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-300	720.00	Undeveloped	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-800	78.19	Developed	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-801	18.91	Developed	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-803	9.32	Undeveloped	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-806	79.09	Undeveloped	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-807	9.24	Undeveloped		Golden Eagle	Nest	Private
188.00	49	Hardin Ranch	19-23-0-700	4778.71	Undeveloped	EFU-1	Sage Grouse	Lek	Private
189.00	50	Prineville	14-16-28-200	144.10	Undeveloped	EFU2	Prairie Falcon	Nest	Private
189.00	50	Prineville	14-16-28-201	5.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
189.00	50	Prineville	14-16-28-400	80.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
189.00	50	Prineville	14-16-28-700	160.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
192.00	51	O'Neil	14-14-21-100	297.95	Developed	EFU2	Prairie Falcon	Nest	Private
192.00	51	O'Neil	14-14-21-300	221.57	Undeveloped	EFU2	Prairie Falcon	Nest	Private
193.00	52	Ochoco River	14-17-36				Prairie Falcon	Nest	Private
195.00	53	Houston	14-15-19-200	411.63	Developed	EFU3	Prairie Falcon	Nest	Private
200.00	54	Twelvemile River	19-24-0-100	14333.95	Developed		Sage Grouse	Lek	Private
207.00	55	Grizzly Mtn	13-15-0-3300	1388.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
207.00	55	Grizzly Mtn	13-15-0-3501	390.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
207.00	55	Grizzly Mtn	13-15-0-3700	360.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
207.00	55	Grizzly Mtn	13-15-0-3800	40.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
208.00	56	Alkali Flat	17-17-0-1106	40.00	Undeveloped	P-R	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-2500	320.00	Undeveloped	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-2700	73.08	Undeveloped	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-2702	721.90	Developed	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-3600	440.00	Undeveloped	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-700	10721.49	Developed	P-R	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-700	0.00	Developed	P-R	Prairie Falcon	Nest	Public
211.00	57	Maupin Butte	17-23-0-700	6120.00	Developed	EFU-1	Sage Grouse	Lek	Private
211.00	57	Maupin Butte	17-24-0-1100	167.20	Undeveloped	EFU-1	Sage Grouse	Lek	Private
212.00	58	Maupin Butte	17-24-0-1200	1619.16	Undeveloped	EFU-1	Sage Grouse	Lek	Private
212.00		Maupin Butte	16-15-7-800				Sage Grouse	Lek	Private
214.00	59	Eagle Rock	16-17-31				Prairie Falcon	Nest	Public
215.00	60	Bowman Dam	17-16-0-100	17299.33	Undeveloped	P-R	Prairie Falcon	Nest	Public
217.00	61	Powell Buttes	16-14-12-100				Prairie Falcon	Nest	Private
217.00	61	Powell Buttes	16-14-12-2100				Prairie Falcon	Nest	Private
217.00	61	Powell Buttes	16-14-12-300				Prairie Falcon	Nest	Private

Crook County Sensitive Bird Sites -- Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
218.00	62	Brothers SW	19-17-35				Sage Grouse	Lek	Private
221.00	63	Ochoco River	15-17-20				Bald Eagle	Nest	Public
229.00	64	Paulina	16-23-0-300	2040.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private
375.00	65	Ochoco River	15-17-10				Bald Eagle	Roost	Private
375.00	65	Ochoco River	15-17-4				Bald Eagle	Roost	Private
375.00	67	Ochoco River	15-17-3				Bald Eagle	Roost	Private
375.00	68	Ochoco River	15-17-9				Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-100	338.41	Undeveloped	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-100	2.52	Undeveloped	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-101	0.00	Undeveloped	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-200	36.66	Developed	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-200	89.56	Undeveloped	EFU2	Bald Eagle	Roost	Private
379.00	70	Post	16-19-0-100	9647.44	Developed	EFU-1	Bald Eagle	Roost	Private
379.00	70	Post	16-19-0-2500	291.14	Developed	EFU-1	Bald Eagle	Roost	Private
379.00	70	Post	16-19-0-700	160.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private
		Ochoco Butte	13-20-36				Bald Eagle	Nest	Private & Public

BIRD SITE INVENTORY – ROOSTS: Crook County Sensitive Bird Sites - Roosts									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
107.00	5	Drake Butte	17-20-0-1700	640.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public
107.00	5	Drake Butte	17-20-0-1800	640.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public
107.00	5	Drake Butte	17-20-0-1900	10641.24	Undeveloped	F-1	Bald Eagle	Roost	Private & Public
107.00	6	Drake Butte	17-20-0-1700	640.0	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public
107.00	6	Drake Butte	17-20-0-1800	640.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private & Public
107.00	6	Drake Butte	17-20-0-1900	10641.24	Undeveloped	F-1	Bald Eagle	Roost	Private & Public
111.00	7	Mud Spring	15-24-28				Bald Eagle	Roost	Private
112.00	8	Pilot Butte	15-18-0-100	11837.40	Undeveloped	F-1	Bald Eagle	Roost	Private
112.00	8	Pilot Butte	15-18-0-1600	320.00	Developed	F-1	Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-1100	597.60	Undeveloped		Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-1200	240.00	Undeveloped		Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-132	320.00	Developed	EFU-1	Bald Eagle	Roost	Private
112.00	8	Pilot Butte	16-18-0-135	1097.85	Undeveloped	F-1	Bald Eagle	Roost	Private
113.00	9	Ochoco River	15-17-5-1000	15.30	Undeveloped	EFU-2	Bald Eagle	Roost	Private
113.00	9	Ochoco River	15-17-5-1000	17.64	Undeveloped	EFU-2	Bald Eagle	Roost	Private
113.00	9	Ochoco River	15-17-5-1100	264.00	Undeveloped	EFU-2	Bald Eagle	Roost	Private
118.00	10	Mud Spring	15-24-0-100	17458.35	Undeveloped	FU1 & F1	Bald Eagle	Roost	Private
118.00	10	Mud Spring	15-24-0-101	160.00	Undeveloped	F-1	Bald Eagle	Roost	Private
118.00	10	Mud Spring	15-24-0-400	200.00	Developed	F-1	Bald Eagle	Roost	Private
118.00	10	Mud Spring	15-24-0-401	236.60	Developed	EFU-1	Bald Eagle	Roost	Private

Crook County Sensitive Bird Sites – Roosts – Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
118.00	11	Mud Spring	15-24-0-500	320.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	16-19-0-100	9647.44	Developed	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	16-19-0-2600	291.14	Developed	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	16-19-0-700	160.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	17-19-0-200	478.78	Undeveloped	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	17-19-0-300	599.20	Undeveloped	EFU-1	Bald Eagle	Roost	Private
123.00	15	Post	17-19-0-301	39.30	Undeveloped	EFU-1	Bald Eagle	Roost	Private
375.00	65	Ochoco River	15-17-10				Bald Eagle	Roost	Private
375.00	65	Ochoco River	15-17-4				Bald Eagle	Roost	Private
375.00	67	Ochoco River	15-17-3				Bald Eagle	Roost	Private
375.00	68	Ochoco River	15-17-9				Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-100	338.41	Undeveloped	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-100	2.52	Undeveloped	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-101	0.00	Undeveloped	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-200	36.66	Developed	EFU2	Bald Eagle	Roost	Private
376.00	69	Ochoco River	14-17-35-200	89.56	Undeveloped	EFU2	Bald Eagle	Roost	Private
379.00	70	Post	16-19-0-100	9647.44	Developed	EFU-1	Bald Eagle	Roost	Private
379.00	70	Post	16-19-0-2500	291.14	Developed	EFU-1	Bald Eagle	Roost	Private
379.00	70	Post	16-19-0-700	160.00	Undeveloped	EFU-1	Bald Eagle	Roost	Private

BIRD SITE INVENTORY – NESTS									
Crook County Sensitive Bird Sites – Nests									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
101.00	1	Houston	14-15-20-100	227.17	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.00	1	Houston	14-15-20-400	134.50	Developed	EFU2	Golden Eagle	Nest	Private
101.00	1	Houston	14-15-21-101	253.36	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.00	1	Houston	14-15-21-101	111.10	Developed	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-20-100	227.17	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-20-400	134.50	Developed	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-21-101	253.36	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.01	2	Houston	14-15-21-101	111.10	Developed	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-20-100	227.17	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-20-400	134.50	Developed	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-21-101	253.36	Undeveloped	EFU2	Golden Eagle	Nest	Private
101.02	3	Houston	14-15-21-101	111.10	Developed	EFU2	Golden Eagle	Nest	Private
103.00	4	Powell Buttes	16-14-0-2300	320.00	Undeveloped	EFU-3	Golden Eagle	Nest	Private
103.00	4	Powell Buttes	16-14-0-2303	613.05	Undeveloped	EFU-3	Golden Eagle	Nest	Private
103.00	4	Powell Buttes	16-14-0-300	720.00	Undeveloped	EFU-3	Golden Eagle	Nest	Private
116.00		Hensley Butte	13-16-0-4000	724.50	Undeveloped	EFU2	Bald Eagle	Nest	Private
116.01		Hensley Butte	13-16-0-4000	724.50	Undeveloped	EFU2	Bald Eagle	Nest	Private
121.00	13	Foley Butte	12-16-0-100	11849.24	Undeveloped	F-1	Bald Eagle	Nest	Private
121.00	13	Foley Butte	12-16-0-400	320.00	Undeveloped	F-1	Bald Eagle	Nest	Private
122.00	14	Grizzly Mtn	13-15-0-2000	800.00	Undeveloped	EFU2	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-1106	40.00	Undeveloped	P-R	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-2500	320.00	Undeveloped	EFU-1	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-2700	73.08	Undeveloped	EFU-1	Bald Eagle	Nest	Public

Crook County Sensitive Bird Sites – Nests – Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
125.00	16	Alkali Flat	17-17-0-2702	721.90	Developed	EFU-1	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-3600	440.00	Undeveloped	EFU-1	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-700	10721.49	Developed	P-R	Bald Eagle	Nest	Public
125.00	16	Alkali Flat	17-17-0-700	0.00	Developed	P-R	Bald Eagle	Nest	Public
130.00	21	Houston	14-15-27-105	5.21	Undeveloped	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-1404				Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-200	6.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-201	15.08	Developed	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-202	1.39	Developed	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-203	2.14	Developed	R-5	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-204	57.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
130.00	21	Houston	14-15-27-205	1.39	Developed	R-5	Golden Eagle	Nest	Private
134.00	22	O'Neil	14-14-0-1801	78.86	Undeveloped	EFU2	Golden Eagle	Nest	Private
134.00	22	O'Neil	14-14-0-1804	240.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
134.00	22	O'Neil	14-14-27-100	626.93	Developed	EFU2	Golden Eagle	Nest	Private
134.00		O'Neil	14-14-34-1803				Golden Eagle	Nest	Private
134.01	23	O'Neil	14-14-35-100	319.08	Undeveloped	EFU3	Golden Eagle	Nest	Private
134.01	23	O'Neil	14-14-35-101	141.13	Undeveloped	EFU3	Golden Eagle	Nest	Private
134.01		O'Neil	14-14-35-1801				Golden Eagle	Nest	Private
136.00	24	Houston	14-15-28				Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-100	37.38	Developed	EFU2	Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-200	80.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-300	128.95	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.00	25	Houston	14-14-24-400	200.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-100	37.38	Developed	EFU2	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-200	80.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-300	128.95	Undeveloped	EFU23	Golden Eagle	Nest	Private
137.01	26	Houston	14-14-24-400	200.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
138.00	27	Cadle Butte	14-18-0-1805	2236.43	Developed	EFU2	Bald Eagle	Nest	Private
138.00	27	Cadle Butte	14-18-0-2400	548.53	Developed	FU2 & F1	Bald Eagle	Nest	Private
138.00	27	Cadle Butte	14-18-0-2401	5.42	Undeveloped	FU2 & F1	Bald Eagle	Nest	Private
140.00	29	Grizzly Mtn	13-15-0-3300	1388.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
140.00	29	Grizzly Mtn	13-15-0-3700	360.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
140.00	29	Grizzly Mtn	13-15-0-3800	40.00	Undeveloped	EFU2	Golden Eagle	Nest	Private
141.00	30	Prineville	15-16-7				Golden Eagle	Nest	Private
141.01	31	Prineville	15-16-7				Golden Eagle	Nest	Private
142.00	32	O'Neil	14-14-21-100	297.95	Developed	EFU2	Golden Eagle	Nest	Private
142.00	32	O'Neil	14-14-21-300	221.57	Undeveloped	EFU2	Golden Eagle	Nest	Private
143.00	33	O'Neil	14-14-20-100	489.74	Developed	EFU2	Golden Eagle	Nest	Private
143.00	33	O'Neil	14-14-20-300	79.14	Undeveloped	EFU2	Golden Eagle	Nest	Private
143.00	33	O'Neil	14-14-29-100	93.82	Developed	EFU2	Golden Eagle	Nest	Private
143.00		O'Neil	14-14-29-300				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-11-800				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-18-2100				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-7-800				Golden Eagle	Nest	Private
148.00	34	Powell Buttes	16-15-8-800				Golden Eagle	Nest	Private
150.00		Alkali Flat	17-17-33				Golden Eagle	Nest	Private & Public

