

***JEFFERSON
COUNTY
COMPREHENSIVE
PLAN***

*Adopted December 27, 2006
By Ordinance O-01-07 and O-03-07*

Effective January 1, 2007

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PART 1

BACKGROUND

STATEWIDE PLANNING REQUIREMENTS

A Comprehensive Plan is a generalized, coordinated land use map and policy statement that interrelates all functional and natural systems and activities relating to the use of lands, including, but not limited to, sewer and water systems, transportation systems, educational facilities, recreational facilities, and natural resources and air and water quality management programs. [ORS 197.015(5)¹]

Comprehensive planning began in Oregon in 1969 when legislation was passed requiring all Oregon Counties to develop comprehensive plans. There was, however, little funding to accomplish this task, and no specific criteria were given to guide development of the plans.

In 1973 the Oregon State Legislature, through Senate Bill 100, created the Land Conservation and Development Commission (LCDC), and charged them with developing statewide planning goals and guidelines. Cities and counties were then required to construct comprehensive plans which addressed these goals. Some goals have been amended since 1973 to reflect statutory changes made by the state legislature, legal interpretations by the state Land Use Board of Appeals (LUBA) or the appellate courts, and refinements or modifications deemed necessary by LCDC.

Although there are 19 statewide planning goals, only 14 of the goals apply to Jefferson County. These include:

- Goal 1: Citizen Involvement
- Goal 2: Land Use Planning
- Goal 3: Agricultural Lands
- Goal 4: Forest Lands
- Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces
- Goal 6: Air, Water and Land Resources Quality
- Goal 7: Areas Subject to Natural Hazards
- Goal 8: Recreational Needs
- Goal 9: Economic Development
- Goal 10: Housing
- Goal 11: Public Facilities and Services
- Goal 12: Transportation
- Goal 13: Energy Conservation
- Goal 14: Urbanization

The Jefferson County Comprehensive Plan must comply with these goals.

¹ Citations to Oregon Revised Statutes (ORS) are based on the 2005 statutes.

HISTORY OF JEFFERSON COUNTY PLANNING

Jefferson County adopted its first Comprehensive Plan April 4, 1973, prior to adoption of the statewide planning goals. The Plan identified prime farmlands, limited agricultural areas, general rural and rural service areas, recreation lands, special recreation areas and urban expansion areas, with objectives to guide development or preservation of each area. It also included a road and highway plan, a Warm Springs Reservation plan, and a housing and urban development element. A Zoning Ordinance to implement the Plan was adopted July 5, 1973.

In the late 1970s the County Planning Commission began work to develop a Comprehensive Plan that would comply with the statewide planning goals. The first draft of the Plan, which replaced the 1973 Plan, was adopted on March 11, 1981. Revisions were required by LCDC, so the Plan was amended on February 2, 1983. The amended plan was acknowledged by LCDC on June 2, 1983, but was appealed to the Court of Appeals, who reversed LCDC and remanded it. The issues on remand concerned Range Land provisions, inventories of Goal 5 resources, and exception (rural residential) areas. As a result of the remand, several areas that had been designated rural residential were reclassified as agricultural land. An amended Plan was adopted on May 29, 1985, and was acknowledged on November 21, 1985.

The Plan was amended over the years, primarily to address work tasks required as part of Periodic Review during the period from 1993 to 1997. But the vast majority of the Plan text remained the same as was originally adopted in 1981. Consequently, much of the background material in the Plan was out of date. Many of the Plan's objectives and policies no longer complied with state statutes and administrative rules, or could not be accomplished through the Zoning Ordinance or other land use regulations. Thus a complete update and revision of the Plan was both necessary and long overdue.

PURPOSE OF THE COMPREHENSIVE PLAN

This amended Comprehensive Plan presents the official goals and policies concerning land use in Jefferson County. It addresses all phases of land use and resource utilization and applicable statewide planning Goals adopted by LCDC. Its aim is to guide land use and development in the County until 2025, while recognizing that periodic review and amendment will be necessary to address changing conditions.

The goals and policies in the Comprehensive Plan are aspirational and are not intended to be mandatory approval criteria. The goals and policies are implemented through other measures, primarily by regulations in the Zoning Ordinance. All land use regulations adopted by the County must be in compliance with the Comprehensive Plan.

PLAN COMPONENTS

The Comprehensive Plan contains background information and policies addressing how the County will comply with each of the 14 applicable statewide planning Goals. Other information that has been adopted as part of the Plan is contained in Appendixes. Appendix I contains inventory information related to Goal 5 resources. Appendix II contains all of the exception statements for lands that are not subject to Goal 3, Agricultural Land or Goal 4, Forest Land.

DESCRIPTION OF COUNTY

Jefferson County is located on the eastern side of the Cascade Mountains in Central Oregon. It was established from a portion of Crook County on December 12, 1914, and named for Mount Jefferson, which is on the county's western boundary. The county's western border is the crest of the Cascades. Most of the county lies in the Deschutes River Drainage Basin. A small area in the northeastern corner of the county is part of the John Day River Basin. The county has a total area of 1,795 square miles (1,148,160 acres) and ranks 19th of 36 in the State according to size.

Elevation in Jefferson County ranges from 10,495 feet at the tip of Mt. Jefferson to around 1,300 feet in the John Day River Area. Average annual precipitation exhibits a corresponding variation, ranging from around 100 inches near Mt. Jefferson to nine inches at Madras. The average length of a season without killing frosts at Madras ranges from 90-110 days.

The western third of the county is predominantly commercial forest land. The topography of this area varies from level plains to gentle slopes and narrow valleys to high mountain peaks. The central third of the county is a high plateau which is broken by the steep walled canyons of the Deschutes and Crooked Rivers. The eastern third of the county is primarily non-irrigated range land, consisting of rolling or low mountainous land vegetated with grasses, brush and western juniper.

Land use generally corresponds to the land form. Much of the western third of the county is occupied by timber lands of the Deschutes National Forest, as well as the Warm Springs Indian Reservation. The National Forest is used for forestry, open space recreation and wilderness preservation. The central third of the county contains the majority of the irrigated farm land, along with the main population centers. East of this central land lies sparsely settled unirrigated land used for dry land wheat farming, grazing, and open space.

The Camp Sherman rural community is unique within Jefferson County. Entirely surrounded by Deschutes National Forest, Camp Sherman is located in the southwest portion of the County, within the 158,000 acre Metolius Basin watershed. Camp Sherman has been and remains at the heart of Confederated Tribes of Warm Springs native culture. In the last 120 years it has also been important to European explorers with the historic Santiam Wagon Road running through the area. Camp Sherman was named for the wheat farmers of Sherman County who brought their families to the area for vacations and recreation, with some of the earliest homes in the area dating back to 1915.

As development pressures arose in Oregon, the State developed land use planning statutes in the 1970's. Camp Sherman residents immediately designed and implemented special protections through legislative process for the Metolius Basin to maintain its character as a rural forest area. This has resulted in well-planned land management allocations with a variety of special land use zones and a preservation program developed in conjunction with the USDA Forest Service in 1990.

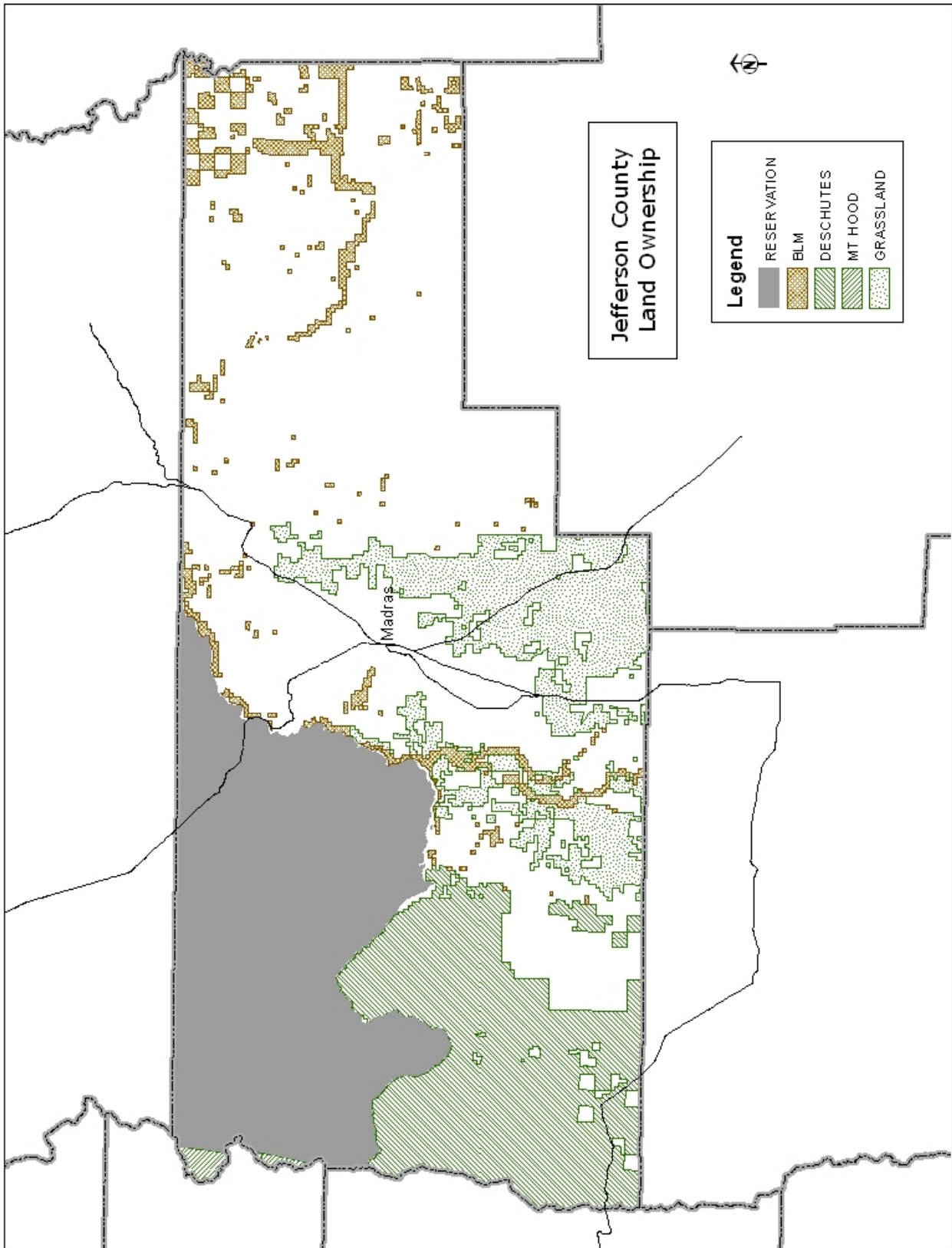
The Metolius Watershed is a closed spring-fed system of statewide and national significance. It is clear that this Basin enhances the value of Central Oregon and is one of Jefferson County's crown jewels.

More than half of the land in the county is under public ownership or is part of the Confederated Tribes of the Warm Springs Reservation of Oregon. The Warm Springs Reservation occupies the northwest quarter of the County, extending north into Wasco County. A few additional parcels have been placed in tribal trust status. Jefferson County does not have any regulatory authority over activities on Reservation or trust lands, so they are not addressed in the Comprehensive Plan.

The amount of land under public and reservation ownership is shown in the following table, and is depicted on the following map. There are 570,238 acres of private land.

PUBLIC AND RESERVATION LANDS

Warm Springs Reservation:	257,109 acres
Deschutes National Forest:	159,593 acres
Mt. Hood National Forest:	4,220 acres
Crooked River National Grasslands:	112,683 acres
Bureau of Land Management:	42,534 acres
State of Oregon:	<u>1,783 acres</u>
Total:	577,922 acres



PART 2

GOALS AND POLICIES

GOAL 1: CITIZEN INVOLVEMENT

Goal: To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Jefferson County established a County Planning Commission on February 3, 1960. Until 1970 the Commission's activities were limited to subdivision review and approval. Early in the county planning program it was determined that citizen participation was an essential aspect of developing a comprehensive plan. In February, 1970 the County Court appointed the first of what would be nine citizen's advisory committees to assist the Planning Commission in development of a planning program for the county. The Citizen Involvement Program was formalized in 1975 as an initial step in construction of a Comprehensive Plan to meet statewide Planning Goals and Guidelines. The citizen advisory committees participated in all phases of drafting the 1981 Comprehensive Plan.

After the Plan was adopted and was acknowledged by LCDC, there was much less need for citizen advisory committees. By 2005, only one appointed citizen advisory committee remained active – the Camp Sherman Local Advisory Committee.

It is important to continue to provide for and foster greater communication between the County and citizens. Community Planning Advisory Committees (CPACs) can assist in this effort. CPACs may be appointed by the Board of Commissioners if there is a substantial show of interest by citizens living in a specific geographic area or who participate in a common type of land use activity, such as the agricultural community. The role of the CPACs should be twofold. First, the CPACs should provide comments to County decision-makers on major development applications that may have an impact on the local area, and provide input on changes to the Comprehensive Plan and Zoning Ordinance they feel should be made for their area. Second, and equally important, the CPACs should act as a conduit between the County and citizens in the area by disseminating information on planning and proposed development activities to the local community.

The boundary or extent of the area that any CPAC covers will be determined by the Board of Commissioners, but normally will be based on zone boundaries. Membership, structure and specific responsibilities of the CPACs will be outlined in separate by-laws.

Individual citizens are given the opportunity to review land use applications and participate in the planning process in accordance with statutory requirements. Notice of administrative decisions and public hearings are mailed to surrounding property owners as required by ORS 197.763 and ORS 215. Notice of public hearings is also published in the local newspaper.

Policy 1: Strive to maximize citizen involvement during the review and amendment of the Comprehensive Plan and implementing ordinances.

- 1.1 The County Planning Commission shall continue as the Committee for Citizen Involvement. Planning Commission members shall be appointed by the Board of Commissioners after an open application process, and shall represent different geographic areas as well as different areas of interest to the greatest extent possible.

- 1.2 A Citizen Advisory Committee, made up of members representing different geographic areas of the County, different areas of expertise and public agencies shall be appointed by the Board of Commissioners to assist when the County reviews or updates the Comprehensive Plan and implementing ordinances.
 - 1.3 The Planning Commission and Board of Commissioners should strive to hold informational meetings or public hearings in various locations throughout the County as part of any major revision of the Comprehensive Plan or Zoning Ordinance.
- Policy 2: Provide maximum opportunity for citizen participation in the land use permitting process.
- 2.1 The County will notify surrounding and nearby property owners and other persons or agencies that might be affected by proposed and tentatively approved land use actions, as required by state statute.
 - 2.2 Notice of public hearings should be published in the Madras Pioneer and any local newspaper where a land use is proposed when the application is likely to generate public interest or concern.
 - 2.3 The Board of Commissioners shall consider the appointment of Community Planning Advisory Committees representing the various geographic communities and interests to disseminate information on planning and development proposals to the local community and to provide input and recommendations on proposed land use activities in their areas of interest, if requested by such groups. Advisory Committees could represent Camp Sherman, Three Rivers Recreation Area, Crooked River Ranch, and agricultural interests.
 - 2.4 Proposals for uses that may impact the surrounding area should be considered at a public hearing so that those who may be affected have the opportunity to express their concerns.
- Policy 3: Information on planning processes, procedures and requirements should be readily available to the public.
- 3.1 A copy of the current County Comprehensive Plan and Zoning Ordinance should be posted on the County website and be placed in the Jefferson County library and other places where it will be available to the public.
 - 3.2 Alternative means should be used whenever possible to educate and keep the community informed on planning matters. Such means may include community forums, newspaper articles, maintenance of a County website, or newsletters in utility bills or tax statements.

GOAL 2: LAND USE PLANNING

Goal: To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land to assure an adequate factual base for such decisions and actions.

Jefferson County's first Subdivision Ordinance was adopted in 1962. It has been replaced or amended multiple times since then. The first Zoning Ordinance was adopted in 1964, but it applied only to the central portion of the County. A new Zoning Ordinance which covered a larger portion of the County was adopted in 1973, but it wasn't until 1975 that the entire County was zoned. In 1981 the County adopted both a new Comprehensive Plan and Zoning Ordinance, but neither fully complied with statewide planning goals. Both were amended in 1983 and 1985, and were acknowledged on November 21, 1985. The Zoning Ordinance has been amended many times since, most recently in 2003.

In 2005 the County began the process of rewriting the Comprehensive Plan, Zoning Ordinance and Subdivision Ordinance. As part of this process, the County decided to incorporate land division regulations into the Zoning Ordinance, rather than having a separate Subdivision Ordinance. This will allow consistency in procedures for processing all land use applications.

The Zoning Ordinance contains regulations to implement Comprehensive Plan policies, state statutes and administrative rules. It contains standards and approval criteria, as well as procedures for processing land use applications. Applicable standards and criteria depend upon the zoning designation of the property where a land use action is proposed, plus any additional regulations that are needed to address and protect specific areas and resources.

The adopted Zoning Map establishes the zoning designation of all land in the unincorporated area of the County, excluding the Warm Springs Indian Reservation. Zoning boundaries were drawn based on requirements of state goals, statutes and administrative rules; to recognize existing County land uses; to provide areas for development; and to protect air, water and land resources. The Zoning Map provides a more specific depiction of the general land use categories identified on the Comprehensive Plan Map.

Taken together, the Comprehensive Plan, Comprehensive Plan Map, Zoning Ordinance and Zoning Map are the tools that the County uses to implement its planning program.

Policy 1: The Comprehensive Plan shall be maintained as the overall policy statement to guide land use planning in Jefferson County. The Comprehensive Plan shall implement and comply with applicable statewide planning goals.

1.1 Comprehensive Plan policies are to be viewed as guiding statements, but are not mandatory approval criteria that will be applied to individual land use applications. The Plan policies are implemented through zoning, land division and transportation regulations.

1.2 The Zoning Ordinance and other land use regulations shall be in accordance with the Comprehensive Plan and statewide planning goals, unless an exception to one

or more of the goals has been approved. The rationale for the exception shall be included in the Comprehensive Plan.

Policy 2: The County will maintain a planning department to coordinate land use planning activities, and a Planning Commission to provide citizen input concerning land use matters. The Board of Commissioners, as governing body, will continue to be the final authority in making land use decisions.

Policy 3: The County will continue communication and coordination with other governmental agencies, special districts and the Confederated Tribes of the Warm Springs Reservation. Notice of land use applications should be provided to those groups that may have an interest in the proposed land use activity.

Policy 4: The Comprehensive Plan should be reviewed every five years or when changes in circumstances or new information warrant.

GOAL 3: AGRICULTURAL LANDS

Goal: To preserve and maintain agricultural lands.

Approximately 69 percent or 789,854 acres of the total County area (including the Warm Springs Reservation) is considered to be farmed according to OSU Extension Service information. Agriculture is somewhat limited because of the relatively short growing season of 90 – 100 days in the Madras area, and because of limited supplies of water for irrigation outside the North Unit Irrigation District (NUID). The highest value crops grown in the County are grass, vegetable and flower seed, although the total number of acres of these crops is relatively small because many seed crops require a buffer to prevent cross pollination with different varieties and need “clean” ground that has been out of production for that crop for a number of years. Livestock and associated rangeland, pasture, alfalfa and hay are also important to the agricultural economy. According to OSU Extension Service information, there were approximately 23,000 head of cattle in the County in 2004.

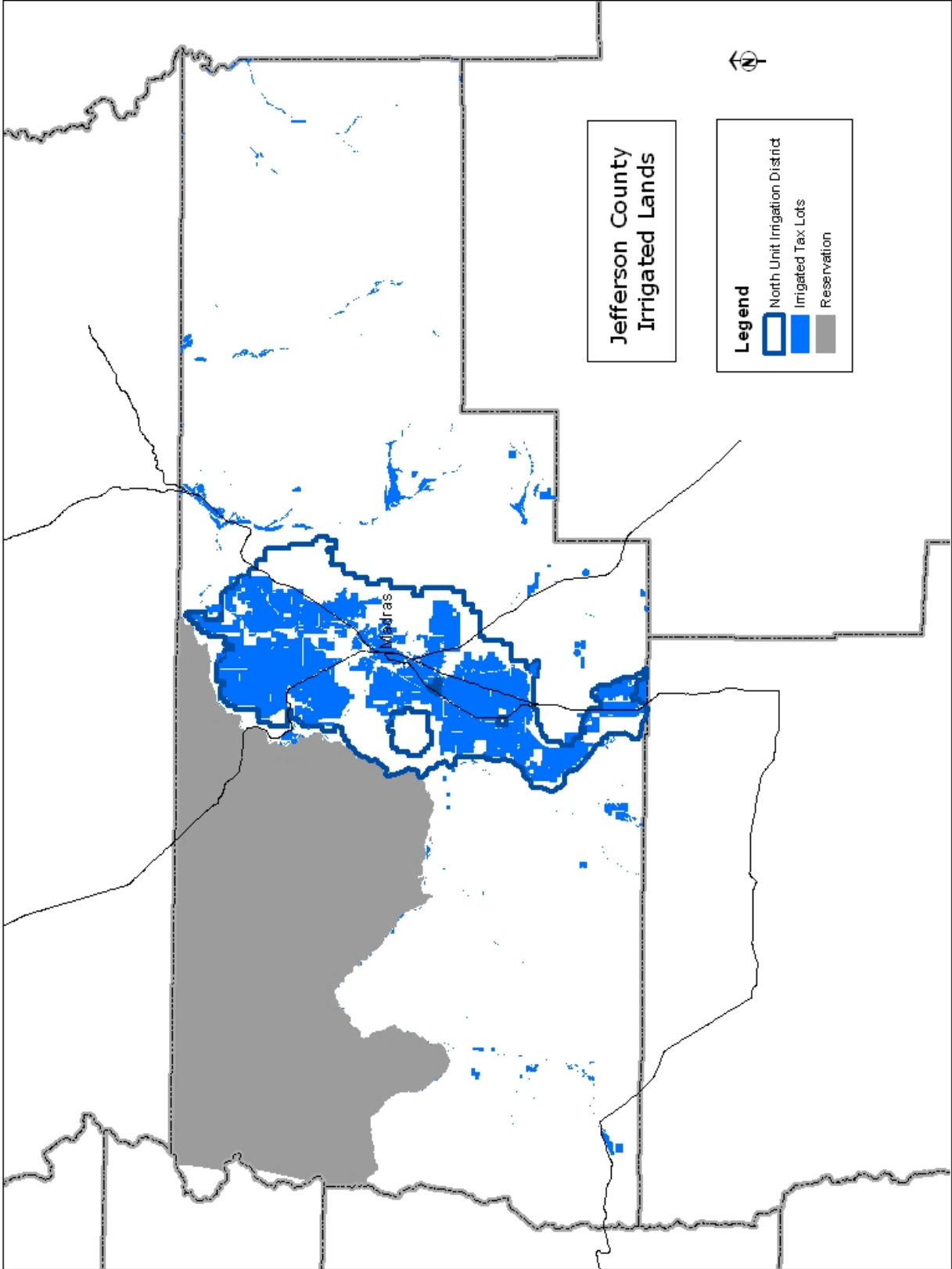
Availability of water for irrigation has a significant effect on the types of crops that can be grown. Irrigation has enabled farmers to turn marginal dry land into productive, diversified farms. Approximately 58,000 acres in the County are within the boundary of the NUID. However, there is sufficient water to irrigate only about 50,000 acres of the land within the boundary. The NUID has water rights from the Deschutes River, which are generally sufficient to provide adequate water throughout the growing season.

Approximately 7,000 additional acres of land in the County are irrigated from other sources, including the Crooked River. These lands are generally smaller tracts adjacent to creeks. A small amount of land also uses well water for irrigation. In most years, water supply to these areas is not adequate after July when water is needed most, thus limiting crop production.

The map on the following page shows the NUID boundary, parcels within the district that are at least partially irrigated, and other areas outside the boundary that have water rights.

Between 20,000 and 30,000 acres of dry land contain good soils and could likely be productive farm land, but no additional water is currently available for irrigating these lands. New water sources or the transfer of water from other parcels could increase productivity of these lands.

The eastern third of the county, east of the NUID boundary consists mainly of Class VI and VII soils which are either used for livestock grazing or are undeveloped. Limited grazing also takes place in the Whychus Creek area, located west of the Deschutes River and adjacent to the Deschutes County line. These areas are ecologically fragile and will not recover from abuse as quickly or completely as irrigated land. At one time some of these lands were used for dry land agriculture, but they have been converted to grassland through the Conservation Reserve Program (CRP) because land that is not irrigated currently cannot economically be used for crop production. The County has historically limited land divisions and residential development in these areas in order to avoid unmanageable land conservation problems. Further, settlement of non-agriculturally oriented people in these remote sections of the county results in increased fire risk and demands for community services and utilities which become very costly over great distances.



Included in the nonirrigated area of the county is the Crooked River National Grassland, which is federally owned land. 112,683 acres of the Grassland is in Jefferson County. The Grassland is managed in part for livestock grazing, but also for wildlife habitat and recreation.

Agricultural Zones

The Natural Resource Conservation Service (NRCS) rates soils based on agricultural capability and limitations, with Class I soils having few limitations and class VIII soils having severe limitations that preclude their use for agriculture. In eastern Oregon, Class I through VI soils are considered to be suitable for agriculture, although Class VI soils have severe limitations that make them generally unsuited to cultivation and limit their use to pasture and range. In addition to lands with Class I through VI soils, lands in other soil classes which are necessary to permit farm practices to be undertaken on adjacent or nearby lands must be included and classified as agricultural land under statewide planning Goal 3.