Crook County Sensitive Bird Sites – Nests – Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
152.00	36	Prairie Hill	16-20-0-1300	2060.00	Undeveloped	EFU-1	Golden Eagle	Nest	Private
152.00	36	Prairie Hill	16-20-0-1900	960.00	Undeveloped	EFU-1	Golden Eagle	Nest	Private
152.00	36	Prairie Hill	16-20-0-300	7301.50	Developed	F-1	Golden Eagle	Nest	Private
155.00	37	O'Neil	14-14-20-100	489.74	Developed	EFU2	Golden Eagle	Nest	Private
155.00	37	O'Neil	14-14-20-300	79.14	Undeveloped	EFU2	Golden Eagle	Nest	Private
155.00	37	O'Neil	14-14-29-100	93.82	Developed	EFU2	Golden Eagle	Nest	Private
155.00		O'Neil	14-14-29-300				Golden Eagle	Nest	Private
159.00	39	Ochoco River	14-17-31				Golden Eagle	Nest	Private
160.00	40	Ochoco River	15-17-12				Golden Eagle	Nest	Private
173.00	43	Houston	14-15-35-2800	100	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-35-2902	2.30	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-35-2903	6.45	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-3700	35.42	Undeveloped	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-3701	0.58	Undeveloped	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-5000	15.46	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-5001	12.30	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	14-15-36-5002	1.00	Developed	R-5	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped		Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	2.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped		Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	0.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	1298.80	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	80.00	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	458.32	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-300	811.64	Developed	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-500	38.86	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-600	5.70	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-601	13.59	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-602	4.00	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-603	13.58	Undeveloped	A-A	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-700	1.53	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-800	3.75	Undeveloped	SRM-1	Golden Eagle	Nest	Private
173.00	43	Houston	15-15-0-900	1.00	Undeveloped	A-A	Golden Eagle	Nest	Private
178.00	44	Prineville	15-16-2-200	40.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.00	44	Prineville	15-16-2-300	18.50	Undeveloped	EFU-2	Golden Eagle	Nest	Public
178.00	44	Prineville	15-16-2-301	20.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.00	44	Prineville	15-16-2-400	1.50	Developed	EFU-2	Golden Eagle	Nest	Public
178.00		Prineville	15-16-1-1004				Golden Eagle	Nest	Public
178.00		Prineville	15-16-1-904				Golden Eagle	Nest	Public
178.00		Prineville	15-16-1-1000				Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-200	40.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-300	18.50	Undeveloped	EFU-2	Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-301	20.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.01	45	Prineville	15-16-2-400	1.50	Developed	EFU-2	Golden Eagle	Nest	Public

Crook County Sensitive Bird Sites – Nests – Continued									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
178.01		Prineville	15-16-1-1004				Golden Eagle	Nest	Public
178.01		Prineville	15-16-1-904				Golden Eagle	Nest	Public
178.01		Prineville	15-16-1-1000				Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-200	40.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-300	18.50	Undeveloped	EFU-2	Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-301	20.00	Developed	EFU-2	Golden Eagle	Nest	Public
178.02	46	Prineville	15-16-2-400	1.50	Developed	EFU-2	Golden Eagle	Nest	Public
178.02		Prineville	15-16-1-1004				Golden Eagle	Nest	Public
178.02		Prineville	15-16-1-904				Golden Eagle	Nest	Public
178.02		Prineville	15-16-1-1000				Golden Eagle	Nest	Public
182.00	47	Pilot Butte	17-18-0-500	278.38	Undeveloped	EFU-1	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-100	639.53	Developed	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-300	720.00	Undeveloped	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-800	78.19	Developed	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-801	18.91	Developed	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-803	9.32	Undeveloped	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-806	79.09	Undeveloped	EFU-3	Golden Eagle	Nest	Private
186.00	48	Powell Buttes	16-14-0-807	9.24	Undeveloped		Golden Eagle	Nest	Private
189.00	50	Prineville	14-16-28-200	144.10	Undeveloped	EFU2	Prairie Falcon	Nest	Private
189.00	50	Prineville	14-16-28-201	5.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
189.00	50	Prineville	14-16-28-400	80.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
189.00	50	Prineville	14-16-28-700	160.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
192.00	51	O'Neil	14-14-21-100	297.95	Developed	EFU2	Prairie Falcon	Nest	Private
192.00	51	O'Neil	14-14-21-300	221.57	Undeveloped	EFU2	Prairie Falcon	Nest	Private
193.00	52	Ochoco River	14-17-36				Prairie Falcon	Nest	Private
195.00	53	Houston	14-15-19-200	411.63	Developed	EFU3	Prairie Falcon	Nest	Private
207.00	55	Grizzly Mtn	13-15-0-3300	1388.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
207.00	55	Grizzly Mtn	13-15-0-3501	390.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
207.00	55	Grizzly Mtn	13-15-0-3700	360.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
207.00	55	Grizzly Mtn	13-15-0-3800	40.00	Undeveloped	EFU2	Prairie Falcon	Nest	Private
208.00	56	Alkali Flat	17-17-0-1106	40.00	Undeveloped	P-R	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-2500	320.00	Undeveloped	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-2700	73.08	Undeveloped	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-2702	721.90	Developed	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-3600	440.00	Undeveloped	EFU-1	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-700	10721.49	Developed	P-R	Prairie Falcon	Nest	Public
208.00	56	Alkali Flat	17-17-0-700	0.00	Developed	P-R	Prairie Falcon	Nest	Public
214.00	59	Eagle Rock	16-17-31				Prairie Falcon	Nest	Public
215.00	60	Bowman Dam	17-16-0-100	17299.33	Undeveloped	P-R	Prairie Falcon	Nest	Public
217.00	61	Powell Buttes	16-14-12-100				Prairie Falcon	Nest	Private
217.00	61	Powell Buttes	16-14-12-2100				Prairie Falcon	Nest	Private
217.00	61	Powell Buttes	16-14-12-300				Prairie Falcon	Nest	Private
221.00	63	Ochoco River	15-17-20				Bald Eagle	Nest	Public
		Ochoco Butte	13-20-36				Bald Eagle	Nest	Private & Public

BIRD SITE INVENTORY – LEKS: Crook County Bird Sites - Leks									
Site No.	County No.	Quad Map	Map	Acres	Status	Zone	Species	Site Type	Landowner
126.00	17	Powell Mtn	16-25-16				Sage Grouse	Lek	Private
126.01	18	Powell Mtn	16-25-17				Sage Grouse	Lek	Private
127.00	19	Rabbit Valley	16-20-0-1300	2060.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private
127.00	19	Rabbit Valley	16-20-0-1900	950.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private
127.00	19	Rabbit Valley	16-20-0-300	7301.50	Developed	F-1	Sage Grouse	Lek	Private
128.00	20	West Butte	18-16-0-2800	160.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private & Public
139.00	28	GI Ranch	20-22-0-1300	1754.68	Undeveloped	EFU-1	Sage Grouse	Lek	Private
139.00	28	GI Ranch	21-22-0-400	1568.47	Undeveloped	EFU-1	Sage Grouse	Lek	Private
139.00	28	GI Ranch	21-22-0-500	41.81	Undeveloped	EFU-1	Sage Grouse	Lek	Private
151.00	35	GI Ranch	21-22-0-600	319.87	Undeveloped	EFU-1	Sage Grouse	Lek	Private
151.00	35	GI Ranch	21-22-0-700	1445.66	Undeveloped	EFU-1	Sage Grouse	Lek	Private
151.00	35	GI Ranch	21-22-0-800	360.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private
158.00	38	Ibex Butte	20-23-0-100	4403.32	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	20-23-0-200	13455.95	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-200	5514.96	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-500	82.92	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-600	78.98	Undeveloped	EFU-1	Sage Grouse	Lek	Private
171.00	42	GI Ranch	21-23-0-700	238.50	Undeveloped	EFU-1	Sage Grouse	Lek	Private
188.00	49	Hardin Ranch	19-23-0-700	4778.71	Undeveloped	EFU-1	Sage Grouse	Lek	Private
200.00	54	Twelvemile River	19-24-0-100	14333.95	Developed		Sage Grouse	Lek	Private
211.00	57	Maupin Butte	17-23-0-700	6120.00	Developed	EFU-1	Sage Grouse	Lek	Private
211.00	57	Maupin Butte	17-24-0-1100	167.20	Undeveloped	EFU-1	Sage Grouse	Lek	Private
212.00	58	Maupin Butte	17-24-0-1200	1619.16	Undeveloped	EFU-1	Sage Grouse	Lek	Private
212.00		Maupin Butte	16-15-7-800				Sage Grouse	Lek	Private
218.00	62	Brothers SW	19-17-35				Sage Grouse	Lek	Private
229.00	64	Paulina	16-23-0-300	2040.00	Undeveloped	EFU-1	Sage Grouse	Lek	Private

(Ordinance No. 124; 5/27/93)

WILDLIFE POLICIES

1. All crucial wildlife areas indicated on the inventory map shall be classified as exclusive agriculture, grazing, forest or open space. No major land use change shall be permitted without a conditional use permit.
2. **Density within Crucial Wintering Areas for deer shall not be greater than one residence for each 160 acres and for the General Winter Range, not more than one residence for 80 acres, except in the EFU-3 zone in which 40 acres may be allowed per residence. (Ordinance No. 71; 7/28/92)**
3. Elk wintering areas shall not have more than one residence per 320 acres.
4. To preserve valuable upland game bird habitat, urban sprawl and scattered residential use on agricultural lands shall be prohibited.

5. Channelization and overgrazing of river and stream channels shall be discouraged.
6. Road construction shall not occur except as deemed necessary in crucial deer, elk and antelope wintering areas. Offroad travel shall not be allowed within crucial areas during winter periods.
7. Intensive recreational developments shall not locate within sensitive crucial habitat areas.
8. Habitat of all species indicated as endangered, threatened or vulnerable shall be preserved. Nesting sites of endangered bird species shall be protected and buffered from conflicting uses.
9. **The County shall within 120 days of the adoption of Ordinance No. 124 (5/27/93), review and revise, if necessary, the analysis of the economic, social, environmental and energy (ESEE) consequences of protecting the inventoried bald eagle, golden eagle, prairie falcon nest areas; the inventoried bald eagle roost areas; the sage grouse lek areas submitted by ODFW and to complete the Goal 5 process.**

The following two statements or policies were also included as part of Ordinance No. 124. It is unclear if there is any validity to them.