Irrigated land within the NUID boundary is predominantly composed of Class II and III soil, and is primarily zoned Exclusive Farm Use A-1.

Within the boundaries of the NUID are lands that do not have irrigation water rights and are predominantly composed of Class IV and VI soils. In 1996 the county established a second category of exclusive farm use land, the Exclusive Farm Use A-2 zone, to recognize these non-irrigated and less productive lands. At the time, the criteria to rezone property from A-1 to A-2 were designed to allow only one specific area on the north side of Round Butte to be rezoned. One intent of the A-2 zone is to allow dwellings that are not in conjunction with farm use. The County has historically not allowed such dwellings in the A-1 zone in order to protect and preserve the best farmland in the County and to minimize impacts to farming activities from nonfarm uses. As part of the 2006 Comprehensive Plan update, the Planning Commission determined that it may be appropriate to allow other unirrigated lands with marginal soils to be rezoned to A-2.

The predominant zone in the County is the Range Land zone, which consists of unirrigated land between the Deschutes National Forest boundary and the Deschutes River gorge in the western third of the County, and almost all land east of the NUID boundary. Lands in the Range Land zone are predominantly composed of Class IV through VII soils.

Policy 1: Protect agricultural and range land which presently is under production, or has the potential to be productive.

1.1 The County will preserve agriculture lands through Exclusive Farm Use Zoning, as required by state statute. Exclusive Farm Use lands shall include land that is predominantly agricultural capability classes I through VI, and lands in other classes which are interspersed or are necessary to permit farm practices to be undertaken on adjacent or nearby lands.

1.2 Lands within the North Unit Irrigation District boundary should be zoned Exclusive Farm Use A-1. Dwellings that are not in conjunction with farm use

should not be permitted in the A-1 zone in order to prevent adverse impacts to farming practices.

1.3 Nonirrigated lands that are predominantly composed of agricultural capability class VI through VIII soil that is within or in close proximity to the North Unit Irrigation District boundary may be zoned Exclusive Farm Use A-2. Dwellings that are not in conjunction with farm use may be allowed in the A-2 zone if in compliance with administrative rule requirements.

1.4 Unirrigated agricultural land outside the boundaries of the North Unit Irrigation District that is composed predominantly of Class IV through VII soils should be zoned Range Land.

Policy 2: Recognize the importance of irrigation for crop production.

2.1 If possible, require that agricultural water rights be transferred to other agricultural land if irrigated land is developed for a non-agricultural use.

GOAL 4: FOREST LANDS

Goal: To conserve forest lands by maintaining the forest land base and to protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.

Forest land is rated by productivity class, as described by the U.S. Forest Service (USFS) manual on Timber Management Inventories. Forest productivity in Jefferson County ranges from Class 2 (165 to 224 cubic feet/acre/year) to Class 7 (less than 20 cubic feet/acre/year).

The USFS and Oregon Department of Forestry (ODF) define “timber land” as forest land capable of producing 20 cubic feet or more per acre per year of industrial wood. Timber land also includes “forest land”, which is at least 10 percent stocked by live trees or land formerly having such cover and not currently developed for nonforest use, and “other forest land”, which is incapable of producing 20 cubic feet per acre per year of industrial wood because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness. Statewide planning Goal 4 states that in addition to lands which are suitable for commercial forest uses, forest land also includes adjacent or nearby lands which are necessary to permit forest operations or practices, and other forested lands that maintain soil, air, water and fish and wildlife resources. Consequently, lands that have a productivity of less than 20 cubic feet per acre per year of industrial wood may still be classified and zoned as forest land.

There are 260,820 acres of land in Jefferson County that have been zoned Forest Management. The Forest Management zone is located mainly in the western third of the county, on the eastern slopes of the Cascades, with a smaller amount along the southeastern border of the county in the foothills of the Ochoco Mountains.

More than half of the land in the Forest Management zone is part of the Deschutes National Forest, as shown in the following table:

OWNERSHIP OF TIMBER LAND

<u>OWNER</u>	<u>ACRES</u>
Deschutes National Forest	140,000
Other Federal Land	23,500
Forest Industries	70,000
Other Private	27,000

TIMBER HARVESTING

Live saw timber volume harvested in Jefferson County consists entirely of softwood species. Ponderosa pine is the dominant cover, accounting for 50 percent of the total. Douglas fir accounts for approximately 23% of saw timber volume. Other commercial species are the true firs and Engleman spruce. Juniper is not considered to be saw timber, but has some value on a small scale for lumber, poles, posts, mulch and biomass for power generation.

According to USFS Publication PNW-RB-238 Timber Resource Statistics for Eastern Oregon, 1999 (published in 2004), “National forest timber harvests have dramatically declined in the 1990s. From 1970 to 1989, timber harvest volume from national forests [in Eastern Oregon] averaged 1.16 billion board feet per year. That number dropped to 0.47 billion per year between 1990 and 2000, with an average of 0.24 billion from 1994 to 2000, a decrease of 79 percent from the 1970 to 1989 period.” The following table, which shows ODF figures for the volume of timber harvested in the county, confirms that there has been a significant reduction in the amount of timber harvested from national forest land, which has not been offset by harvest from industry and other private lands.

ANNUAL TIMBER HARVEST

Volume Removed in 1000s of Board Feet – Scribner Log Scale*

Year	USFS	Forest Industry	Other Private	Total
1990 - 94	56,792	52,199	7,620	117,121
1995 - 99	23,978	32,162	4,330	60,470
2000 - 03	9,283	14,179	2,139	15,601

* Includes volume removed (hardwood and softwood) as logs, poles and pilings, but not volume removed from woodcutting operations or piled unmerchantable timber.

As timber harvests have declined, there has been a shift from use of the national forest land predominantly for timber management, to a balance of timber management, grazing, wildlife habitat management, recreation and other uses. The Deschutes National Forest Plan states that no area within the forest is devoted solely to the production of timber as a commodity. An estimated 8 million people use the Deschutes National Forest every year to camp, fish, hike, hunt, ski and enjoy other recreational activities. (This figure is for the entire National Forest. Information on the percentage of use occurring within Jefferson County is not available.)

FIRE

Controlled fire in forested areas can be a beneficial tool in improving the ecological health of the forest, and can reduce the severity of future fires by removing heavy brush and thinning overly dense tree stands. More often, wildfires have a significant negative impact on forest land because they destroy timber, impact watersheds, and affect recreational and other uses. In 2002 the Eyerly fire burned 23,573 acres near the head of the Metolius Arm of Lake Billy Chinook. In 2003 the Booth and Bear Butte fires burned nearly 91,000 acres in the Deschutes and Willamette National Forests and the Warm Springs Reservation. Over 40,000 acres that burned were in the

Mt. Jefferson Wilderness. Although these fires were lightning caused, increased human activity in forested areas and residential encroachment into forested areas is of major concern.

RESIDENTIAL USE

According to County Assessment records, in 2004 there were 33 dwellings in the Forest Management zone, including six on federal land. The majority of the dwellings are near the Metolius River and Lake Billy Chinook. There were only three dwellings on forest land in the southeastern part of the county.

Residences on forest land can cause conflicts with resource management practices such as logging activities, slash burning, and application of herbicides, silvicides, fungicides and insecticides. The presence of residential uses can also have negative consequences on wildlife populations and migratory routes, and increase wildfire risk. However, properly sited dwellings can allow a property owner to increase forest management, minimize vandalism to forested areas, and provide a source of water and manpower to suppress wildfires.

- Policy 1: Protect commercial forest land and adjacent land for timber production, harvesting and related management activities, and which is important for the protection of watersheds, fish and wildlife habitat and which provides recreational opportunities.
- 1.1 The County should continue to apply the Forest Management zone to commercial forest lands and adjacent lands that are valuable for protecting soil, air, water, and fish and wildlife resources and for providing recreational opportunities, consistent with Goal 4.
 - 1.2 The Forest Management zone should include lands capable of producing 20 cubic feet or more per acre per year of industrial wood, and other interspersed or adjacent areas which are necessary to permit forest operations or practices, or to maintain soil, air, water and fish and wildlife resources.
 - 1.3 Zoning regulations applied to land in the Forest Management zone should limit uses which could have significant adverse effects on forest land, operations or practices. Siting standards should be designed to make allowed uses compatible with forest operations and practices and agriculture, to conserve other values found on forest lands, and to minimize wildfire hazard.

GOAL 5: NATURAL RESOURCES, SCENIC AND HISTORIC AREAS, AND OPEN SPACES

Goal: To conserve open space and protect natural and scenic resources.

Statewide planning Goal 5 requires the county to inventory the following resources:

1. Riparian corridors, including water and riparian areas and fish habitat;
2. Wetlands;
3. Wildlife Habitat (including bird sites);
4. Federal Wild and Scenic Rivers;
5. State Scenic Waterways;
6. Groundwater resources;
7. Approved Oregon Recreation Trails;
8. Natural Areas;
9. Wilderness Areas;
10. Mineral and Aggregate Resources;
11. Energy sources;
12. Cultural areas.

Counties are also encouraged to maintain current inventories of historic resources, open space, and scenic views and sites.

Jefferson County completed inventories for Goal 5 resources as part of the 1981 Comprehensive Plan. Inventory information is included in the Comprehensive Plan as Appendix IV. In 1997, as part of Periodic Review, the County was required to update its inventory of riparian corridors, wetland areas, federal wild and scenic rivers, state scenic waterways, and bird habitat. The other Goal 5 resources have not been reviewed since the original inventory in 1981, except for post acknowledge plan amendments to add sites to the mineral and aggregate inventory. While the County recognizes that this inventory information should be revisited and updated, it was not part of the 2006 Plan amendment.

- Policy 1: The existing inventories of Goal 5 resources should be reviewed and updated or amended as needed at or prior to the County's next Periodic Review.
- 1.1 The requirements of OAR 660-023 will be used to consider the significance of Goal 5 resources.
 - 1.2 The County will continue to process applications for Post Acknowledgement Plan Amendments to add sites to Goal 5 inventories when site-specific information on location, quality and quantity is submitted by individuals or agencies.

RIPARIAN CORRIDORS, WATER AREAS AND FISH HABITAT

Jefferson County waters contain 5 species of anadromous (sea-run) fish, 8 species of resident salmonids and at least 7 species of warm-water game fish. These fish populations vary from year to year in response primarily to habitat and weather factors. The following table lists fish known to be present in Jefferson County waters.

FISH SPECIES OF JEFFERSON COUNTY

<u>ANADROMOUS</u>	<u>RESIDENT</u>	<u>WARM WATER GAME FISH</u>
Spring Chinook Salmon	Rainbow Trout	Largemouth Bass
Fall Chinook Salmon	Cutthroat	Smallmouth Bass
Summer Steelhead	Brook Trout	Black Crappie
Coho Salmon	Brown Trout	White Crappie
Sockeye Salmon	Bull Trout	Bluegill
	Whitefish	Brown Bullhead
	Kokoanee	

All salmonids (rainbow trout, kokoanee, dolly varden, etc.) require rather rigid habitat conditions in order to survive. The water of the stream, lake or reservoir must be relatively free of pollutants, must not exceed a maximum summer temperature of 70-75 degrees, and must be of a continuous supply. The loss of any one of the basic habitat requirements will eliminate, or seriously reduce the fish population subjected to the environmental degradation. Warm-water game fish (bass, bluegill, etc.) also require certain habitat conditions which, if altered, will result in a population loss. Water level fluctuations during the spring spawning period destroy nests.

There are 4,660 surface acres of water contained in reservoirs and lakes of 200 or more surface acres each in the County. The three major reservoirs are Lake Billy Chinook, Lake Simtustus and Haystack Reservoir. There are also numerous natural lakes which vary in size from Suttle Lake to the small 1-2 acre alpine lakes. The county also contains 495 miles of streams, of which 394 miles contain a salmonid population.

The Oregon Department of Fish and Wildlife (ODFW) operates fish hatcheries at Round Butte dam and Wizard Falls. The Wizard Falls hatchery raises trout, kokanee and Atlantic salmon, primarily for stocking lakes and reservoirs. The Round Butte hatchery raises Spring Chinook and summer steelhead. Native anadromous fish populations in the Crooked River and Deschutes River watersheds were extinguished when the Round Butte and Pelton dams were first constructed. Fish passage is now required as part of the relicensing of the dams, and ODFW is working to reintroduce salmonids reared at the Round Butte hatchery into these watersheds. ODFW also currently stocks Haystack Reservoir and Lake Simtustus, along with many high-mountain lakes. Flowing waters are not currently stocked and rely on natural fisheries production.