Section 2 – Crook County hereby adopts an Interim Protection Policy for the ODFW Inventory of Sensitive Bird Habitat Areas and in compliance with Statewide Planning Goal 5. These sites are attached hereto as Exhibit “A” and are adopted by this reference and incorporated herein, and are subject to the Sensitive Bird Habitat Combining Zone.

Section 3 – Crook County hereby adopts a Comprehensive Plan Policy to allow a maximum of one hundred and twenty (120) days from the date of this adoption to allow Crook County and the Oregon Department of Fish and Wildlife (ODFW) to review, and amend if necessary, the Goal 5 inventory of bald eagle roosts and sage grouse lek sites submitted by ODFW, and to complete the required Goal 5 program. These sites are attached as Exhibit “A” to the Sensitive Bird Habitat Verification of Inventory Ordinance. (Ordinance No. 124; 5/27/98)

GEOLOGY

The general geology of Crook County is almost entirely volcanic in origin. The Clarno and John Day Formations are the most extensive with Columbia River Basalts, Dansforth Mascall Rim Basalts, Deschutes Formations and unconsolidated materials (i.e. alluvial valleys and terraces, etc.) following in decreasing order. General geology interpretations for Crook County have been used to extrapolate the Water Resource-Irrigable Lands Map and the

Structural Geology-Natural Hazards Map. The most up to date account of the geology of Crook County has been compiled from aerial photo interpretation and geologic mapping.

A summary of these major geologic formations is as follows:

Alluvium (recent age) - Unconsolidated gravel, sand and silt along streams, channels, floodplains and low terraces. Materials derived from erosion of sediments, and rocks located in the drainage basins.

Terrace Alluvium (Pleistocene and Recent Age) -Unconsolidated sand, silt and clay deposits formed by stream or lake processes reworking bedrock materials. The Prineville terrace deposits are up to 300 feet thick. A stratum of gravel ranging between 10 and 30 feet thick at the base of this unit is the most productive ground water source in the area. These gravels are mined at the terrace scarp.

Alluvial fan debris, slope wash and pediment materials (Pleisto - and Recent Age) - Poorly sorted and stratified gravel, sand and silt derived from local bedrock. Mode of formation indicates continuing debris flow and sheet flood processes which would be hazardous.

Landslide Debris - Unsorted and unstratified mixtures of basalt and tuffaceous sedimentary rocks. The vast majority of landslides are inactive as most movement probably took place during the Pleistocene. However, some slides are still active northeast of Prineville in the Ochoco Mountains.¹⁹

Rim Basalts - (Late to Pliocene to Pleistocene) - The basalt flows which rest on top of older geologic units described below (normally less than 100 feet thick). These are the youngest basalt flows of the county. They are prone to sliding on underlying Mascall, Dansforth and Deschutes formations along steep slopes and canyons.

Mascall and Dansforth Formations - (Late Miocene to Pliocene Age-Paulina Basin and Deschutes Formation Middle Pliocene Age to Pleistocene- Prineville Basin) – Poorly consolidated siliceous tuffs, welded tuffs and tuffaceous sediments formed principally by river and lake processes which reworked freshly fallen ash. Up to 300 feet thick.

Columbia River Basalt - (Middle Miocene) - Basalt flows which overlie the John Day Formation unconformably. Locally, thin tuff and tuffaceous sandstone and siltstone deposits are interbedded with the basalt flows. Flows average 50-100 feet thick but can be up to 800 feet. Extremely prone to sliding on underlying John Day tuffs.

¹⁹Lawrence, Oregon State University, 1976 personal communication.

John Day Formation - (Lower Oligocene to Lower Miocene Age) - Silicic tuffs and tuffaceous sediments produced by (1) direct deposition from ash falls and (2) redeposition of ash by wind, shallow streams and sheet wash. These rocks are very unstable on slopes, especially under rimrock basalts and other relatively rigid materials. They are also easily eroded, particularly where vegetation is sparse. This formation is often exposed as a thin band around the Clarno formation. It is unconformable on the Clarno. Silic and andesitic flows and welded tuffs are present in the western part of the county.

Clarno Formation - (Eocene Age) - Andesitic flows, tuffs and tuffaceous sediments, the latter formed by rivers, debris flows and mud flows reworking ash deposits. Erosion continued throughout the period when this unit was developing resulting in minor unconformities. This unit underlies the largest part of the Maury Mountains and the western part of the Ochoco mountains.

Structural geology indicates that the Clarno, John Day and Columbia River Basalt formations are all folded on a N.E. trending axis. Good examples are found in the Big Summit Prairie area. Following that event, additional folding occurred and produced E.W. trending structures. These events produced many faults, joints and bedding lineations which are evident on high flight photography. The Geology Map is an interpretation of where these features are in the county. Faults and joints, which are older than 5 million years (before present), have broken up the Columbia River Basalt Formation east of Big Summit Prairie and the Clarno Formation in the south central portion of the county. The latter area has the highest number of fault and joint patterns in the county. The youngest faults and joints are concentrated in the southeast portion of the county in Paulina Basin, the south fork of the Crooked River, north portion of Camp Creek drainage and the Bear Creek drainage south of Prineville Reservoir. These youngest features have been active until very recently (less than 5 million years before present). They are now inactive, stable and pose no hazard problem.

Definitions

1. Faulting - Indicated motion has occurred and has produced an offset of geologic formations.
2. Jointing - Indicates no motion has occurred and no offset of geologic formations.
3. Lineaments - Indicates either 1) faulting or jointing patterns, or 2) bedding within geologic formations.

Note: Analysis of these structural features indicates that no fault motions or earthquakes should occur in Crook County as all motion of this type has ceased.

LANDSLIDES

Extreme Potential, i.e. active landslides. (Map Unit 012, Structural Geology and Natural Hazards Map, approximately 6,400 acres.) To date, the only historically active landslides in Crook County occur northeast of Prineville in the Ochoco Mountains (vicinity of Wildcat Mountain, Hash Rock and Rooster Rock) and along Crooked River east of Prineville Reservoir.

The most common landslide pattern involves rimrock situations where thin basalt flows overlie tuffs and tuffaceous sediments, i.e. Clarno, John Day, Mascall, Dansforth or Deschutes formations. Erosion of the tuffaceous sediments undercuts the basalt flows which then collapse and slide with the underlying sediments.

Common indications of active landslides (slope instability) are hummocky terrain with micro-relief in the form of prominent ridges and valleys, distinctive scarps at the head of (and sometimes within) the landslide, random orientation of trees and fence posts and small lakes at heads of rotated blocks. Many of these conditions are also indications of rapid soil creep (downslope movement of soil and rock). Both Clarno and John Day formations have serious soil creep potential especially where thick overburden occurs (Map Unit 620, 624, 630 on Geology Map). Extreme caution should be taken in active landslide areas. Activities, which increase the weight supported by the slide (heavy construction logging), inject water into the formation, undercut the base (road cuts, terracing), or produce vibration (logging activity, road construction, blasting); all these activities may cause these areas to move catastrophically.

Very High Potential, i.e. tuffs and tuffaceous sediments of Clarno and John Day formations. (Map Units 620 and 730 respectively, Geology Map, approximately 207,360 acres total and Unit 2 on Structural Geology and Natural Hazards Map.) The major portion of these areas occurs south of Crooked River, east of Prineville Reservoir, up Bear Creek and Camp Creek drainages and northwest of Prineville. These units have a high potential for sheet erosion, gully wash and mud flows during periods of heavy rainfall (cloud bursts); particularly where vegetation is sparse and on steep slopes. They also have serious soil creep potential especially for units with thick overburden or very loosely consolidated sediments (Map Units 620, 630 Geology Map). Badland topography is common for these units. Colloidal clays found in these sediments are thought to be significant contributors to water turbidity in the Prineville Reservoir. These fragile soils can be quickly eroded by any off-road vehicular travel whether it be recreation or construction oriented.

Cloudburst Activity. Storm tracks, which normally produce cloudbursts, originate in the southwest and travel across Pine Mountain and Horse Ridge, then through Crook County affecting approximately 325 square miles and into Wheeler County moving in a northeast direction. Prior to 1971-72, storm tracks and resulting cloud burst activity were concentrated in the western portion of Crook County. The Swartz Canyon area, Powell Butte Area and McKay-Mill Creek Area were the main location of highest intensity storms. After 1971-72, there was a definite shift in weather patterns and storm activity to the east and to the north. This shift produced maximum intensity cloudbursts, which first struck the Bear Creek Area, then “jumped” the Maury Mountains to strike the south side of the Ochoco Mountains in the Lookout Mountain-North Fork (Crooked River) area. After that, the storm would jump the remainder of the Ochoco

Mountains and again strike further to the northeast in the Bridge Creek and West Branch areas of Wheeler County.

Instead of jumping the Maury and Ochoco Mountains, storm tracks can split around them hitting the McKay-Mill Creek area and Camp Creek area. The mountains form definite barriers for storm activity; however, they are often hit by lightning strikes which result in forest fire hazards.

Storms which generate cloudbursts occur two to three times a year in the Bear Creek area, Lookout Mountain-North Fork area and McKay-Mill Creek area. These areas also record the strongest intensity storms. The normal pattern is 5-10 minute downpours resulting in sediment erosion and deposition at the base of every gully and minor tributary to the major drainages in the area. Often a minimum of 2 to 3 feet of debris covers the roads. Walls of water 10 to 15 feet high have been noted from these rainstorms in the upper stretches of gullies as the soil and bedrock formations are not capable of absorbing the large quantity of water. This water is quickly dissipated when it reaches the alluvial plains (Map Units 002 and 402).

The Camp Creek area, Swartz Canyon area and east of the Lookout Mountain-North Fork area have storms of less intensity which occur commonly once every 2 to 3 years. It should be noted that the areas indicated for cloud burst activity coincide with areas marked as high erosion potential because of the predominance of sedimentary tuffs and clays.

Very High Potential for Hazard Erosion. Poorly consolidated tuffaceous sediments of the Dansforth, Mascall and Deschutes formations (Map Units 602, 702, 639, 902) possess very high erosion potential. They comprise approximately 21,200 acres, mostly within the southeast portions of the county in the Paulina Basin, and the South Fork of the Crooked River. Small outcrops also occur on rimrock slopes in the Prineville area.

Unknown Potential, Inactive Landslides. (Map Unit 012, approximately 64,000 acres.) These formations occur primarily along canyon walls where rimrock basalts overlie weak tuffaceous sediments. The majority are concentrated along rimrock slopes adjacent to the Prineville Valley at the Ochoco and Prineville Reservoirs, and along the upper Crooked River Valley. Isolated inactive landslides occur around Grizzly Mountain, in the Ochoco and Maury Mountains and in southeastern Crook County.

These landslides are presently geologically stable and it is unlikely that present climatic and erosional process will reactivate them. However, changes in land use activities could reactivate portions of all of these areas, especially those activities which would increase the weight that is supported by the slide (high density developments), which would inject water into the formation (septic tank drainfields, irrigation or water well leakage), or which might undercut the base (road cuts, terracing, etc.), or vibrations from construction, logging or blasting.

Talus and Scree. (Map Units 013, 113, 413.) These areas receive major rock fall debris from surrounding cliffs. The majority are located within the Paulina Basin and southeastern portions of Crook County. Most rimrock slopes and other slopes receive minor rock debris over long periods of time. Generally, cliff retreat within these areas is minimal. However, large

fractures are common near the edges of the rimrock. These particular areas are potential hazards for disturbance related activities. They also indicate cliff retreat and subsequent long-term talus slope development.

Landslide material may incorporate any of that referenced hereinafter. The mechanical action of sliding has broken the formations altering the hydrological characteristics of the original material. In general, the permeability of the slide material is much greater than that of the parent material. Landslide material is also a surficial deposit which allows it to receive recharge from rainfall. Such deposits should yield moderate amounts of water to wells (5 to 15 gpm) when saturated. These formations may, however, present other problems in the form of geologic hazards.

Rim Basalts (Excluding Columbia River Basalts - Ter) - These formations are above the regional water table and are not thick enough for water development. Water may be trapped in sufficient quantity for household use on a limited scale, but it is more probable that wells will have to penetrate into deeper strata for water sources.

Columbia River Basalts (Only Ter) - When found in sufficient thickness below the water table, this unit is a significant aquifer. The Columbia River Basalt in western Crook County is not an important aquifer. This unit is not thick enough for the development of water and is usually found at elevations above the water table. Where saturated, it may produce enough water to sustain household use (1-8 gpm). In the Ochoco Mountains of the northeast portion of Crook County, the Columbia River Basalt Formation may be a significant aquifer. Here, the formation is located in the major recharge area for the Ochoco and Crooked River drainages and could have substantial water potential. The Columbia River Basalt Formation between Prineville and the Prineville Reservoir cannot be a significant aquifer because there is very limited recharge area. It is likely that wells in this formation are tapping a large perched aquifer or system of perched aquifers as the recharge can only be from precipitation in the immediate vicinity. It is cut off from the major recharge areas of the Maury and Ochoco Mountains.

Deschutes, Dansforth and Mascall Formations; John Day Formation; Clarno Formation; and Pre-Tertiary Formations - These formations can be grouped together because they are all poor aquifers. They consist of fine-grained sediments, tuffs, and volcanic materials which cover the bulk of Crook County. Wells drilled in these formations characteristically produce small yields, 1 to 8 gpm, and are often dry. Occasionally a more permeable zone may be encountered, but the water stored in such zones will be limited. Perched water tables are the rule rather than the exception.

NATURAL DISASTERS AND HAZARD AREAS

The physical properties of the major geologic units have been used to identify areas which have high potential for erosion, mass movement or other natural disaster and hazard situations related to bedrock geology. Areas, which have a potential for damaging land and/or property, are rated on a relative scale as to degree of hazard present. Refer to Development Limitations Chapter III, and Structural Geology and Natural Hazards Map.

SOIL CAPABILITY CLASSES

The Soil Conservation Service has developed the following description of soil capability class:

“The capability classification is a grouping that shows, in a general way, how suitable soils are for most kinds of farming. It is a practical grouping based on limitations of the soils, the risk of damage when they are used, and the way they respond to treatment” (Page 11, Prineville Area Soil Survey).

The S.C.S. has defined eight capability classes which are generally described as follows (Pg. 11 & 12, Prineville Area Soil Survey):

- “Class I : Soils that have few limitations that restrict their use. No soils in the Prineville Area are in this class.
- Class II : Soils that have some limitations that reduce the choice of plants or require moderate conservation practices...
- Class III : Soils that have severe limitations that reduce the choice of plants, or require special conservation practices, or both...
- Class IV : Soils that have very severe limitations that restrict the choice of plants, require very special management, or both...
- Class V : Soils that are subject to little or no erosion but have other limitations, impractical to remove, that limit their use largely to pasture, range, woodland, or wildlife...
- Class VI : Soils with severe limitations that make them generally unsuitable for cultivation and that limit their use largely to pasture or range, woodland, or wildlife and cover...
- Class VII : Soils with very severe limitations that make them unsuitable for cultivation without major reclamation and that restrict their use largely to range, woodland, or wildlife...
- Class VIII : Soils and land forms that have limitations that preclude their use for commercial plant production and restrict their use to recreation, wildlife, water supply, mining, or aesthetic purposes...”

Soils that are of S.C.S. class I- IV are usually deep, well drained and on the gentle slopes of the floodplains and terraces of the Crooked River and its major tributaries. These lands are productive for irrigated crops.

Those soils of S.C.S. classes V-VIII are generally shallow, have drainage problems, and commonly occur in steep and rocky areas. These lands are limited in use to pasture, range, woodland, wildlife habitat, watershed, and recreation areas. For detailed descriptions of soils, see individual soil survey reports.

The soil maps show those areas in the county which have the best soils for agriculture (generally class A - S.C.S. classes I-IV). When correlated with existing land use and other factors, the information can help direct growth relative to the preservation of agricultural lands. S.C.S. capability classes can also be used to determine the location of pasture and grazing lands. Soil surveys have not been conducted to the level of accuracy necessary to determine soil capabilities within small individual tax lots except for that area covered by the Prineville Area Soil Survey. The General Soils Map for the County does not separate either individual soil types or classifications, nor, due to its general nature, does it distinguish good rangeland areas. The Septic Tank Suitability Maps and the Detailed Soils Maps were extrapolated from soil interpretations; other information which could be extrapolated includes number of acres covered by each soil, percentage of land covered by each soil, depth of soils, parent material, landform descriptions, etc. The soil information and maps have been compiled using photo interpretation and information found in the Prineville Area Soil Survey, the Trout Creek Area Soil Survey and the Bear Creek Soil Survey.

RANGELANDS

Rangelands are those areas of the county which, by reasons of physical limitations, low and/or erratic precipitation, rough topography, poor drainage, restrictive soils, or extreme temperatures, are unsuited to cultivation. Rangelands are a source of forage for free ranging native and domestic animals, as well as a source of wood products, water and wildlife. Rangeland resources may be described as follows:

1. Grazing in Ochoco National Forest Lands - The Ochoco National Forest is divided into 63 grazing allotments, or herd units, which vary in size from 40 to 60,000 acres throughout the Prineville, Big Summit and Paulina Ranger Districts. Approximately 63 grazing permits are issued by the U. S. Forest Service on Ochoco National Forest lands. An estimated 8,452 head of cattle and 4,550 head of sheep consume 39,611 A.U.M's of forage during the three to four month grazing season. Appendix I contains a computation chart used by the Forest Service for A.U.M's consumed by livestock. Within the Ochoco National Forest and Crooked River National Grasslands, approximately 733,281 acres are in a suitable range condition, 96,496 acres unsuitable and 19,700 acres administratively closed to grazing. No acreage estimates are available for private lands. However, statistics can be developed if detailed information is needed in the future.
2. Grazing on B.L.M. Lands - The B.L.M. manages a total of 511,341 acres in Crook County. All B.L.M. lands are under range management. There are 96 B.L.M. allotments; 61 in the Prineville unit, and 35 in the Upper Crooked River Unit.

The Grazing Allotment Map outlines Crook County's grazing allotment boundaries. The map indicates that the ranch economy of Crook County is economically tied to the grazing allotments and management practices of the public lands.

MULTIPLE RESOURCE MANAGEMENT

Multiple resource management implies (simultaneous) utilization of rangeland resources to result in a harmonious combination of the variety and uses of products the land is capable of yielding on a sustained basis. Uses include livestock grazing, recreation, wildlife, watershed, and wood products (forest production). Multiple resource management does not necessarily imply all uses being made simultaneously on one localized site. Management to promote dominant use of rangeland for special purposes may be required for specific locations when compatible with land capability. However, multiple products and uses should be the output for extensive areas of rangeland.

FOREST LANDS

The purpose of forestry background data and resource maps is to describe the general location of commercial forest resources and forest types within Crook County (maps developed by using O.S.U. aerial photographic interpretations and U.S.F.S. data); to describe and give examples of the level of detail which other agencies involved with commercial forest lands have at present, and to identify applicable management plans in use and those under review by U.S. Forest Service, State Forestry and B.L.M.

A general view of the county's forest resources has been obtained from vegetation land use interpretations of high flight photography (O.S.U., 1973). No distinctions have been made in the vegetation interpretations between commercial and non-commercial forest lands. The majority of the commercial forest lands generally occur within the Ponderosa Pine, Douglas Fir, and mixed Conifer types with very little acreage in the Lodgepole Pine and Spruce-Fir types. Non-commercial forest lands are generally located in the Juniper types, Savanna like vegetation and meadows. The Private/Commercial Forests and Forest Types Map shows general forest types and the private/public forest lands. The General Vegetation Land Use Map indicates general county-wide vegetation/land use.

Vegetation types are broadly classified into "rangeland" (juniper, sage, grasses), "forest" (ponderosa pine, douglas fir, mixed conifer, lodgepole, spruce and meadow/marsh), "agricultural" (field crops, pasture, non-producing), "cultural", and "miscellaneous" (urban, water, barren lands) on the Vegetation Land Use Map. The major forest resources occur in the Ochoco and Maury Mountains and in the lower southeast corner of the county. Agriculture lands occupy the Prineville alluvial valley and terraces and Paulina Basin with small acreages following major stream channels. Rangelands cover the remainder of the land. It should be noted that almost all of the forest and agriculture area are used extensively for the grazing of livestock. Vegetation land use is used to extrapolate general boundaries for the forest resource of the Ochoco and Maury Mountains on the basis of tree species. It also is used to extrapolate

estimates for agriculture and rangelands for the county, excluding the overlap of range into forested lands. Detailed vegetation land use mapping is available through the U. S. Forest Service, BLM and State Forestry.

Commercial Forest Lands

Public Lands - The U. S. Forest Service manages 443,870 acres of land in Crook County. Approximately 68% of this land is classified as commercial forest and 18% as non-commercial forest. This accounts for approximately 80% of all commercial forest lands located in the county, more than 90% of the volume of saw timber cut, and slightly less than 90% of the timber growing stock. The remainder of the commercial forest land is either under private ownership/management and protected (fire) by State Forestry, or under BLM management.

Appendix II is a statistical summary of the national forest lands located in Crook County. Total acreages of the Ochoco National Forest are also included for reference. The total value of timber receipts for FY 1976 returned to Crook County from the Ochoco National Forest lands was \$1,020,247.42, or slightly more than half of all timber receipts generated on the whole national forest. During the year, 137,805 MBF of timber were cut, of which 133,414 MBF were sold. The BLM managed 511,341 acres of land in Crook County of which 11,225 acres are classified as productive (commercial) timber land; 99,000 acres as non-productive (non-commercial) timber land; and remaining is classified as non-forest land. The majority of the productive (commercial) forest land is located in the Ochoco Mountains adjacent to the National forest in the northeast section of the county. Minor acreages occur in the Maury Mountains and on Grizzly Mountain. At present, the land classified as non-productive (non-commercial) timber consists of juniper stands which produce at least 20 cu. ft./ac/yr of timber. This volume is enough to classify this land as commercial timber; however, there is no present demand (market) for it other than for firewood and for one sawmill. These non-productive areas are concentrated in the southeast portion of the county, i.e. upper fork of the Crooked River, and Camp Creek north of the G.I. Ranch area.

Private Timber Lands - Privately owned timber lands are protected against fire damage by the Oregon Forestry Department (District 10). In addition, the State Forestry Department also regulates private industry timber practices under the "Forest Practices Act", and does consulting for small timber producers concerning management practices.

The State Forestry Department protects 164,666 acres of private timber land. Of this, approximately 106,077 acres are classified as Class II or commercial forest and 58,589 acres of Class III or non-commercial forest land (ORS 526.324 Classification). BLM is contracted to protect 9,091 acres of commercial land and 17,803 acres of grazing lands. The majority of privately owned timber land is located adjacent to the Ochoco National Forest west of Lookout Mountain. Minor acreages are located adjacent to all parts of the National Forest. This data should be viewed as a very general guide to private forest location and condition as neither the Tax Commission nor the State Forestry Department has the need to update the original timber mapping which was done in 1959 (information from State Forestry Department).