The major rivers and streams, lakes and impoundments are listed in the following two tables:

MAJOR JEFFERSON COUNTY STREAMS

<u>STREAM</u>	<u>STREAM MILES</u>	<u>FISH SPECIES AND (ABUNDANCE)</u>
Upper Deschutes River	33 miles	Rb(2), Br(2), Wf(1), BrB(3), K(2)
Lower Deschutes River	12 miles	Ch(2), ST(2), Rb(2), DV(4), Wf(1), BrB(3)
Crooked River	14 miles	Rb(2), SB(3), Wf(1), K(2), BrB(3)
Metolius River	19 miles	Rb(1), K(1), Br(3), DV(3), Wf(1), DT(3)
Lake Creek (from Suttle Lake)		
Middle Fork	3 miles	K(2), Wf(2), Br(2)
South Fork	3 miles	Rb(2), K(2), Br(2), Wf(2)
North Fork	4 miles	Rb(2), Br(2)
Canyon Creek	9 miles	Rb(2), K(2), DV(3)
Roaring Creek	4 miles	Unknown
Brush Creek	8 miles	Rb(2), DV(3)
Abbot Creek	4 miles	Rb(2), BT(3)
Jefferson Creek	13 miles	Rb(2), K(2), DV(3)
Whitewater Creek	14 miles	Unknown
Shitike Creek	37 miles	Ch(2), ST(2)
Tenino Creek	11 miles	Ch(3), ST(3)
Seekseequa Creek	15 miles	Unknown
Boulder Creek	13 miles	Unknown
Trout Creek (and upper tributaries)	37 miles	ST(3), Rb(3)
Whychus Creek	7 miles	Rb(2), Br(3)
Fly Creek	14 miles	Rb(2)
Willow Creek	20 miles	Rb(3)
Hay Creek	18 miles	Rb(3)
Muddy Creek	12 miles	Rb(3)
Cherry Creek	12 miles	Rb(3), ST(3)
John Day River	6 miles	Ch(2), ST(2), Rb(3), SB(1), CC(3)
Link Creek	0.5 miles	Br(2), K(1), BT(3), Wf(1)
Jack Creek	4.5 miles	DV(3), K(2)
Davis Creek	4 miles	Rb(3)
Candle Creek	5 miles	DV(3)
Cache Creek	3 miles	Rb(2)
Cabot Creek	6 miles	BT(2)
Bean Creek	4 miles	Rb(2)
Spring Creek	0.4 miles	K(1), DV(3), Rb(2)
South Fork	3 miles	Rb(2)
North Fork	3 miles	Rb(2)
Street Creek		
South Fork	3 miles	Rb(2)
Middle Fork	3 miles	Rb(2)
North Fork	4 miles	Rb(2)
Six Creek	5 miles	Rb(2)
First Creek	11 miles	Rb(2)
Mill Creek		

LAKES AND IMPOUNDMENTS

NAME	LOCATION T.R.SEC.	APPROX. SIZE (ACRES)	PRESENT USE	FISH SPECIES (ABUNDANCE)
Weigand Reservoir	9-13-24	5	I-F	Unknown
Cherry Creek Reservoir	9-19-34	60	I-F	Unknown
Little Muddy	10-18-3	20	F	Unknown
Little Trout Creek #1	9-17-11	5		Unknown
#2	9-17-16	5	I-F	Unknown
Board Hollow Reservoir	11-17-15	5	I-F	Unknown
Wood Reservoir	9-15-10	20	I-F	Unknown
Wilson Creek Reservoir	10-15-9	60	I-F	Unknown
Powell Site	12-16-19	37	I-FC	Unknown
Kauffman Site	12-15-25	27	I-FC	Unknown
Coon Creek Reservoir	12-15-25	7.3	I-F	Unknown
Quinn Reservoir	12-15-34	12	I-F	Unknown
Dee Reservoir	12-15-33	35	I-F	Unknown
Weigand Reservoir	12-15-33	4.7	I-F	Unknown
Chitwood #2	12-15-29	4.4	I-F	Unknown
Buck Butte Reservoir	11-14-22	80	F-FC	Unknown
Box Canyon Reservoir	11-14-18	102	F-FC	Unknown
Mud Springs Reservoir	11-14-4	5	I	0
Kruths Reservoir	10-14-9	4	I-F	Unknown
Schmoker Reservoir	11-14-3	200	RR	0
Trout Creek				
Cow Camp Site	11-17-14	60	(Not yet built)	-
Hill Grade Reservoir Site	10-17-28	110	(Not yet built)	-
Lyle Reservoir	10-15-5	4	I-F	Unknown
Brewer Reservoir	11-15-22	100	I-F	Unknown
Little Willow Creek Reservoir	11-15-12	75	I-F	Unknown
Morrow Bros.	12-15-20	40	I-F	Unknown
Mays Reservoir	9-18-36	5	F	BC(1), LB(2), CC(4)
Stephenson Lake	11-19-32	4		0
Haystack Reservoir	12-13-27	235	I-F-Sw	K(2), Rb(3), BrB(2), LB(2), BC(1)
Lake Simtustus	10-13-19	600	P-F-Sw	K(1),Rb(2),BrB(3),DV(3)
Lake Billy Chinook	11-12-27	3,997	P-F-Sw	Rb(3),K(1),DV(3), LB(3),SB(2),BT(4),WF(3)
Suttle Lake	13-8-25	270	F-Sw	BT(3), Br(1),K(1), Wf(1), Rb(3)
Blue Lake	13-8-26	60	F-Sw	K(3), Rb(1), BT(3)
Scout Lake	13-8-25		F-Sw	BT(3)
Dark Lake	13-8-35		F	BT(3)
Cache Lake	13-8-33	8	F	BT(2), CT(3), Rb(2)
Hand Lake	13-8-33	12	F	CT(2)
Link Lake	13-8-32	18	F	CT(3), Rb(2), BT(2)
Island Lake	13-8-32	10	F	Rb(2), BT(2)
Circle Lake	13-8-30		F	Unknown
Square Lake	13-8-19	55	F	CT(3), BT(2)
Long Lake	13-8-20	18	F	CT(3), Rb(2), BT(2)
Round Lake	13-8-16	22	F	Rb(2), BT(2)
Booth Lake	13-8-18	8	F	CT(3), Rb(3), BT(2)
Martin Lake	13-8-7	4	F	BT(2)
Summit Lake	13-8-7	4		0
Little Lake	13-8-8			Unknown

Jack Lake	12-8-33	4	F	Rb(3)
Cullin Lake	12-8-29	2	F	Unknown
Koko Lake	12-8-19	3	F	Rb(2)
Wasco Lake	12-8-20	20	F	CT(2), Rb(2)
Cabot Lake	11-8-27	6		0
Shirley Lake	11-8-28	4	F	BT(2)
Carl Lake	11-8-28	20		BT(1)
Patsy Lake	11-8-21	2	F	BT(2)
Table Lake	11-8-16	5	F	BT(1)
Jefferson Lake	11-8-15	4		0
Torso Lake	12-8-05	9	F	Rb(3), BT(2)
Minto Lake	12-8-20	6		0
Peewee Lake	12-8-05	2	F	BT(2)
Sand Camp	12-8-32	5		0
Upper Lake	9-8-00		F	BT
Timber Lake	9-8-00		F	BT
Top Lake	9-8-00		F	BT
Ollalie Lake	9-8-00		F	Rb, BT
Fly Lake	12-11-00		I	0

F-Fishing; Sw-Swimming; I-Irrigation; FC- Flood Con.; RR- Regulating Reservoir; P-Power

Policy 2: Protect water resources and fish habitat in the County.

- 2.1 Appropriate state and federal agencies and other groups with an interest in protection of fish habitat should be notified and given the opportunity to provide comments during the review of development proposals which might affect water quality or fish habitat.
- 2.2 Areas adjacent to rivers, streams and lakes should be protected through the establishment of a riparian corridor boundary which requires development to meet set backs from the water body and maintain riparian vegetation, in accordance with the safe harbor provisions of OAR 660-023-0090.

WETLANDS

The County has not inventoried wetlands, but will rely on the National Wetland Inventory maps.

Policy 3: The Department of State Lands should be notified prior to authorization of development within or near a wetland shown on the National Wetland Inventory Map.

WILDLIFE HABITAT

Jefferson County has seven big game species, nine upland game bird species, and a wide variety of furbearers and nongame species. Wildlife populations vary from year to year mainly in response to weather factors and predation.

Deer, pronghorn and elk are the major big game species in the County. Their survival depends on providing adequate habitat to meet needs for food and cover. All require both summering and wintering areas.

Deer and elk require a summering area that provides adequate amounts of green forage consisting of grass, forbs and browse that is in close proximity to heavy brush and tree cover. Summer cover needs are generally for fawning, thermal protection and escape from human or predator harassment. Wintering areas need to provide relatively snow-free feeding areas with good supplies of grass and browse species adjacent to tree or brush cover. Cover must provide escape from predation and harassment, and thermal cover.

In summer, pronghorn require generally open terrain with a good supply of forbs and grasses coupled with stands of sagebrush or rabbit brush for concealment of young. Winter habitat requires flat areas consisting mainly of forbs, low sage, grasses and scattered stands of juniper for thermal cover.

Deer, elk and pronghorn habitat in many cases overlaps agricultural and rural residential areas, where they can cause damage to crops and landscaping. Human encroachment into habitat areas can result in decreased wildlife population numbers. Fencing is of particular concern because it can impede travel and ensnare animals.

Furbearing mammals found in the County include mink, beaver, muskrat, river otter, bobcat, marten, coyote, red fox and wolverines. Depending upon the species, furbearers may occupy both aquatic and terrestrial habitats.

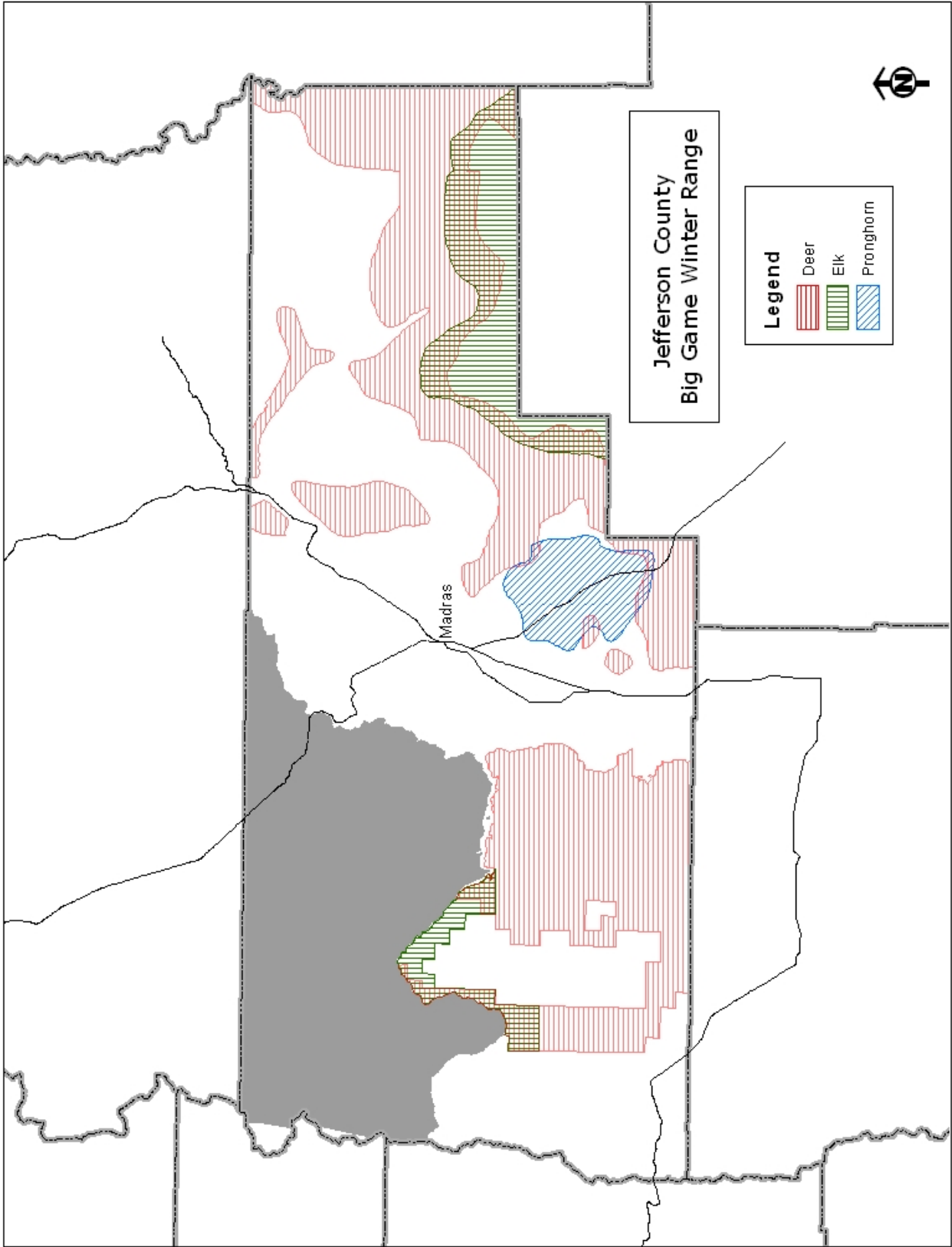
Upland game birds found in the County include California Quail, Mountain Quail, Chukar Partridge, Turkey, Ring-necked Pheasant, Blue Grouse, Ruffed Grouse, Hungarian Partridge and Mourning Dove. Winter habitat conditions limit upland game bird populations each year, so populations for any year are primarily a result of the production of that year. Production is dependent upon suitable habitat with plenty of food, cover and water for reproductive success.

The following map shows the location of big game winter range wildlife habitat areas which have been designated as significant through the Goal 5 process. The County has established a Wildlife Area Combining Zone to protect these areas.

Policy 4: Protect wildlife habitat.

4.1 The Wildlife Area Combining Zone should be used to protect the integrity of deer, elk and pronghorn wildlife habitat in winter range areas.

- 4.2 Appropriate state and federal agencies, the Confederated Tribes of the Warm Springs Reservation, and other groups with an interest in protection of wildlife habitat should be notified and given the opportunity to provide comments when proposed land use actions may affect designated wildlife habitat.
- 4.3 Rezoning lands within designated big game wildlife habitat areas for new rural residential lots in most cases should not be allowed.



BIRD NESTING SITES

Several species of raptors may be found in Jefferson County. Nests are most often found on canyon walls above rivers and streams. Raptors are particularly vulnerable to human harassment and encroachment, and in general are not compatible with human activity. Buffer zones around nest sites and prohibiting development in habitat areas can minimize conflicts.

In 1997 the County completed the statewide planning Goal 5 process and designated 24 nesting sites for bald eagles, golden eagles and prairie falcons as sensitive bird habitat. As part of that process, a ¼ mile buffer was mapped around nests and various levels of restrictions on development were imposed. In most cases, when a nest site was on a canyon wall, all development below the canyon rim within ¼ mile of the nest was prohibited. Development above the rim was restricted to time periods when birds are not actively nesting. The designated sites are shown on the following table:

SENSITIVE BIRD HABITAT

COUNTY SITE #	ODFW Inventory #	SPECIES	MAP QUAD	LOCATION NAME
1	JE 0199	BE	Fly Creek	Lower Desert
2	JE 0901	BE	Fly Creek	Big Canyon
3	JE 0762	GE	Round Butte	Bridge Cliff
4	JE 0760	GE	Round Butte	Sandstone Cliff
5	JE 0769	PF	Round Butte	Deschutes Bridge
6	JE 0453	PF	Steelhead Falls	Lower Desert
7	JE 0445	GE	Steelhead Falls	Opal Springs
8	JE 0455	GE	Steelhead Falls	Ken Bruce Residence
9	JE 0909	PF	Steelhead Falls	North Crooked River
10	JE 0908	PF	Steelhead Falls	Old Ranch House
11	JE 0458	GE	Steelhead Falls	Steelhead Falls
13	JE 0149	PF	Opal City	Canal Tunnel
14	JE 0428	GE	Opal City	Crooked River South
15	JE 0436	GE	Opal City	CRR RV Park
16	JE 0135	GE	Opal City	Haystack Butte
17	JE 0791	GE	Opal City	Trail Crossing
18	JE 0435	PF	Opal City	Old Church
19	JE 0152	GE	Buck Butte	Upper Willow Creek
20	JE 0157	PF	Buck Butte	Upper Willow Creek
21	JE 0628	GE	Eagle Butte	Mecca Cliff
22	JE 0630	GE	Gateway	Frog Springs
23	JE 0828	GE	Madras East	Paxton-Gateway
25	JE 0727	GE	Madras West	Fishladder/Vanora Cliff
26	JE 0732	GE	Madras West	Gladys Grant
27	JE 0733	GE	Madras West	Peterson

An additional 13 nest sites were identified in 1997, but were only given interim protection for 120 days to allow the County to complete the Goal 5 process. Unfortunately, the Goal 5 process appears to have only been done for site #11, so the other 12 sites are not designated as significant Goal 5 resources. As indicated in Policy 1, the inventory of bird nest sites should be reviewed and updated when time allows.

Policy 5: Protect designated sensitive bird nesting sites

- 5.1 The Program to meet Goal 5 that was approved during the goal 5 process should be followed in order to prevent impacts to designated nesting sites from development activities.
- 5.2 The following guidelines should be used to regulate when construction and other development activities may occur without disturbance to nesting birds. The protected period is when no construction activity should occur. The early release date is when construction may start if ODFW verifies that the nest is not currently being used:

Species	Protected Period	Early Release
Bald Eagle	Jan 15 - Aug. 31	May 1
Golden Eagle	Feb. 1 - Aug.31	May 1
Prairie Falcon	March 1 - Aug. 30	June 1

FEDERAL WILD AND SCENIC RIVERS

The following river segments have been designated as Federal Wild and Scenic Rivers:

Deschutes River - from Pelton Dam downstream to the north county line.

Deschutes River - from the south county line downstream to the upper end of Lake Billy Chinook.

John Day River - portion within county.

Metolius River - from the Deschutes National Forest to Lake Billy Chinook.

Crooked River - from the National Grassland boundary downstream to river mile 8, south of Opal Spring.

Policy 6: Federal Wild and Scenic Rivers should be protected.

- 6.1 At or prior to the next Periodic Review, the County should investigate whether additional regulations should be adopted to implement federal management plans for the portions of the designated Federal Wild and Scenic Rivers located in the County.
- 6.2 The Zoning Ordinance should require that measures be taken to reduce the visibility of buildings from a designated federal wild and scenic river.
- 6.3 The Bureau of Land Management should be notified of proposed uses within ½ mile of a designated federal wild and scenic river.

STATE SCENIC WATERWAYS

The Oregon Parks and Recreation Department regulates the state Scenic Waterway program. They must be notified of land use activities, including cutting of trees, mining, and construction of roads, utilities, buildings and other structures. The proposed use or activity may not take place until written approval is granted. The following river segments in Jefferson County have been designated as State Scenic Waterways:

Deschutes River - from Pelton Dam downstream to the north county line.

Deschutes River – from the south county line downstream to the upper end of Lake Billy Chinook.

John Day River - portion within county

Metolius River - from Metolius Springs near Camp Sherman downstream to its confluence with Candle Creek.

- Policy 7: Cooperate with state management of the State Scenic Waterways Program.
- 7.1 Require notification and approval from the Oregon Parks and Recreation Department State Scenic Waterways Program prior to issuance of building permits for development within a designated state scenic waterway.
 - 7.2 At or prior to the next Periodic Review, the County should investigate whether additional regulations should be adopted to implement state management plans for the portions of the designated State Scenic Waterways located in the County. Until that time, the Zoning Ordinance should require that measures be taken to reduce the visibility of buildings from a designated river.

GROUNDWATER RESOURCES

Ground water resources in the county are known only in a general manner. The major source of domestic water for much of the County comes from Opal Springs, supplied in a system managed by Deschutes Valley Water District. However, in addition to Deschutes Valley Water, the City of Madras acquires some of its domestic water supply from wells, as does the Three Rivers Recreation Area, part of Crooked River Ranch and some individual parcels in outlying areas of the County. Because of the high water table in much of the Metolius Basin, wells in the Camp Sherman area normally do not have to be very deep. In other areas of the County, wells may need to be drilled hundreds of feet deep in order to reach the aquifer.

The County does not regulate the use of groundwater resources; regulation is by the State Department of Water Resources. Under current state regulations, obtaining groundwater from a well for domestic use (less than 15,000 gallons per day) and to irrigate no more than ½ acre of lawn or noncommercial garden is exempt from the need to obtain a water right. Obtaining water from wells for most other purposes, such as for crop irrigation, requires a water right. According to the Department of Water Resources, no new water rights for groundwater will be issued without mitigation. Mitigation could include purchasing a water right for surface water and dedicating that water to in-stream use.

OAR 660-023-0140 states that significant groundwater resources are limited to critical groundwater areas and restrictively classified areas designated by the Oregon Water Resources Commission, and wellhead protection areas. There are no such areas in Jefferson County.

Policy 8: Protect groundwater resources in the County.

- 8.1 Appropriate public agencies should be notified and consulted during the review of development proposals which will obtain water from wells, or which might affect ground water quality.

APPROVED RECREATION TRAILS

Two trails, which have been designated as part of the Oregon Trails System as either existing or potential trails, were included in the Goal 5 inventory:

Pacific Crest Trail – runs from Mexico to Canada. The trail crosses six miles of the southwest corner of the county.

Metolius-Wendigo Trail – a horse and hiking trail which forms a 50 mile loop in southwestern Jefferson County.

These trails are primarily located on public lands. There are also many miles of trails in the forested western section of the county, in the Deschutes National Forest and Mount Jefferson Wilderness. Other trails include the Tam-a-lau trail in Cove Palisades State Park; the Grey Butte trail, which extends to Smith Rocks State Park; the Willow Creek trail which extends from Madras to Lake Simtustus; and less developed trails along the Deschutes River. While these trails provide important recreational opportunities, they are not required to be inventoried under the Goal 5 process.

Policy 9: Recognize the importance of established recreational trails within the County.

9.1 The potential adverse impact that proposed development would have on recreational trails should be considered in the land use approval process.

NATURAL AREAS

The Oregon Natural Areas Data Summary, published in April 1978, inventoried 24 sites in Jefferson County which represent ecologically or scientifically significant resources, as shown in the following table:

NATURAL AREA INVENTORY

Site	Site Name	Township	Range
1	Head of Metolius River	13S	9E
2	El Rancho Trail	10S	10E
4	Whychus Creek/Deschutes/Owl Creek Canyons	11-13S	11,12E
6	Balanced Rocks	11S	11E
9	Lake Simtustus golden eagle nests	10S	12,13E
14	Unnamed golden eagle occurrence	13S	12E
16	Pony Creek Canyon	9S	15,16E
17	Trout Creek Canyon	9S	16E
18	Unnamed	10S	16E
19	Hay Creek	10,11S	15,16E
20	Box Canyon	12S	12E
21	Metolius Deer Winter Range	12S	11E
22	Steelhead Falls Scenic Area	13S	12E
23	Alder Springs Geological Area	13S	12E
26	Stephenson Lake	11S	19E
29	Fly Creek and Thorn Spring	12,13S	10E
31	Metolius Research Natural Area	12S	9E
33	The Island	11,12S	12E
34	Unnamed golden eagle nest site	13S	12E
35	Unnamed bald eagle nest site	13S	8E
36	Mt. Jefferson Wilderness Area	9-13S	7-9E
37	Olallie Lake Scenic Area	9S	8E
38	Three Fingered Jack	12,13S	7½,8E
39	Blue Lake	13S	8E
40	Head of Jack Creek nature trail	13S	8E

Although listed on the inventory, sites 2, 4, 9, 14, 18, 19, 26, 29, and 34 have not been determined to be significant under statewide planning Goal 5 because insufficient information was available to determine significance at the time the inventory was completed.

An additional natural area is the Metolius Research Natural Area (RNA), which is a designated component of the Federal Research Natural Area Program administered by the US Forest Service. This 1,140 acre tract north of Camp Sherman contains undisturbed representatives of several typical eastern Cascade slope biotic communities. Other potential ecologically and scientifically significant areas which have been identified in the western part of the County include the Suttle Lake area, Black Butte, the Upper Metolius area, Castle Rocks, and Elliot Corbett State Park. However, none of these areas have been reviewed through the statewide Planning Goal 5 process, so they are not currently part of the Natural Area inventory.

Policy 10: Designated Natural Areas in the County should be protected through consideration of potential adverse impacts from proposed development.

WILDERNESS AREAS

34,061 acres of the Mt. Jefferson Wilderness and 4,220 acres of the Mt. Hood Wilderness lie within Jefferson County and have been designated as significant Goal 5 resources. These wilderness areas, along with adjacent forest land, are managed by the US Forest Service. The County does not have jurisdiction over land use activities within wilderness areas.

MINERAL AND AGGREGATE RESOURCES

Around the turn of the century mercury mining took place in the eastern portion of the County. Most of these mineral extraction sites are now abandoned. 38 mineral and aggregate sites were inventoried in 1981. There appear to be some errors in the list because air photos of some of the described sites do not show any indication of past or present mining activity. As indicated in Policy 1, the inventory should be reviewed and updated to determine which sites are significant and should remain on the inventory. Site No. 12 was removed from the inventory because it is within the Warm Springs Reservation, where the County does not have jurisdiction.