Detailed Inventories of Forest Lands (U.S. Forest Service) - The total resource information system (TRI) is being used on the Ochoco National Forest for storage of detailed resource information and is available at the office of the Ochoco National Forest.

The forest is divided into areas, or TRI “compartments” which have been, or, are in the process of being, inventories using uncontrolled mosaics for base maps. Timber types, plant community ecoclasses, soils, wildlife resource areas, streams, recreation sites, and other resource information are all depicted on overlays. Information on individual map units, or “cells”, within these “compartments” are stored in computers and microfilm files.

Stream side management units, foreground retention units, range parameters, wildlife data, and certain other types of information are not presently stored in the computer files. Statistics have not been broken out for these particular resources in Crook County. However, most of this information can be extrapolated and developed manually from original data if needed for future studies. Summaries of Timber Class Distribution for the Ochoco National Forest and of national forest acreages for Crook County are included in the Appendix of this plan. The following resource information established many of the natural constraints used for management plans on the Ochoco National Forest:

1. Timber Resource Inventory - The National Forest was classified into 12 silvicultural management groups for the draft environmental statement of the Timber Management Plan. These groups were recombined for mapping and may be seen on the Private/ Commercial Forests and Forest Types Map.
2. Plant Community Ecoclass Inventory (Hall, 1973).

Plant community descriptions are organized by similarity between dominant plants and environments. All meadow types are grouped together; low elevation communities are grouped by grass, shrub, and tree dominance and forest communities are organized roughly by elevational occurrence and by similarity in dominant trees. Lastly, non-forested alpine openings are listed.

The basis for land and natural resource management guidelines are included in data related to general environment, soils, and dominant vegetation types. This information is the basis for management decisions, including range condition and trend guides, silviculture guides, forest stockability guides, and vegetation response to management guides. Productivity information was applied to the two TRI compartments which cover the east end of the Maury Mountains. Land, which has the potential for commercial timber production, is presently classified as commercial timber land. The soil land types mapped for the Ochoco National Forest are correlated with plant community types. This provides the potential productivity of land for commercial timber (see forest background data for advanced soil maps and tables).

Definitions - Commercial Forest Land

1. Commercial forest lands are those lands capable of producing crops of marketable wood products and are not withdrawn from this use by statute or administrative regulation. Commercial forests can be managed to generally produce in excess of

an annual growth of 20 cubic feet per acre of marketable lumber. This includes accessible and potentially accessible land and operable and potentially operable area.

2. Non-commercial forest lands - Non-commercial forest land is land incapable of producing 20 cubic feet per acre per year of industrial wood products.
3. Non-forest land - Non-forest land is land that has never supported forests and lands formerly forested but now developed for such non forest uses as crops, improved pasture and residential areas.
4. Potential yield - The maximum sustained yearly cutting level attainable with intensive forestry practices.
5. Productivity classes - Productivity classes refer to general land productivity as a function of fertility and moisture availability. Productivity is referred to as site class or site index in the U.S.F.S. technical literature.
6. Sustained yield (as defined in Multiple Use Act) - Sustained yield of the several products and services means the achievement and maintenance of perpetuity of a high level annual or regular periodic output of the various renewable resources of the National Forest without impairment of productivity of the land.
7. ORS 526.324 Classification of Forest Land - All forest lands within the county fall into one of the following classes: (a) Class 1 - Timber class, includes all forest land primarily suitable for the production of timber (none in Crook County); (b) Class 2 - Timber and grazing class, includes all forest land primarily suitable for joint use for timber production and the grazing of livestock, as a permanent or semi-permanent joint use, or as a temporary joint use during the interim between logging and reforestation; (c) Class 3 - Agricultural class, includes all forest land primarily suitable for grazing and other agricultural use.

Proposed Forest Management Practices

Ochoco National Forest - Overall management direction for Ochoco National Forest is contained in the Forest Land Management Plan. A Draft Environmental Statement of a revised Timber Management Plan is to be issued in late 1978. The Timber Management Plan contains specific direction as to how timber resources will be managed. The 5 year Timber Action Plan (updated annually) is based upon the objectives of the Timber Management Plan.

BLM Forest Lands - Initial timber resource inventories and statistical data are being worked into a draft environmental statement and management program which will be completed in the early 1980's. At present, the Organic Act of 1976 is the legal directive for management programs administered by the BLM.

Insert Map
Septic Tank Suitability

Insert Map
Septic Tank Suitability

Insert Map

Physical Limitations

Insert Map

Structural Geology and Natural Hazards

Insert Map
Slope/Soil Composite

Insert Map

Irrigation Suitability: Water Resources

Insert Map

Oil : Geothermal : Mineral : Quarry

Insert Map

Wildlife Resources

Insert Map

Geology

GEOLOGY MAP LEGEND

AERIAL MAP UNIT	RECONNAISSANCE GEOLOGIC MAP UNIT 2	GEOLOGIC AGE 2 AND FORMATION	DIGITAL MAP UNIT THICKNESS OF UNCONSOLIDATED MATERIAL 3		
			10'	10'	Unknown
A. Unconsolidated Materials					
Floodplain Alluvium	Qa	Recent to Pleistocene	000	100	400
Terrace Alluvium	Qt	Recent to Pleistocene	001		
Alluvial Fan/Bajada Gr.	Qf, Qg	Recent to Pleistocene	002	105	402
Undiff. Valley & Plain	Qa, Qt	Recent to Pleistocene	009		409
Landslides	Q1	Recent to Pleistocene	012		412
Talus & Scree	Qs	Recent to Pleistocene	013	113	413
Lakebeds	Qia, Qp	Recent to Pleistocene	020		
Evaporites	Qia, Qp	Recent to Pleistocene	021	121	421
Aeolian Ash	Qw	Recent to Pleistocene	030	130	
B. Consolidated Materials			THICKNESS OF OVERBURDEN		
			6" – 10'	18"	UNKNOWN
Tuffaceous Sediments (poorly consolidated)	QTts, Qts	Deschutes Fm. (Pliocene-Pleistocene) Mascall-Dansforth Fm. (Pliocene)	602	702	692
Intermediate:					
Andesitic/Tuffs	Tct	Clarno Fm. (Eocene-Oligocene)	620	720	
Tuffaceous Sediments					
Andesitic/Basaltic Vent Material	Tjwv	John Day Fm. (Oligocene-Miocene)	621		
Andesite Flows	Tef, Tjf, Ta	Clarno Fm./John Day Fm.	622		
Andesitic & Frag. Rocks	Tc	Clarno Fm.	624		

AERIAL MAP UNIT	RECONNAISSANCE GEOLOGIC MAP UNIT 2	GEOLOGIC AGE 2 AND FORMATION	DIGITAL MAP UNIT THICKNESS OF OVERBURDEN		
			6 – 10'	18"	UNKNOWN
Silicic:					
Silicic Tuffs & Tuffaceous Sed.	Tjr, Tt	John Day Fm.	630	730	
Silicic Vent Materials	Otsv	Pleistocene to Tertiary	631		
Silicic Flows	Tjr, Tr	John Day	632	732	
Silicic Welded Tuffs	Twr, Tjw, Ttw	John Day	633	733	
Undifferentiated Silicic Rocks	Tj	John Day	639		
Basaltic:					
Basaltic Vent Materials	QTbv, Qtbv, Tbv, Tbv, Tcnmc	Rim Basalts (Pleistocene)	640	740	
Basalt Flows	Qtb, Tbt, Tb, Tcr	Columbia River Basalt (Miocene)	642	742	
Intrusives:					
Andestic Rock	Tmi, Tcmr			763	963
Silic Rock	Tsi		664		964
Undifferentiated:					
Pre-Tertiary			690		
Welded Tuffs & Sediments	PT				

Insert Map

Soils (Map Unit (morphology) and General Capability)

Legend for Soils
(Map Unit Morphology) and General Capability Map

Soil Association, Description, and Component Soils

Symbol

- 1a. Powder-Courtrock Association: Deep and moderately deep, medium textured soils on floodplains. Alkaline soils occur in some poorly drained areas.
- Powder loam, Courtrock sandy loam, Metolius sandy loam, Veazie sandy loam, Polly loam.
- 1b. Calabar-Damon Association: Poorly and somewhat poorly drained, medium and fine textured soils, some of which are alkaline.
- Calabar silt loam, Damon silty clay loam, Crooked sandy loam, Boyce silty clay loam, Ontko silty clay loam.
2. Ochoco-Prineville Association: Moderately deep, medium textured soils, with partially cemented pans, on old alluvial terraces.
- Ochoco sandy loam, Prineville sandy loam, Hack loam, Courtrock sandy loam.
- 3a. Ayres-Nouque Association: Shallow and moderately deep, medium textured, gravelly soils with strongly cemented pans, on slightly dissected alluvial fans.
- Ayres sandy loam, Nouque silt loam, Deschutes sandy loam, Shev loamy sand, Salisbury clay loam, Gribble cobbly loam.
- 3b. Ayres-Nouque Association (dissected): Similar to 3a, but moderately to strongly dissected.
- 4a. Deschutes-Arron-Redmond Association: Shallow, very shallow and moderately deep, medium textured soils, some of which are stony, on nearly level to gently rolling older lava flows.
- Deschutes sandy loam, Arron sandy loam, Redmond sandy loam, Deskamp loamy sand, Gosney very stony loamy sand, Bakeoven very cobbly loam, Rockland.

- 4b. Deschutes-Gosney Association: Similar to 4a, but on rolling, moderately dissected terrain.

Deschutes sandy loam, Gosney very stony loamy sand, Bakeoven very cobbly loam.

- 4c. Deschutes-Redmond Association: Shallow and moderately deep, medium and coarse textured soils in nearly level and concave areas of younger lava flows. Bare rock predominates on convex portions.

Deschutes sandy loam, Redmond sandy loam, Bakeoven very cobbly loam, Rockland.

- 4d. Deskamp-Arron-Gosney Association: Similar to 4c, but bare rock predominates.

Deskamp loamy sand, Arron sandy loam, Gosney very stony loamy sand, Rockland, Deschutes loamy sand.

5. Roba-Fopiano Association: Shallow and moderately deep, medium textured soils in gently rolling terrain formed from soft sedimentary rocks.

Roba loam, Fopiano silty clay loam, Marsden silt loam.

- 6a. Ruckles-Anawalt Association: Very shallow and shallow, stony and very stony soils, many of which have clayey subsoils, on gently rolling to nearly level volcanic plateaus.

Ruckles very stony silt loam, Anawalt stony silt loam, Bakeoven very cobbly loam, Olson stony loam.

- 6b. Anawalt-Ruckles-Lookout Association: Similar to 6a, but on rolling, somewhat dissected topography.

Anawalt stony silt loam, Ruckles very stony silt loam, Lookout stony silt loam, Bakeoven very cobbly loam, Olson stony loam, Rockland.

- 6c. Anawalt-Ruckles-Rarey Association: Similar to 6a, but on steeply rolling, dissected topography.

Anawalt stony silt loam, Ruckles very stony silt loam, Rarey loam, Rockley very cobbly loam, Bakeoven very cobbly loam, Rockland.

- 7a. Simas-Ginser-Tub Association: Moderately deep, shallow and deep clayey soils, on moderately dissected rolling terrain.

Simas cobbly silty clay loam, Ginser very stony loam, Tub silt loam, Day clay, Prag very stony loam, Soft sedimentary rocks.

- 7b. Simas-Tub-Soft Sedimentary Rock Association: Similar to 7a, but with numerous exposures of unconsolidated rock.

Simas cobbly silty clay loam, Tub silt loam, Soft sedimentary rocks, Ginser very stony loam, Day clay, Prag very stony loam, Rockland.

- 8a. Anawalt-Merlin Association: Shallow and moderately deep clayey soils in steeply rolling, dissected terrain. Moderately deep, loamy soils occur on north slopes and in concave places. Rock outcrops are common.

Anawalt stony silt loam, Merlin very stony loam, Rarey loam.

- 8b. Venator-Izee Association: Shallow, moderately deep and deep, medium textured soils on rolling terrain of strongly folded older rocks.

Venator shaly loam, Izee shaly loam, Rarey loam, Utley shaly loam.

- 9a. Simas -Tub-Ginser Association: Shallow and moderately deep, stony and very stony, medium and fine textured soils predominate. Moderately deep, stone-free, medium textured soils occur on some north slopes. Steeply rolling, dissected terrain predominates, and rock outcrops are common.

Simas cobbly silty clay loam, Tub silt loam, Ginser very stony loam, Gem very stony loam, Prag very stony loam, Rarey loam, Curant silt loam, Rockland.

- 9b. Prag-Tub-Rarey Association: Similar to 9a, but north slopes make up +25% of the area.

Prag very stony loam, Tub silt loam, Rarey loam, Ginser very stony loam, Simas cobbly clay loam.

- 9c. Searles-Elmore-Simas Association: Shallow, moderately deep and deep, stony, medium texture soils in steeply rolling and mountainous terrain underlain by rhyolite.

Searles very stony loam, Elmore very stony loam, Simas cobbly silty clay loam, Tub silt loam, Licksillet very stony loam, Rockland, Deskamp loamy sand.

10. Anatone-Klicker-Hall Ranch Association: A complex landscape consisting predominately of very shallow, stony and very stony, sparsely vegetated soils on nearly level to rolling plateaus. Moderately deep and deep, medium textured, timbered soils occur on north slopes and in canyons.

Anatone very stony loam, Klicker very stony silt loam, Hall Ranch stony loam, Tolo silt loam, Snell very stony loam.

11. Klicker-Hall Ranch-Anatone Association: A complex landscape consisting predominantly of moderately deep and deep, medium textured, timbered soils; with sparsely vegetated, very shallow and stony soils on south facing slopes.
- Klicker very stony silt loam, Anatone very stony loam, Hall Ranch stony loam, Tolo silt loam, Snell very stony loam.
- 12a. Hankins-Hankton Association: Moderately deep and deep, fine-textured, timbered soils in moderately dissected, rolling terrain, primarily above 500 feet elevation.
- Hankins cobbly loam, Hankton cobbly silt loam, Boardtree gravelly loam, Yawkey gravelly loam.
- 12b. Boardtree-Yawkey-Hankins Association: Similar to 12a, but north slopes predominate.
- Boardtree gravelly loam, Yawkey gravelly loam, Hankins cobbly loam, Hankton cobbly silt loam.
- 13a. Hankton-Hankins-Klicker Association: Moderately deep and deep, medium and fine-textured, stony, timbered soils in steeply rolling, dissected terrain. South slopes may have shallow, stony soils and lack timber.
- Hankton cobbly silt loam, Hankins cobbly loam, Klicker very stony silt loam, Ginser very stony loam, Yawkey gravelly loam, Snell very stony loam, Anatone very stony loam, Rockland.
- 13b. Hankton-Klicker-Ginser Association: Similar to 13a, but south slopes predominate.
- Hankton cobbly silt loam, Klicker very stony silt loam, Ginser very stony loam, Snell very stony loam, Anatone very stony loam, Rockland.
- 13c. Hall Ranch-Daxty Association: Shallow and moderately deep, gravelly, loamy soils on a strongly dissected plateau.
- Hall Ranch stony loam, Daxty very stony loam, Anatone very stony loam.
- 14a. Boardtree-Whistler Association: Moderately deep and deep, medium textured, timbered soils formed from volcanic ash over a variety of buried soils, primarily on north slopes above 4500 feet elevation.
- Boardtree gravelly loam, Whistler sandy loam, Yawkey gravelly loam, Hankins cobbly loam.

14b. Hankins-Hankton-Boardtree Association: A mixture of units 14a and 13b.

Hankins cobbly loam, Hankton cobbly silt loam, Boardtree gravelly loam, Klicker very stony silt loam, Yawkey gravelly loam, Ginser very stony loam, Snell very stony loam.

15a. Lickskillet-Rockland Association: Very steep, shallow and moderately deep, stony and rocky soils predominate. Canyons with more than 500 feet of local relief.

Lickskillet very stony loam, Rockland, Bakeoven very cobbly loam, Lookout stony silt loam, Simas cobbly silty clay loam, Tub silt loam.

15b. Simas-Tub-Rockland Association: Similar to 15a, but includes areas of more gentle relief resulting from landslides.

Simas cobbly silty clay loam, Tub silt loam, Rockland, Lookout stony silt loam, Gem very stony loam.

Component soils are listed in order of decreasing importance.

Crook County, Oregon
NASA Flight 72-114
1:120,000

Insert Map

Soil Type Capability – Prineville Valley Area

SOIL TYPE CAPABILITY MAP LEGEND
Soil Capability of General Soils of Crook County Study (O.S.U.)
(For detailed description of soils, see Prineville Area Soil Survey)

UNIT SYMBOL	PERCENT SCS CAPABILITY CLASS	% CLASS A (SCS I-IV)	% CLASS B (SCS V,VI)	% CLASS C (SCS VII, VIII)
1a	94 II 6 III	100	0	0
1b	32 III 12 IV 56 V	44	56	0
2	100 II	100	0	0
3a, 3b	58 II 8 III 34 VI	66	34	0
4a	46 II 10 III 31 VI 4 VII 9 VIII	56	31	13
4b	65 IV 35 VII	6	0	35
4c	74 II 13 VII 13 VIII	74	0	26
4d	40 III 25 VI 20 VII 15 VIII	40	25	35
5	100 VI	0	100	0
6a	100 VII	0	0	100
6b	12 VI 86 VII 2 VIII	0	12	88
6c	14 VI 77 VII 9 VIII	0	14	86
7a	70 VI 25 VII 5 VIII	0	70	30
7b	50 VI 31 VII 19 VIII	0	50	50
8a	20 VI 80 VII	0	20	80
8b	100 VI	0	100	0
8c	100 VI	0	100	0

UNIT SYMBOL	PERCENT SCS CAPABILITY CLASS	% CLASS A (SCS I-IV)	% CLASS B (SCS V,VI)	% CLASS C (SCS VII, VIII)
9a	55 VI 40 VIII 5 VIII	0	55	45
9b	57 VI 43 VII	0	57	43
9c	3 III 33 VI 61 VII 3 VIII	3	33	64
10	5 V 95 VII	0	5	95
11	20 V 80 VII	0	20	80
12a	100 VII	0	0	100
12b	100 VII	0	0	100
13a	95 VII 5 VIII	0	0	100
13b	92 VII 8 VIII	0	0	100
13c	100 VII	0	0	100
14a	25 V 75 VII	0	25	75
14b	7 V 90 VII 3 VIII	0	7	93
15a	10 III 15 VI 50 VII 25 VIII	10	15	75
15b	67 VI 8 VII 25 VIII	0	67	33

BEAR CREEK SOIL SURVEY (EXCERPT)
(For a detailed description of soils, see Bear Creek Soil Survey)

MAP UNIT	SCS SOIL CAPABILITY CLASS	SOILS CLASS FOR LEGEND	MAP UNIT	SCS SOIL CAPABILITY CLASS	SOILS CLASS FOR LEGEND
94 D	VIII	C	151 B	VI	B
94 E	VIII	C	151 C	VI	B
96 CS	VIII	C	151 CS	VII	C
96 D	VIII	C	151 D	VI	B
96 DS	VIII	C	151 DS	VII	B
96 E	VIII	C	151 ES	VII	C
96 ES	VIII	C	154 B	VI	B
105 C	VII	C	154 C	VI	B
114 B	VII	C	154 CS	VII	C
114 C	VII	C	154 D	VI	B
114 DS	VII	C	154 DS	VII	C
116 B	IV	A	154 ES	VII	C
116 BS	VI	B	155 C	VI	B
116 C	IV	A	155 CS	VII	C
116 DS	VI	B	162 B	IV	A
118 B	IV	A	162 C	IV	A
118 C	IV	A	162 CS	VII	C
118 CS	VI	B	162 D	IV	A
118 D	IV	A	162 DS	VII	C
130 D	VI	B	162 E	IV	A
130 DS	VI	B	171 A	VI	B
133 C	VI	B	171 B	VI	B
133 CS	VI	B	171 C	VI	B
133 D	VI	B	171 CS	VII	C
133 DS	VII	C	171 D	VI	B
133 E	VI	B	171 DS	VII	C
133 ES	VII	C	171 ES	VII	C
150 C	VI	B	172 C	VI	B
150 CS	VII	C	172 CS	VII	C
150 D	VI	B	172 DS	VII	C
150 DS	VII	C	172 ES	VII	C
150 ES	VII	C	173 C	VI	B
173 DS	VII	C	175 B	IV	A
175 A	IV	A			

TROUT CREEK SOIL SURVEY (EXCERPT)
(Soils within Crook County only)
(For a detailed description of soils, see Trout Creek Soil Survey)

MAP UNIT	SCS SOIL CAPABILITY CLASS	SOILS CLASS FOR LEGEND	MAP UNIT	SCS SOIL CAPABILITY CLASS	SOILS CLASS FOR LEGEND
AgC	IV	A	LaC	IB	A
BaC	VII	C	LcE	VII	C
ByF	VII	C	MaC	IV	A
CrB	IV	A	MbE	VII	C
CtE	VI	B	McD	IV	A
CtF	VII	C	MtB	IV	A
DeE	VI	B	Mx	III	A
DoE	VI	B	SeF	VII	C
ErB	IV	A	SIE	VI	B
ErE	VI	B	SmF	VII	C
GnF	VII	C	Wd	II	A
GrD	VI	B			

**SOILS
MORPHOLOGY, DEPTH, SLOPE
% AREA AND ASSOCIATION**

MAP UNIT (MORPHOLOGY)	DEPTH (INCHES)	SLOPE (% GRADE)	% AREA	SOIL ASSOCIATION
1a Floodplain terrace	60+	0 – 3	3.3	Powder-Courtrock (loam)
1a Floodplain	40 – 60	0 – 3	1.3	Calabar – Damon
1b Terrace	10 – 20	7 – 12	2	Ochoco-Prineville Sandy Loam
2 Alluvial Fans	10 – 20	12 – 20	4.5	Ayres-Nouque Deschutes (Sandy Loam)
3 Alluvial Fans (Slightly Dissected)	20 – 40	12 – 20	2.1	Desckamp-Arron-Gosney (Loamy Sand)
3 Alluvial Fans (Slightly Dissected)	20 – 40	12 – 20	0.8	Deschutes-Redmond Bakeoven (Cobbly Sandy Loam)
4a Lava Flows	20 – 40	12 – 20	4	Deschutes-Arron-Redmond (Sandy Loam)
4b Lava w/ rolling moderately dissected terrain	20 – 40	12 – 20	4	Deschutes-Arron-Redmond (Sandy Loam)
4c w/ lava ridges	20 – 40	12 – 20	4	Deschutes-Gosney (8a)
4d Lava, Barerock predom	20 – 40	12 – 20	0.4	Deschutes-Gosney (8a)
5 Rolling Topo	20 – 40	20 – 35	2.5	Roba-Fopiano (loam)
6a Volcanic Plateaus Gently Rolling	20 – 40	35 – 60	5	Simas-Ginser-Tub Silt
6b Volcanic Plateaus Rolling, Dissected			4.7	(Gravel-Clay-Siloon)
6c Volcanic Plateaus Steeply Dissected		35 – 60		Simas-Tub Silt Sed Rx (Silt Loam)
7a Mod. Dissected Rolling		35 – 60		Simas-Tub Silt Sed Tx (Silt Loam)
7b Mod. Dissected Rolling Unconsolidated Rock Outcrops				
8a Steeply Rolling Dissected Terrain (Rock Outcrop common)	10 – 20	35 – 60	7	Ruckles-Anawait (Stony Silty Loam)
8a Steeply Rolling Dissected Terrain (Rock Outcrop common)	20 – 40	12 – 20	0.4	Deschutes Gosney (Sandy Loam)
8b Steeply Rolling Dissected Terrain (Rock Outcrop common)	10 – 20	35 – 60	7.4	Anawait-Ruckles Lookout (Stony Silty Loam)
8c Steeply Rolling Dissected Terrain (Rock Outcrop common)	20 – 40	35 – 60	4.7	Anawait-Ruckles-Rarey
8c Steeply Rolling Dissected Terrain (Rock Outcrop common)	10 – 20	20 – 35	2.7	Anawait-Merlin-Rarey