The following table lists the locations and descriptions of the designated mineral and aggregate sites in the county:

MINERAL AND AGGREGATE INVENTORY

No.	OWNER	TAX LOT	DESCRIPTION	MATERIAL
1	State of Oregon	9-14-(25)-2401	Lyle Canyon – SE¼ NE¼	Rock
2	USA	9-14-27-500	Old Maids Canyon – SE¼ NE¼	Rock
3	USA	11-14-(03)-200, 300 11-14-4-100	NW¼ NW¼ & SW¼ NW¼ NE¼ NE¼ & SE¼ NE¼	Rock
4		11-13-02	Grote Quarry SW¼	Rock
5		11-13-27	SW¼ SW¼	Rock
6	USA State of Oregon	11-12-(13)-300 11-12-(13) & (24)-1100	Round Butte S½ SE¼ & SE¼ SW¼ N½ NE¼ & NW¼ NW¼	Cinders
7		12-12-12C	Grote Quarry SW¼	Rock
8	USA	13-13-(05)-400	Grote Quarry SE¼ NE¼	Rock
9	USA State of Oregon	13-13-27-600 13-13-28-800	W½ SW¼ SW¼ E½ SE¼ SE¼	Rock
10	Jefferson County	9-14-(19)-4500	Gateway Gravel Pit SE¼	Gravel
11	USA	13-9-(32)-100	E½ NE¼ SW¼	Gravel
13	State of Oregon	9-13-31-100	Geeder Canyon SW¼ NE¼ NE¼	Rock
14	USA	9-13-31-800	SW¼ SW¼ SW¼	Gravel
15	State of Oregon	10-13-08-200	N½ NE¼	Rock
16	State of Oregon	10-13-09-300	N½ NW¼ NW¼	Rock
17	Stevenson	10-13-16-400	Cinder Hill SW¼	Cinders, rock
18	USA	10-13-33-400	SE¼ SE¼	Rock
19	Hooker Creek Jefferson County USA	10-13-34-201, 202 11-13-03-400 11-13-04-100	R.L Coats Quarry SW¼ NW¼ NE¼	Rock
20	USA	11-13-36-200	NE¼ NW¼	Gravel
21	USA	13-14-(35)-100 13-14-(36)-100	NE¼ SE¼ NW¼ SW¼	Rock
22	State of Oregon	12-13-13-300	SE¼	Rock
23	Molony	12-15-(20)-1413	NE¼	Rock
24	USA	13-14-(17)-100	SE¼ NW¼	Rock
25	Card	9-16-(28)-1700	NW¼ NE¼	Rock
26	Clark	11-15-(09)-500	SW¼ SW¼	Rock
27	Columbia Empire Farms	9-14-(26)-5700	W½ SW¼	Rock
28	Gateway Rock	9-14-(17)-1000	NE¼ SE¼	Rock
29	USA	12-13-35-100	NE¼ SW¼	Rock
30	State of Oregon	12-12-17-100	NE¼ NE¼	Rock
31	USA	12-11-(17)-1700	SE¼ NE¼	Rock
32	USA	11-10-(03)-200	NW¼ NE¼	Rock
33	USA	12-9-(10)-100	SW¼ NE¼	Cinders
34	Miller	10-14-21-600	SW¼ SW¼	Rock
35	City of Madras	11-14-(08)-500	NW¼ NW¼	Rock
36	State of Oregon	11-14-(09)-402	NE¼ NE¼	Rock
37	Various owners	9-16-25 9-17-30 9-17-31	E½ All All	Lead, Gold, Silver
38	Various owners	10-18-10	N½	Lead
39	Elkhorn Properties	11-13-09-400	SE¼ SW¼, SE¼	Sand
O-59-93 O-178-06	Williams, Downing Construction	11-13-21-302	6 47 acres in NW¼ NW¼ Metolius Quarry	Rock

O-01-94	Jefferson County	11-14-18-500	NE $\frac{1}{4}$ SW $\frac{1}{4}$	Borrow Source
O-149-98	Zemke	11-14-04-400, 402	E $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$	Rock
O-49-99	ALMBW Farm	11-13-16-100	E $\frac{1}{2}$ NW $\frac{1}{4}$	Sand
O-39-2000	Baggett	10-14-(34)-1400	SE $\frac{1}{4}$ SW $\frac{1}{4}$	Rock
O-10-01	Bissell	11-13-25-304	SE $\frac{1}{4}$ SW $\frac{1}{4}$	Fill
O-73-01	Bissell	11-13-30-100	S $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ & SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$	Rock
O-172-04	Canham	9-14-(15)-2405	& S $\frac{1}{2}$ NW $\frac{1}{4}$	Rock

All of the original 38 sites that were inventoried as part of the 1981 Comprehensive Plan were located in a resource zone, and no conflicting uses were identified because there was no adjacent development. No specific program was developed to protect any of the sites, and conditional use approval was required in order to conduct mining or processing activities. In order to give consideration to potential impacts mining activities may have on uses that may have been established in the vicinity since 1981, as well as to consider traffic safety and the potential impact to roads, the County should continue to require conditional use approval prior to authorizing mining at any of these sites. Other aggregate sites which were added to the inventory under the procedures in OAR 660-023-0180(3) and (5) should be subject only to review for compliance with clear and objective operating standards.

OAR 660-023-0180(9) requires that the Comprehensive Plan and Zoning Ordinance include procedures and requirements for considering applications for post acknowledgement plan amendments to add aggregate sites to the Mineral and Aggregate inventory. This work will be done as part of or prior to the County's next periodic review.

Policy 11: Recognize the importance of having adequate quantities of mineral and aggregate resources throughout the County to support development and road construction.

- 11.1 Mining and processing activities should be allowed in areas where they will not cause a significant adverse impact to conflicting uses within 1,500 feet of the operation or to other Goal 5 resources, provided that roads can safely accommodate the number and weight of haul trucks.
- 11.2 Conditional use approval should be required prior to allowing mining at sites 1 – 38 on the Mineral and Aggregate Inventory or at sites that have been found to be significant under OAR 660-023-0180(4) and (6). Proposals to allow mining at aggregate sites that have been found to be significant under the procedures in OAR 660-023-0180(3) and (5) should be reviewed only for compliance with clear and objective operating standards.
- 11.3 The procedures and requirements of OAR 660-023-0180 shall be directly applied to consideration of an application to add a new site to the Mineral and Aggregate Inventory.

ENERGY SOURCES

There are no known oil, gas, or geothermal resource sites in the county, although leases have been granted to explore for these resources on both public and private land.

The primary developed energy sources in the County are hydroelectric facilities at Round Butte dam, Pelton dam and the Warm Springs reregulating dam. These hydroelectric facilities were approved by the Federal Energy Regulatory Commission (FERC), so are deemed to be significant Goal 5 resources. The facilities are currently co-owned by Portland General Electric (PGE) and the Confederated Tribes of the Warm Springs Reservation of Oregon. As part of relicensing the facilities, PGE and the Tribes are adopting a management plan to protect the water source for the facilities. The management plan and the regulatory boundary have not been finalized. At or prior to the County's next periodic review, the Comprehensive Plan and Zoning Ordinance may need to be amended to implement the final FERC decision on the management plan. As an interim protection measure, the County should require that notice of applications for proposed development near Lake Billy Chinook, Lake Simtustus or between Round Butte dam and the reregulating dam be sent to PGE and the Tribes with a request for comments or recommendations.

There is a smaller hydroelectric facility at Opal Springs, which is used by the Deschutes Valley Water District to provide energy for pumping water out of the Crooked River canyon and up 800 feet to the top of the rim. While this is an important energy source, it has not been designated as a significant Goal 5 energy resource.

Solar power is an important form of energy for individual residences. It may be used to supplement other power sources or be the primary energy source when electric power is not available, as is the case in the Three Rivers Recreation Area. As technology advances, wind power may be developed either for individual or commercial use. Wood burning continues to be used for heating many residences, and on a larger scale there is potential for development of biomass energy generation facilities to burn woody materials.

Policy 12: Protect existing energy sources and allow development of new sources in appropriate locations.

12.1 Approval of land use activities within the regulatory boundary approved by the Federal Energy Regulatory Commission for Pelton and Round Butte dams should be coordinated with the appropriate regulating agency once the final boundaries and management plan for the regulatory area are adopted. Any necessary approvals required by the regulatory agency should be obtained prior to initiating development.

12.2 Small-scale solar and wind power systems should be allowed as an alternative energy source.

12.3 Encourage continued availability of fuel wood on public lands.

CULTURAL AREAS

The 1981 Goal 5 inventory of historic resources included a number of “aboriginal prehistory” sites within Cove Palisades State Park. The inventory indicated that the County did not know the exact location of the sites, but concluded that state ownership would provide protection. Because of the widespread use of the area by Native Americans, there are likely a number of other historic and traditional cultural sites in the County. State statutes contain requirements for obtaining permits prior to archaeological excavations, and require that appropriate Indian Tribes and various state agencies be notified if cultural or archaeological objects are discovered either as part of a permitted excavation or inadvertently during construction of development activities. Compliance with these statutory provisions is the best way for the County to provide protection to these unknown cultural and archaeological resources.

Policy 13: Recognize the importance of cultural and archaeological resources.

- 13.1 State statutory and federal requirements for archaeological excavations and the inadvertent discovery of archaeological sites or objects during development should be followed. The Confederated Tribes of the Warm Springs Reservation should be notified of all planned archaeological excavations and inadvertent discoveries of archeological sites or objects.

HISTORIC RESOURCES

The Jefferson County Historical Society assisted the County in establishing a program for preservation of valuable historic resources and setting the priorities for these activities. The Society felt that locatable structures and specific definable sites should take priority in local preservation efforts. To this end, the Society and the County agreed to the following actions:

- A. Locatable structures and definable sites should be listed in the Comprehensive Plan and shown on a map in the Jefferson County Museum. These sites should, over time, become identified at the site to increase their historic value to the public.
- B. A special effort should be undertaken by the society and the County Planning Department to locate and document all historic cemeteries and family burial plots in the county. These sites are of particular interest to relatives of early settlers.
- C. Locations which cannot be well defined, or for which no visible remains exist, should be marked on a map in the museum, along with an explanation of the events or structures which were on the location.

The Society compiled the following list of sites and structures which warrant special protective treatment at the local level. The Statewide Inventory of Historic Sites and Buildings was used as a resource document for this study. The Jefferson County Courthouse and Jail are owned by the County. However, it should be noted that all of the buildings on the list are within the Madras city limits and are not subject to County zoning regulations.

HISTORIC SITES OF SPECIAL LOCAL INTEREST

Campbell's Ferry
Petroglyph at Cove State Park
Pioneer Homestead on Fairgrounds
Peter Skene Ogden Wayside
Old Santiam Pass
Crooked River Trail Crossing
Jefferson County Courthouse #1 - 1918
Horse Heaven Mine
Jefferson County Jail - 1918
Madras Conservative Baptist Church - 1912

Additional sites were inventoried and identified as warranting designation and explanation in the museum. The following table contains the complete list of significant historic resources. As indicated in Policy 1, as time allows these sites should be reviewed and the sites that are either in the city or no longer exist should be removed from the inventory.

INVENTORY OF HISTORIC RESOURCES

SITE	LOCATION	DESCRIPTION
Old Santiam Pass	Closely following existing Highway 20	Hand-built wagon road used from 1860 on
Oregon Trunk Railroad	Along Deschutes and Willow Creek canyons	Rail line built to compete in the race to build railroad to Bend
Herb Keeney Cellar	Map 12-13-32, east slope of Juniper Butte	Stone and sod root cellar built into slope
Gray Butte Cemetery	Map 13-14-6	Cemetery dating from 1890s
Horse Heaven Mine	Map 10-18-12, on Road 817 east of Ashwood	Turn of century mercury mine
Crooked River Trail Crossing	Map 13-13-33, one mile upstream from Hwy 97 bridge	River ford used in 1845, now gone but trail into canyon still passable by foot.
Peter Skene Ogden Landmark	Map 13-13-32 at Peter Skene Ogden State Wayside	Plaque on Crooked River bridge commemorating exploration of area by Ogden in 1825
Crooked River Railroad Bridge	Map 13-13-32 at Peter Skene Ogden State Wayside	Bridge over Crooked River constructed in 1910 – 1911
Campbell Ferry	Deschutes River, about ¼ mile upstream from Highway 26	Location of old cable ferry. Exact location unknown
Pioneer Homestead at fairground	County fairgrounds in Madras	One and ½ story residence, windmill and storage barn
Jefferson County Courthouse #1	Fifth and D Street in Madras	Two story brick building circa 1917
(former) Madras Conservative Baptist Church	802 D Street in Madras	One story building with high pitch gable roof and bell tower
Jefferson County Jail	Sixth and D Street in Madras	One story concrete building with dome roof, iron door and three small windows. Circa 1918
Suttle Lake Picnic Shelter	Suttle Lake Park	Log structure with gable roof, split shakes, lava stone fireplace
J.M. Robinson House	Carl King ranch	One story cabin circa 1880
Carl King Barn	Opal City area, King Ranch	Frame barn circa 1917
Carl King House	Opal City area, King Ranch	One and ½ story building, shiplap exterior, circa 1912
Hay Creek Ranch Horse Barn	Map 11-15-16. Ranch headquarters area.	Barn, board and batten siding, two cupolas, circa 1880s
Hay Creek Ranch Cemetery	Map 11-15-8. Northwest of ranch headquarters area.	Cemetery for as many as 150 ranch employees, dating from 1870s.
Hay Creek Ranch Dairy Barn	Map 11-15-16. Ranch headquarters area.	Sixteen-sided barn with octagon cupola and silo, circa 1916
Hay Creek Ranch Silo	Map 11-15-16. Ranch headquarters area.	Octagonal silo constructed of horizontal 2' x 4's stacked to about 35 feet.
Hay Creek Ranch Commissary	Map 11-15-16. Ranch headquarters area.	Wood frame building with long roofed front porch
Gates Ranch House	Map 13-12-14 on Crooked River Ranch common land	Two and ½ story building with bellcast hip roof, built 1913.

Camp Sherman, the Allingham Ranch and the Smith Cabin site have been identified as being potentially significant historic resources in the Camp Sherman area, but have not been reviewed under statewide planning Goal 5.

Policy 14: Protect historic resources in the County.

- 14.1 The Historic Sites of Special Local Interest listed in the historic resource inventory should be mapped in the Jefferson County Museum.
- 14.2 Proposals to alter or demolish a designated historic resource should be reviewed.
- 14.3 Historic resources that are of statewide significance and are listed on the National Register of Historic Places should be protected.

OPEN SPACE

There is a significant amount of open space in the County. Lands zoned Exclusive Farm Use A-1 and A-2, Range Land and Forest Management require a large enough minimum lot size to maintain open space characteristics. Additionally, thirty-nine percent of the total land area, or 450,800 acres, is owned by the federal government or other public agencies, and is likely to remain as undeveloped open space.

Policy 15: Preserve the plentiful open space resource of the County.

- 15.1 Resource zoning designations with large minimum lot sizes should be retained throughout the majority of the County in order to retain the open character of undeveloped areas.

SCENIC VIEWS AND SITES

Jefferson County has an abundance of scenic resources. The expansive views of Mt. Jefferson and the Cascade Range are particularly well known. Sections of highways within the County have been designated as Scenic Areas by the State Scenic Area Board. This designation involves restrictions on roadside signing to prevent obstruction of the view. The program is administered by the Department of Transportation.

The many steep-walled canyons running through the County are another valuable scenic resource. The Peter Skene Ogden Wayside is a State Park facility situated on the Crooked River Gorge just north of the Jefferson County line on Highway 97. The wayside provides an impressive view of the 300 foot deep gorge, along with interpretive, sanitary and picnic facilities.

The Cove Palisades State Park is another area of spectacular canyon scenery. The park occupies shoreline areas of Lake Billy Chinook behind Round Butte Dam. Travel by boat or car provides views of the Deschutes, Crooked, and Metolius arms of the reservoir and the canyons which enclose them.

The 1981 Comprehensive Plan inventory identified the following as being outstanding scenic sites:

OUTSTANDING SCENIC SITES

Cove Palisades State Park
Black Butte
The Cascade Range
Mt. Jefferson
Peter Skene Ogden Wayside
Canyon walls of Deschutes and Crooked Rivers
Jack Lake
Round Lake
Wizard Falls
Bridge at Camp Sherman
Corbett State Park at Blue Lake
Castle Rock
Head of Metolius River

The Upper Metolius area, Head of Jack Creek Nature Trail, Metolius Natural area and Suttle Lake area have been identified as potential outstanding scenic sites, but have not been reviewed under the Goal 5 process so have not been determined to be significant.

Policy 16: Protect scenic resources.

- 16.1 Consideration should be given to the adoption of Zoning Ordinance regulations to minimize the visibility of large or tall structures that would infringe on scenic views.

GOAL 6: AIR, WATER AND LAND RESOURCES QUALITY

Goal: To maintain and improve the quality of the air, water, and land resources of the state.

AIR QUALITY

Overall air quality in the county is generally very good, although there are seasonal air quality problems stemming from agricultural burning, forest and grassland prescribed burns, and wildfires. Agricultural burning is regulated by the County, but prescribed burns are generally beyond County control. There are five or six industrial plants in the county which are known to discharge particulate matter into the atmosphere. These are not known to violate current state and federal regulations.

The state Department of Environmental Quality (DEQ) administers the Oregon Clean Air Implementation Plan. This authority, including the permit process for air contaminant discharge, is acknowledged by the county as an environmental safeguard.

The 1977 Federal Clean Air Amendment classified the Mt. Jefferson Wilderness Area as a Class I Area. Class I Areas are subject to the most stringent restraints on air quality deterioration. Because the area adjacent to the Wilderness is part of the Deschutes National Forest, and private lands in the vicinity are not zoned for industrial uses, development that would decrease air quality is unlikely to occur.

WATER QUALITY

The overall water quality of Jefferson County is considered to be excellent. Water quality as a state level concern is handled by the DEQ through its administration of the State Water Quality Management Plan, including issuing of permits. DEQ has adopted water quality standards that apply to several rivers in the County, and is in the process of identifying Total Maximum Daily Loads (TMDLs) for streams in the Deschutes basin. Once this work is completed, the County may need to adopt regulations to comply with TMDLs or other federal or state regulations to protect water quality. In the meantime, the County will protect water quality by complying with DEQ regulations for sewage disposal and by preventing runoff from reaching streams. On-site stormwater runoff detention is an important method of maintaining water quality by preventing sediments and pollutants from reaching waterways.

The cities of Madras, Culver and Metolius operate sewage collection and treatment facilities and will continue to be responsible for sewage disposal inside city limits. Septic disposal in the unincorporated areas of the County is accomplished through individual on-site septic systems, which must comply with DEQ standards. Many vacation residences still rely on pit or vault toilets. As these properties are upgraded, they should be allowed and encouraged to install septic systems that meet DEQ standards.

Camp Sherman and the surrounding Metolius Basin is composed of glacial outwash and faults which probably provide partial barriers to the eastward flow of unconfined groundwater between lava flows. This causes much of the groundwater to rise, resulting in numerous springs and,

more importantly, a high water table which limits the ability of many areas to support septic drainfields.

NOISE CONTROL

DEQ has established noise standards, but has not funded a noise control program for a number of years. Jefferson County does not have the technical expertise, equipment or funds to implement a noise control program, but will require any land use activity likely to generate significant noise to comply with DEQ standards.

Policy 1: Protect the quality of air, water and land resources in the County.

- 1.1 All new industrial development should comply with DEQ air, noise and water quality standards.
- 1.2 The Department of Environmental Quality and other affected agencies should be notified of all proposals for industrial development or other uses which may affect environmental quality. Their comments should be considered in decisions concerning the proposal.
- 1.3 New commercial and industrial development should provide on-site water retention so that stormwater runoff does not flow onto adjoining properties or roads.
- 1.4 Subdivisions and partitions should be designed in a manner so that runoff will be retained on site and not flow into streams, roads or adjacent properties.
- 1.5 Septic systems should meet current DEQ requirements in order to protect water quality. Nonconforming dwellings that currently rely on a pit or vault toilet should be allowed and encouraged to install a septic system and drainfield.
- 1.6 When possible, consider incentives to encourage improving air and water quality.
- 1.7 Impacts to surrounding lands should be considered before lands are rezoned. Impacts should be mitigated whenever possible, such as by providing buffers between different types of land use activities.

GOAL 7: AREAS SUBJECT TO NATURAL HAZARDS

Goal: To protect people and property from natural hazards.

Goal 7 was amended effective 2002. It requires counties to adopt inventories, policies and implementing measures to reduce risk to people and property from floods, landslides, earthquakes and related hazards, and wildfires. The County has adopted regulations for flood hazard protection, and will be updating its wildfire hazard safety standards as part of the 2006 Comprehensive Plan and Zoning Ordinance amendments. Little planning work has been done concerning landslides and earthquake hazards. Goal 7 envisions a process whereby new hazard inventory information generated by federal and state agencies is first reviewed by the Department of Land Conservation and Development (DLCD). DLCD then notifies the County of the new information, and the County has three years to respond to the information by evaluating the risk, obtaining citizen input, and adopting or amending implementation measures to address the risk. Jefferson County has not received notice of new inventory information concerning landslide and earthquake hazards.

Policy 1: Areas subject to earthquakes, landslides and other natural hazards should be mapped when new information on the location of hazardous areas is obtained, and development regulations to protect life and property from these hazards should be adopted as needed.

FLOOD HAZARD

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 required the generation of flood plain boundary maps in the county. This was done by the US Army Corps of Engineers for the Federal Emergency Management Agency (FEMA). A Flood Insurance Study for the unincorporated areas of the county was completed in 1986, and Flood Insurance Rate Maps (FIRMs) which show unincorporated areas of the county that may be subject to flooding were produced in 1989. The most significant flood hazard area in the County is a result of Willow Creek, which runs from the Grizzly area through the City of Madras to Lake Simtustus. The Deschutes, Crooked, Metolius and John Day Rivers and some creeks are also subject to flooding, but because of sparse development near these waterways flood events cause less impact than that caused by Willow Creek. Although most of the area has not been mapped by FEMA, according to residents of the area the Metolius Basin is subject to flooding along glacial streams and within scour channels, and sheet flooding may occur during periods of high water discharge. Sheet flooding can cause water depths of from one to three inches over much of the flat or concave surfaces of the Basin.

According to the Flood Insurance Study, flooding in the county is generally caused by snowmelt or a combination of snowmelt and rainfall in the winter when soils are frozen and cannot absorb water. However, cyclonic rainstorms may occur spring through fall, producing enough precipitation to cause flooding. Encroachment of structures and placement of fill in areas subject to flooding reduces flood-carrying capacity, increases flood height and velocity, and may cause increased damage to structures and property downstream of the encroachment. Encroachment within the floodway is of particular concern. The floodway is the channel of a stream, along with that portion of the adjacent floodplain area which should be kept free of encroachments so

that floodwaters can be carried without substantial increases in flood height. Development in the floodway is also more susceptible to damage due to the velocity of floodwaters and debris. In order to protect downstream properties and minimize potential damage to structures, development in the floodway should be prohibited or strictly regulated. Development may be allowed in the flood plain, which is the area that has a 1% chance of flooding in any year, provided measures are taken to minimize potential damage to property, both public and private, and to protect human life.

In order to participate in the National Flood Insurance Program, the county must adopt and maintain floodplain management regulations consistent with federal criteria in 44 CFR Part 60. As of 2000, 54 flood insurance policies were issued in the unincorporated portion of Jefferson County. The amount of insurance coverage was \$11,430,800. Three claims for flood damage have been paid since 1978.

The minimum federal requirement for residential construction in flood hazard areas is that the lowest floor be elevated to or above the base (100-year) flood elevation. However, calculations of base flood elevation are not precise. Larger floods can occur. Structures that are not elevated higher than the base flood elevation also may suffer water damage to ducts and under floor structural components. Elevating residences at least one foot above the base flood elevation provides a greater margin of safety and also reduces the cost of flood insurance.

- Policy 2: Reduce potential hazards to life and damage to property from flooding.
- 2.1 The County will continue to comply with FEMA requirements in order to maintain eligibility for the National Flood Insurance Program.
 - 2.2 In order to preserve the flood-carrying capacity of stream channels and prevent damaging increases in flood heights, development in the floodway should be prohibited or strictly regulated.
 - 2.3 Development in the flood plain should be regulated to protect life and property and minimize private losses and public costs for rescue or repair of flood-damaged structures. Residences should be elevated at least one foot above the base flood elevation.
 - 2.4 Consideration should be given to development of flood control projects.

LAND HAZARDS

Some soil types within the county are considered unacceptable for building foundations. They are primarily located in the eastern portion of the county, in the Range Land zone. As more information becomes available about the constraints these areas may have on development, consideration should be given as to whether regulations to guide development are needed.

Jefferson County is considered to be in a moderate damage earthquake area (possibility of an intensity of seven quake, Modified Mercalli Intensity Scale). The County has experienced few

earthquakes during the century. The 2001 Atlas of Oregon indicates that there were two earthquakes in Jefferson County in the period from 1840 to 1998, both of magnitude 3.0 – 3.9.

Occurrence of landslides or mass structural failure has occurred along the canyon walls of various rivers throughout the county. Specific information on landslide hazards in Jefferson County has not been generated.

Policy 3: Minimize potential danger to life and property from unstable soils and landforms.

- 3.1 New buildings should comply with building code setbacks from both the rim and toe of slopes.

WILDFIRE

There are two types of wildfire in the County. The first is field and range fire, which occurs in range land areas where vegetation consists of juniper and sage. The second is forest fires which occur in the tall closely spaced timber of western Jefferson County.