MAP UNIT (MORPHOLOGY)	DEPTH (INCHES)	SLOPE (% GRADE)	% AREA	SOIL ASSOCIATION
9a Steep Rolling Dissected Terrain Rock Outcrop common	20 – 40	35 – 60	12.0	Simas-Tub Silt-Ginser (Gravel Clay silty loam)
9a Steep Rolling Dissected Terrain Rock Outcrop common	20 – 40	35 – 60	0.9	Venator-Izee-Rarey (Shaley Loam)
9a Steep Rolling Dissected Terrain Rock Outcrop common	20 – 40	35 – 60	0.9	Venator-Izee
9b Steep Rolling Dissected Terrain Rock Outcrop common North slopes - 25%	20 – 40	35 – 60	1.3	Prag-Tub Silt-Rarey (Very stony-silty loam)
9c Steep Rolling Dissected Terrain	20 – 40	12 – 20	0.4	Deschutes-Gosney
9c Steep Rolling Mountainous	20 – 40	35 – 60	0.6	Searles-Simas TubSilt (Very strong loam)
10 Flat Plateaus Timbered Soil	20 – 40	35 – 60	8	Anatone-Klicker Hall Ranch (Stony Loam)
11 Flat Plateaus Timbered Soil	20 – 40	35 – 60	3.0	Klicker-Hall Ranch-Anatone (Stony, Silty Loam)
12a Mod. Dissected Rolling Terrain (5000 ft elev.) Timbered Soil	40 – 60	35 – 60	3.7	Hankins-Hankton Broadtone Howby
12b North Slopes Predom.	40 – 60	35 – 60	1.8	Broadtree, Hawkey Hawks
13a Steeply Rolling Dissected Terrain Timbered	40 – 60	35 – 60	5.7	Hankton-Hankins-Klicker (Silt Loam)
13b Steeply Rolling Dissected Terrain Timbered South Slopes Predom.	40 – 60	35 – 60	2	Hankton-Klicker Hankins
13c Steeply Rolling Dissected Terrain Timbered	20 – 40	35 – 60	0.6	Hall Ranch-Daxty
14a North Slopes above 4500 ft elev.	40 – 60	35 – 60		Broadtree-Whistler
14b Mixture of 14a & 13b	40 – 60	35 – 60	3.7	Hankins-Hankerton-Broadtree
15a Canyons with more than 500 ft. of local relief	20 – 40	20 – 35	1.8	Lickskillet-Rockland
15b Canyons with more than 500 ft. of local relief, includes more gentle relief from landslides	10 – 20	35 – 60	0.6	Simas-Tub-Rockland

Insert Map
Grazing Allotment

Insert Map

Private/Commercial Forest and Forest Types

Insert Map
Vegetation Land Use

VEGETATION/LAND USE MAP LEGEND		(OSU LEGEND)
RANGELAND TYPES		
I.	HERBACEOUS TYPES	310
	Grassland, steepe and prairie	314
	Tussock/Bunch grasses	314.1
	Tall grasslands	314.3
	Undifferentiated	319
II.	SHRUB-SCRUB TYPES	320
	Halophytic shrub	324
	Greasewood	324.3
	Shrub steepe	325
	Low Sagebrush	325.1
	Low sagebrush, Longlobe sagebrush, Bluebunch wheatgrass, Idaho fescue	325.11
	Stiff sagebrush, Sandberg's bluegrass	325.12
	Big Sagebrush types (Big sagebrush, Three tip sagebrush)	325.2
	Big Sagebrush/Bluebunch wt.	325.21
	Big Sagebrush/Idaho fescue	325.22
	Alpine sagebrush	325.23
	Big sagebrush/Giant wildrye	325.24
	Silver Sagebrush types	325.3
	Rabbitbrush types	325.4
	Mixed shrub-steepe	325.5
	Sclerphyllous Shrub	326
	Curlleaf Mountain Mahogany	326.4
III.	SAVANA-LIKE TYPES	330
	Coniferous Tree over Herb	333
	Juniper over grass	333.1
	Western juniper/Bluebruch wt.	333.11
	Western juniper/Idaho fescue	333.12
	Coniferous Tree over low Shrub	336
	Juniper over shrub	336.1
	Western Juniper/low sagebrush	336.11
	Western Juniper/big sagebrush	336.12
IV.	FOREST AND WOODLAND TYPES	340
	Conifer Forests	341
	Juniper Types	341.1
	Western Juniper/Big sagebrush/Bluebunch wheatgrass	341.11
	Western Juniper/Big sagebrush/Bluebunch wheatgrass/Idaho fescue	341.12
FOREST TYPES		
I.	HERBACEOUS TYPES	310
	Meadows (Graminaea/Cyperaceae)	315
	Dry graminaceous	315.1
	Wet mixed	315.2
	Graminaceous Marshes	316
	Tule Marshes	317

FOREST TYPES CONTINUED		
II.	FOREST AND WOODLAND TYPES	340
	Ponderosa Pine	341.3
	Ponderosa pine/Western juniper	341.31
	Ponderosa pine/Douglas fir	341.32
	Lodgepole Pine	341.4
	Douglas Fir	341.5
	Mixed Conifer	341.6
	Spricue Fir	341.7
	Subalpine Fir	341.71
AGRICULTURAL TYPES		500
I.	FIELD CROPS	510
	Cereal and grains	511
	Forage	512
	Drub, flavoring and spice	514
	Undifferentiated	519
	Dryland fields	519.1
	Irrigated fields	519.2
II.	PASTURE	540
	Herbaceous	541
III.	NON-PRODUCING, FALLOW, TRANSITION OR IDLE LANDS	560
	Fallow cropland	561
	Plowed	562
	Harvested stubble	564
CULTURAL VEGETATION TYPES		400
I.	HERBACEOUS TYPES	410
	Cultural grassland, steepe, prairie	414
	Undifferentiated	419
II.	SHRUB-SCRUB TYPES	420
	Shrub-steepe	425
	Clearing of overstroy species	425.1
III.	SAVANA-LIKE TYPES	430
	Coniferous Tree over Herb	433
	Juniper over grass	433.1
IV.	UNDIFFERENTIATED	490
MISCELLANEOUS TYPES		
I.	Barren Land	(100)
II.	Water Resources	(200)
III.	Urban	(600)
<p>*Mixtures of vegetation types commonly occur and are designated with slash (/) lines. It is assumed that each unit of a mixed land type occurs in equal proportions. Vegetation land use has been identified using aerial photo interpretive techniques (OSU, 1973).</p>		

REVIEW AND REVISION PROCESSES

It is recognized that as a result of changing conditions and future impacts, planning programs including the Comprehensive Plan, the Urban Growth Boundary and all implementing ordinances and supporting documents must be periodically reviewed and updated. ~~This review and update shall be accomplished through a planning schedule which includes ongoing citizen involvement of area advisory committees in rural areas of Crook County and of subject advisory committees within the urbanized area of the Prineville Valley. These advisory committees shall be involved in making recommendations concerning daily land use proposals and workability of planning and zoning regulations; the activities of the advisory committees shall be subject to review and approval of the Citizen Advisory Committee for Citizen Involvement appointed jointly by the Prineville City Council and the Crook County Court (Deletion by Ordinance No. 45; 3/20/91).~~ Technical plan and ordinance revision shall be accomplished through the City of Prineville and Crook County Planning Commissions and the governing bodies of the involved entities, and shall be based in part upon recommendations of the ongoing citizen committees.

The Comprehensive Plan, Urban Growth Boundary, and implementing ordinances shall be evaluated in relation to changing public policies and circumstances, including community, social, economic and environmental needs; the workability of planning programs in carrying out the intent of the Statewide Planning Goals and the goals of the citizens of Crook County shall be considered. Opportunities shall be provided (in addition to the afore-referenced citizen advisory committee recommendations) for comment by all citizens and affected governmental units to insure coordination in formulation and implementation of policies. Notice of all major revisions and minor changes shall be given in accordance with Statewide Planning Goal #2, LAND USE PLANNING.

In addition to periodic scheduled major update of the Plan, the Boundary, and the Ordinances (review to take place every other year in the winter months), minor revisions shall occur when public needs and desires change, and when development occurs at a different rate than contemplated by the plan. Minor revisions shall occur once per year under usual circumstances. At the time of major plan change, Boundary, and/or Ordinance revision, a public statement shall be issued concerning the need for major revision and shall be based upon examination of data and problems. Public need and justification for minor changes shall also be established prior to minor plan changes.

It is the policy of Crook County to adopt policies and procedures required by state statutes and to adopt ordinances implementing those policies and procedures. Therefore, it is the policy of Crook County to incorporate into its land use regulations the procedures set forth in ORS 197.763 with respect to conduct of local quasi-judicial land use hearing,

notice requirements, and hearing procedures. It is also the policy of Crook County to review such procedures from time to time to maintain conformity to state procedural requirement. (Ordinance No. 55; 2/26/92)

MAP RESOURCE INFORMATION - LIMITATIONS

Natural Resource and Development Limitation Maps derived from original aerial photographs may be slightly distorted due to transfer of information and change of scale. When detailed information is required, the map units from the aerial photographs should, therefore, be used.

Slight discrepancies exist at boundaries indicated on these maps; the discrepancies are the result of professional judgment, and can be resolved in the field.

COMMON ABBREVIATIONS AND DEFINITIONS OF TERMS

ABBREVIATIONS

AUM – Animal Unit Month.

BLM – U.S. Bureau of Land Management

BOR – U.S. Bureau of Reclamation

BTU – British Thermal Unit

DEQ – State Department of Environmental Quality

DU – Dwelling Unit

EFU – Exclusive Farm Use Zoning as set forth by ORS Chapter 215

HSHLD – Household

I-O – County Economic Input – Output Study of 1978

LDCD – State Land Conservation and Development Commission or Department

OEDP – County Overall Economic Development Plan and Program

ORS – Oregon Revised Statutes

ORV – Off Road Vehicle

SCS – U.S. Soil Conservation Service

UGB - Urban Growth Boundary

USFA – U.S. Forest Service

YCC – Youth Conservation Corp.

DEFINITIONS OF TERMS

Accepted Farming Practice: As defined in O.R.S. 215.203(2)(c), “Accepted Farming Practice” means a mode of operation that is common to farms of a similar nature, necessary for the operation of such farms to obtain a profit in money, and customarily utilized in conjunction with farm use.

Agricultural Economic Incentives: Economic incentives for agriculture refers to the provisions set forth in applicable State Statutes and Planning Goals relative to assessment and taxation of agricultural lands, limitations relative to agriculture, allowance of compatible non-farm uses, and limitations relative to the assessment of farm units for costs incurred in the provision of facilities and services for non-farm uses.

Agricultural Land: As set forth in State Planning Goal #3, “Agricultural Land” is land of predominately Class I, II, III, IV, V and VI soils as identified in the Soil Capability Classification System of the United States Soil Conservation Service, and other lands which are suitable for farm use taking into consideration soil fertility, suitability for grazing, climatic conditions, existing and future availability of water for farming irrigation purposes, existing land use patterns, technological and energy inputs required, or accepted farming practices. Lands in other classes, which are necessary to permit farm practices to be undertaken on adjacent or nearby lands, shall be included as agricultural land in any event.

Agriculture Regulatory Incentives: As set forth in O.R.S. 215.253, regulatory incentives for agriculture refers to the provision set forth in said Statute that no state agency, city, county or political subdivision of the state may exercise any of its powers to enact local laws or ordinances or impose restrictions or regulations affecting any farm use land situated within an exclusive farm use zone established under O.R.S. 215.203 in a manner that would unreasonably restrict or regulate farm structures or that would unreasonably restrict or regulate accepted farming practices because of noise, dust, odor or other materials carried in the air or other conditions arising therefrom if such conditions do not extend beyond the boundaries of the exclusive farm use zone within which they are created in such manner as to interfere with the use of adjacent lands. Nothing in this reference is intended however to limit or restrict the lawful exercise by any state agency, city, county or political subdivision of the state of its power to protect the health, safety and welfare of the general citizenry.

Buildable Lands: Refers to lands in urban and urbanizable areas that are suitable, available and necessary for residential use.

Buffer or Buffer Area: Refers to an area or land use lying between two or more conflicting land uses which may include open space, screening, less intensive or more compatible uses, natural barriers, or other natural or manmade features that lessen or minimize the impact of one land use upon another.

Carrying Capacity: Level of use which can be accommodated and continued without irreversible impairment of natural resource productivity, the ecosystem and the quality of air, land, and water resources.

Commercial Forest Lands: Are those lands capable of producing crops of marketable wood products and are not withdrawn from this use by statute or administrative regulation. Commercial forests can be managed to generally produce in excess of an annual growth of 20 cubic feet per acre of marketable lumber. This includes accessible and potentially accessible land and operable and potentially operable area.

Conserve: To manage in a manner which avoids wasteful or destructive uses and provides for future availability.

Core Area: Refers to that commercially developed area of the City of Prineville which is generally and predominately located within a 4-block radius of the intersection of Main and Third Streets and along said streets from the intersection thereof for approximately 6 blocks.

County Input-Output Study (I-0 Study): A study completed in 1978 of the Crook County Economy analyzing all inputs and outputs of the total economy and disclosing the nature, interactions and interdependencies of all economic sectors within the total economy of the County. The study is intended to provide a factual basis for decisions relating to project increases or decreases within the more important sectors of the County's economy and analyze this impact on the remainder of the economy.

County Overall Economic Development Program (OEDP): Consists of an Annual Report on the County's overall economic situation and developments prepared pursuant to guidelines set forth by the Economic Development Administration, U.S. Department of Commerce, and thereof establishing eligibility for public and private economic development project funding from said federal agency.

Cultural Area: Refers to an area characterized by evidence of an ethnic, religious or social group with distinctive traits, beliefs and social forms.

Develop: To bring about growth or availability; to construct or alter a structure, to conduct a mining operation, to make a physical change in the use or appearance of land, to divide land into parcels, or to create or terminate rights of access.

Dwelling Unit: Refers to a single housing unit designed for occupancy by a single family or household unit.

Encourage: Stimulate; give help to; foster; to give support to; be favorable to.

Farm Use: As defined in O.R.S. 215.203(2), "Farm Use" means the current employment of land including that portion of such lands under buildings supporting accepted farming practices for the purpose of obtaining a profit in money by raising, harvesting and selling crops or by the feeding, breeding, management and sale of, or the produce of, livestock, poultry, fur-bearing

animals or honeybees, or for dairying and the sale of dairy products or any other agricultural or horticultural use or animal husbandry or any combination thereof.

Financial and Regulatory Incentives: Refers to (1) tax incentives and differential assessments, (2) maximizing land use potentials, (3) reasonable and efficient land use controls and procedures, (4) multiple use and joint development practices, (5) identification of financing sources and methods, (6) development alternatives, and (7) capital improvement programming and phasing.

Forest Lands: (1) lands composed of existing and potential forest lands which are suitable for commercial forest uses; (2) other forested lands needed for watershed protection wildlife and fisheries habitat and recreation; (3) lands where extreme conditions of climate, soil and topography require the maintenance of vegetative cover irrespective of use; (4) other forested lands in urban and agricultural areas which provide urban buffers, wind breaks, wildlife and fisheries habitat, livestock habitat, scenic corridors, and recreational use. All forest lands within the county fall into one of the following classes: (a) Class 1 - Timber class, includes all forest land primarily suitable, for the production of timber (none in Crook County); (b) Class 2 - Timber and grazing class, includes all forest land primarily suitable for joint use for timber production and the grazing of livestock, as a permanent or semi-permanent joint use, or as a temporary joint use during the interim between logging and reforestation; (c) Class 3 - Agricultural class, includes all forest land primarily suitable for grazing and other agricultural use.

Forest Uses: Refers to (1) the production of trees and the processing of forest products; (2) open space, buffers from noise, and visual separation of conflicting uses; (3) watershed protection and wildlife and fisheries habitat; (4) soil protection from wind and water; (5) maintenance of clean air and water; (6) outdoor recreational activities and related support services and wilderness values compatible with these uses; and (7) grazing land for livestock.

Historic Areas: Refers to lands with sites, structures, and objects that have historical significance.

Household: Refers to one or more persons occupying a single housing unit.

Impact: The consequences of a course of action; effect of a goal, plan or decision.

Implementation Measures: The means used to carry out the Comprehensive Plan and Goals and Policies thereof. There are of two general types: (1) Management implementation measures such as ordinances, regulations or project plans, and (2) site or area specific implementation measures such as permits and grants for construction, construction of public facilities or provision of services.

Insure: Guarantee; make sure or certain something will happen.

Key Facilities: Basic facilities that are primarily planned for by local government but which also may be provided by private enterprise and are essential to the support of more intensive development including schools, transportation, water supply, sewage and solid waste disposal.

Maintain: Support, keep, and continue in an existing state or condition without decline.

Natural Area: Includes land and water that has substantially retained its natural character and land and water that, although altered in character, is important as habitats for plant, animal or marine life, for the study of its natural, historical, scientific or paleontological features, or for the appreciation of its natural features.

Natural Disaster and Hazard Areas: Refers to areas that are subject to natural events that are known to result in death or endanger the works of man, such as stream flooding, ground water, erosion and deposition, landslides, earthquakes, weak foundation soils and other natural hazards unique to a specific area.

Natural Resources: Air, land and water and the elements thereof which are valued for their existing and potential usefulness to man.

Non-Commercial Forest Lands: Non-commercial forest land is land incapable of producing 20 cubic feet per acre per year of industrial wood products.

Non-Forest Land: Non-forest land is land that has never supported forests and lands formerly forested but not developed for such non-forest uses as crops, improved pasture and residential areas.

Open Space: Consists of lands used for agricultural or forest uses, and any land area that would, if preserved and continued in its present use (a) conserve and enhance natural or scenic resources; (b) protect air or streams or water supply; (c) promote conservation of soils, wetlands, beaches or tidal marshes; (d) conserve landscaped areas, such as public or private golf courses, that reduce air pollution and enhance the value of abutting or neighboring property; (e) enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations, or sanctuaries or other open space; (f) enhance recreation opportunities; (g) preserve historic areas; and (h) promote orderly urban development.

Pollution: The violation or threatened violation of applicable state or federal environmental quality statutes, rules and standards.

Potential Yield: The maximum sustained yearly cutting level attainable with intensive forestry practices.

Preserve: To save from change or loss and reserve for a special purpose.

Productivity Classes: Productivity classes refer to general land productivity as a function of fertility and moisture availability. Productivity is referred to as site class or site index in the U.S.F.S. technical literature.

Protect: To save or shield from loss, destruction, or injury or for future intended use.

Provide: To prepare, plan for, and supply what is needed.

Public Facilities and Services: Projects, activities and facilities which the appropriate public agency determines to be necessary for the public health, safety and welfare.

Quality: The degree of excellence or relative goodness.

Recreation Areas, Facilities and Opportunities: Provide for human development and enrichment and include but are not limited to: open space and scenic landscape; recreational lands; history; archeology and natural science resources; scenic roads and travelways; sports and cultural events; camping, picnicking and recreational lodging; tourist facilities and accommodations; trails; waterway use facilities; hunting; angling; winter sports; mineral resources; active and passive games and activities.

Recreation Needs: Refers to existing and future demand by citizens and visitors for recreation areas, facilities and opportunities.

Rural Facilities and Services: Refers to facilities and services which the appropriate public agency or governing body determines to be suitable and appropriate solely for the needs of rural use, and not at levels supporting urban uses.

Rural Land: Rural lands are those which are outside the Urban Growth Boundary and are: (a) Non-urban agricultural, forest or open space lands or, (b) Other lands suitable for sparse settlement, small farms, or acreage homesites with no or hardly any public services, and which are not suitable, necessary or intended for urban use.

Rural Service Center: A concentrated assemblage of urban type development including residential, commercial and industrial uses in a generally rural area which provides a minimum level of needed and desirable goods and services to the rural area within which such center is located.

Scenic Areas: Refers to lands that are valued for their aesthetic appearance.

Social Consequences: The tangible and intangible effects upon people and their relationships with the community in which they live resulting from a particular action or decision.

State Planning Goal: The mandatory statewide planning goals adopted by the State Land Conservation and Development Commission pursuant to Oregon Revised Statutes Chapter 197.005 to 197.430.

Strip Commercial Areas: Those predominately commercially developed areas along the Madras and Ochoco Highways leading into the City of Prineville.

Sustained Yield (as defined in Multiple Use Act): Sustained yield of the several products and services means the achievement and maintenance of perpetuity of a high level annual or regular periodic output of the various renewable resources of the National Forest without impairment of productivity of the land.

Transportation: Refers to the movement of people and goods.

Transportation Disadvantaged: Refers to those individuals who have difficulty in obtaining transportation because of their age, income, physical or mental disability.

Transportation Facility: Refers to any physical facility that moves or assists in the movement of people and goods, excluding electricity, sewage and water.

Transportation System: Refers to one or more transportation facilities that are planned, developed, operated and maintained in a coordinated manner to apply continuity of movement between modes and within and between geographic and jurisdictional areas.

Urban Facilities and Services: Refers to key facilities and to appropriate types and levels of at least the following: police protection; fire protection; sanitary facilities; storm drainage facilities; planning, zoning, and subdivision control; health services; recreation facilities and services; energy and communication services; and community governmental services.

Urban Growth Boundary (UGB): A boundary line separating urban and urbanizable lands from rural lands and encompassing an incorporated city and adjoining and area urban uses. The boundary is also a tool for identifying an area within which urban type growth is most likely to occur as an expansion of existing urban development and certainly the area within which such development is most desirable.

Urban Land: Urban areas are those places having an incorporated city. Such areas may also include lands adjacent to and outside the incorporated city and include such lands that: (a) have concentrations of persons who generally reside and work in the area, and (b) have supporting public facilities and services.

Urbanizable Land: Urbanizable lands are those lands within the Urban Growth Boundary and which are identified and (a) determined to be necessary and suitable for future urban uses, (b) can be served by urban services and facilities, and (c) are needed for the expansion of an urban area.