Range fires move quickly and burn intensely. While it is possible to protect buildings from range fires by creating fuel free zones around them and using fire resistant roofing material, much of the range land area in the County is not in a fire protection district. Consequently, range fires may spread uncontrolled over large areas. In 1995 the Ashwood – Donnybrook fire, in the northeast portion of the county, burned approximately 70,800 acres.

Forest fires are much harder to guard against. Forest vegetation and the greater intensity of the fire make residential development in forest areas very hazardous unless measures are taken to reduce the hazard. In 2002 the Eyerly fire burned 23,573 acres near the head of the Metolius Arm of Lake Billy Chinook. In 2003 the Booth and Bear Butte (B & B complex) fires burned a total of nearly 91,000 acres in the Deschutes and Willamette National Forests and the Warm Springs Reservation. Approximately 32,800 acres in Jefferson County were part of the B & B fire.

In 2005 the County developed a Community Wildfire Protection Plan (CWPP) in collaboration with fire protection districts and federal agencies. The CWPP identifies and rates the fire risk to communities and important infrastructure, and proposes actions to reduce the risk.

Policy 4: Reduce the hazard to life, property and infrastructure from wildfires.

- 4.1 New development should incorporate fire protection measures to reduce the risk to structures from wildfires, as well as the risk of fire spreading from a structure to surrounding lands.
- 4.2 Property in an agricultural or forest zone should not be rezoned to a rural residential or other nonresource zone unless structural fire protection can be provided.

GOAL 8: RECREATIONAL NEEDS

Goal: To satisfy the recreation needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

The abundance and variety of resources coupled with an invigorating climate has contributed to Central Oregon's wide-spread recognition as a year-round outdoor recreation area. The County contains many natural attractions such as lakes and streams for fishing, mountains for hiking and skiing, and range land which provides wildlife habitat and hunting opportunities. The gorges of the Crooked, Deschutes and John Day Rivers, and the Cascade Mountain Range are among the spectacular physiographic features of the County.

There are three state parks in the County:

1. The Cove Palisades State Park is the largest recreational facility in the County, covering 4,119 acres. It includes the Deschutes and Crooked River arms of Lake Billy Chinook and the lower portion of the Metolius arm of the lake. The park includes water recreation, boat docks, campgrounds, rental cabins, hiking trails, a store, restaurant, marina and rental services.
2. Peter Skene Ogden Scenic Wayside is a 98 acre facility on both sides of the Crooked River Gorge where it is crossed by Highway 97. The canyon is 400 feet wide and 300 feet deep at this point. The wayside provides impressive views of the canyon and the river which formed it.
3. Elliot R. Corbett II Memorial Park is a primitive area accessed by hiking trail only. The 63 acre park is located at the south end of Blue Lake.

Lake Billy Chinook, Lake Simtustus, Haystack Reservoir and multiple smaller lakes in the Deschutes National Forest, Mt. Jefferson and Mt. Hood Wilderness areas provide opportunities for water recreation. Marinas at Cove Palisades State Park and the Three Rivers Recreation Area offer houseboat rentals on Lake Billy Chinook. River rafting is a popular activity on the Deschutes and John Day Rivers.

There are numerous campgrounds within the Deschutes National Forest and Mount Jefferson Wilderness, in addition to camping available at the Cove Palisades State Park. More developed camping is available at private RV parks located near Haystack Reservoir and Lake Billy Chinook, and in Camp Sherman and Crooked River Ranch.

Numerous private recreational facilities are located in the Metolius River Recreation Area. The area consists of a narrow strip about 12 miles in length along Lake Creek and the upper Metolius River in the Camp Sherman, Blue Lake and Suttle Lake areas. This area contains campgrounds, resorts and lodges, youth and church camps, and numerous vacation residences on both Forest Service and privately owned land.

Public lands in the Deschutes National Forest, including the Mt. Hood and Mt. Jefferson Wildernesses are available for back-country recreation. Other public lands managed by the

Bureau of Land Management and Crooked River National Grassland are available for equestrian activities, mountain biking, and other outdoor activities.

Other Bureau of Land Management lands used for recreation include:

1. Foley Waters: An undeveloped site, a flat area adjacent to Deschutes River;
2. Steelhead Falls: A popular fishing area on the Deschutes River, a number of trails lead into the canyon from this site;
3. Mouth of Whychus Creek: A fishing area that can be reached from either side of the Deschutes River;
4. Government Trail: A trail that leads into the canyon for access to the Deschutes River;
5. Metolius Arm of Lake Billy Chinook: A terraced area adjacent to the lake which is used by boat-in campers;
6. Deschutes Arm of Lake Billy Chinook: An area used by boat-in campers;
7. Gateway Recreation Site: This is the only BLM administered site in Jefferson County that has any facilities. There are eight tables and six toilets at this site.

Rock hounding is another important recreational activity in the County. Hobbyists by the tens of thousands come to the county, beginning with good weather in the spring and continuing until late in the fall, to dig for semi-precious stones, agates, jasper and thunder-eggs. There are public “digs” located on public lands, and many ranchers have opened deposits of desirable rock, managing their holdings on a fee basis.

Juniper Hills Park is a developed county park covering approximately 100 acres just east of the Madras city limits. The park contains ball fields, paved walking paths and a disc golf course. The park is inside the Madras Urban Growth Boundary, and as the city grows the park may eventually be annexed into the city.

There likely are not enough developed park facilities in the County to meet the needs for organized sports like baseball and soccer. However, it is more appropriate for these types of developed recreational facilities to be provided inside city limits where the majority of the participants live, rather than in the unincorporated areas of the County.

Policy 1: Recognize the importance of recreation to both County residents and visitors.

- 1.1 Private recreational development, including a variety of overnight accommodations, should be permitted in locations that will not conflict with surrounding land uses and where adequate services are available.
- 1.2 Private development should not be permitted if it would block access to or otherwise have a significant adverse impact on public open space lands.
- 1.3 Encourage the development of bicycle, equestrian and hiking trails and facilities.

CAMP SHERMAN AREA

The Camp Sherman, Suttle Lake and Blue Lake areas and surrounding Deschutes National Forest land in the western portion of the County are a major recreational and resort area. The Suttle and Blue Lake areas are popular tourist destinations, containing Elliot Corbett State Park, youth and church camps, a resort and marina, and Camp Caldera, an arts and educational facility. Deschutes National Forest land, including the Mt. Jefferson Wilderness, provides year-round recreational opportunities for hiking, fishing, camping, cross country skiing, mountain biking, horseback riding, hunting and other activities. Black Butte, the Wizard Falls Fish Hatchery, and the Head of the Metolius, where the river is formed by springs, are some of the more popular tourist destinations.

The Metolius River, which is a State Scenic Waterway and Federal Wild and Scenic River, has been a popular draw for visitors to the area for at least 100 years. There are nine Forest Service campgrounds along the river between Camp Sherman and Jefferson Creek, approximately nine miles to the north. The Forest Service also leases 108 lots along the Metolius River to private individuals for recreational purposes. The cabins on these lots are restricted to use for vacation purposes and are not permitted to be used for permanent residential use.

The Camp Sherman area, which is bisected by the Metolius River and Lake Creek, has been a vacation spot since at least 1912, when wheat farmers from Sherman County started coming to the area to vacation, camp and fish. Currently, Camp Sherman is an intensively developed resort community with a number of lodges and resorts, as well as residential areas that contain a mix of both vacation homes and full-time residences.

Camp Sherman residents care very deeply about preserving the natural amenities of the area. Goals for the area that were identified in the 1981 Comprehensive Plan were to ensure open space, to protect scenic and historic areas and natural resources for future generations, and to promote a healthy and visually attractive environment.

Policy 2: The open space, scenic, historic and natural resource values that make the Camp Sherman area unique should be recognized and protected.

Policy 3: Recognize that the Deschutes National Forest and private lands within the National Forest boundary provide invaluable recreational opportunities for both County residents and visitors.

3.1 Provide input to the US Forest Service whenever possible when new uses or management strategies are proposed in the Deschutes National Forest.

3.2 Recreational and resort development on private lands within the National Forest boundary should continue to be allowed when the development will be in harmony with the natural environment and will not have an adverse impact on forest lands, rivers and streams or wildlife habitat.

DESTINATION RESORTS

Destination resorts have become a popular feature in Central Oregon, providing overnight lodging, restaurants, meeting facilities and developed recreational facilities, along with some full-time residences. The state has recognized the importance of destination resorts in encouraging tourism and contributing to the state's economic development, and has enacted provisions to allow resorts while still protecting high-value farmland and the most productive forest land. In order to tap this economic potential and provide additional recreational opportunities to visitors, the County has determined that destination resorts should be allowed in the county when consistent with Statewide Planning Goals and Administrative Rules.

ORS 197.465 requires that a Comprehensive Plan that allows for siting of a destination resort include implementing measures which map areas where a resort is permitted, limit uses and activities to those permitted pursuant to ORS 197.455, and assure that developed recreational facilities and key facilities intended to serve the entire development and visitor-oriented accommodations are physically provided or are guaranteed through surety bonding or substantially equivalent financial assurances prior to closure of sale of individual lots or units.

The county must adopt a map consisting of lands that are eligible for siting a destination resort, based on reasonably available information. The adopted map is the sole basis for determining whether tracts of land are eligible for destination resort siting. However, just because a property is mapped as being eligible does not mean that a destination resort is permitted outright in that location. In order to be approved, a proposal for a resort must comply with standards and criteria contained in the Zoning Ordinance.

ORS 197.455 prohibits the siting of destination resorts in any of the following locations:

1. Within 24 air miles of an urban growth boundary with an existing population of 100,000 or more;
2. 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 (NRCS) or its predecessor agency, the Soil Conservation Service;
3. On a site within three miles of a high value crop area unless the development will be a "small" destination resort in an exception area consisting of land that is not defined as agricultural or forest land;
4. On predominantly Cubic Foot Site Class 1 or 2 forestlands as determined by the State Forestry Department, unless a goal exception has been approved;
5. In an especially sensitive big game habitat area.

There are no urban growth boundaries with a population of 100,000 or more within 24 miles of the county. According to NRCS maps, there is no unique farmland in the county. There are a number of soils that are classified as prime, but only if they are irrigated. A prime soils map was prepared, based on Natural Resource Conservation Service (NRCS) soils data, North Unit Irrigation District (NUID) information on irrigated parcels, and state Department of Water Resources data on water rights. Destination resorts will be excluded from these areas.

"High value crop areas" are defined as areas in which there is a concentration of commercial farms capable of producing crops with a minimum gross value of \$1,000 per acre per year.

According to OSU Extension Service Agricultural Statistics, there are a number of crops that can be grown in the county that will produce \$1,000 an acre, including grass and vegetable seed. According to the OSU Extension Service, the determining factor in whether a high value crop can be grown is whether irrigation water is available. Consequently, irrigated lands were mapped based on the NUID and Department of Water Resources information. To identify “concentrations of commercial farms”, irrigated areas were overlaid on air photos using the county’s Geographic Information System. Some areas indicated as being watered by the Department of Water Resources are not being farmed or are single isolated farm parcels. These areas were determined to not be concentrations of commercial farms, so were excluded from the map. Other irrigated areas are within wildlife habitat areas, where destination resorts are not allowed. These areas were also deleted from the map. The resulting high value crop area map was then modified to include some additional lands that are interspersed within the high value crop areas – when high value crop areas are less than one mile apart, the intervening area was included since a destination resort could not be approved within this area.

A three mile buffer was drawn around the high value crop areas. Consideration was also given to high value crop areas in adjoining counties. Jefferson County is bordered by Deschutes, Crook, Wasco, Wheeler, Linn and Marion Counties. Deschutes County has determined that there are no high-value crop areas in the county (Deschutes County Ord. No. 92-002). The border between Jefferson County and Linn and Marion Counties is the crest of the Cascades. This area has high elevations and is forested, so there are no agricultural lands or high-value crop areas within three miles of the border. A three mile buffer was mapped from the border with the other counties. Destination resorts will not be allowed within the high value crop areas or within the three mile buffer. (Although “small” destination resorts may be allowed within the three mile buffer pursuant to ORS 197.455(6), the County has chosen not to adopt provisions for small resorts at this time.)

The small amount of class 1 and 2 forest land was mapped based on NRCS soils data. There is no NRCS data for the Mount Jefferson Wilderness and an area south of Camp Sherman. Since it is possible that these areas contain class 1 and 2 forest soils, they will be excluded from destination resort siting.

The County has not determined which big game habitat areas are “especially sensitive”. Consequently, all land subject to the Wildlife Overlay Combining Zone, which protects deer, elk and pronghorn winter range habitat areas were mapped as being excluded from destination resort siting. The big game winter range map is on page 24. Maps showing the other areas where destination resorts are not allowed are on the following pages.

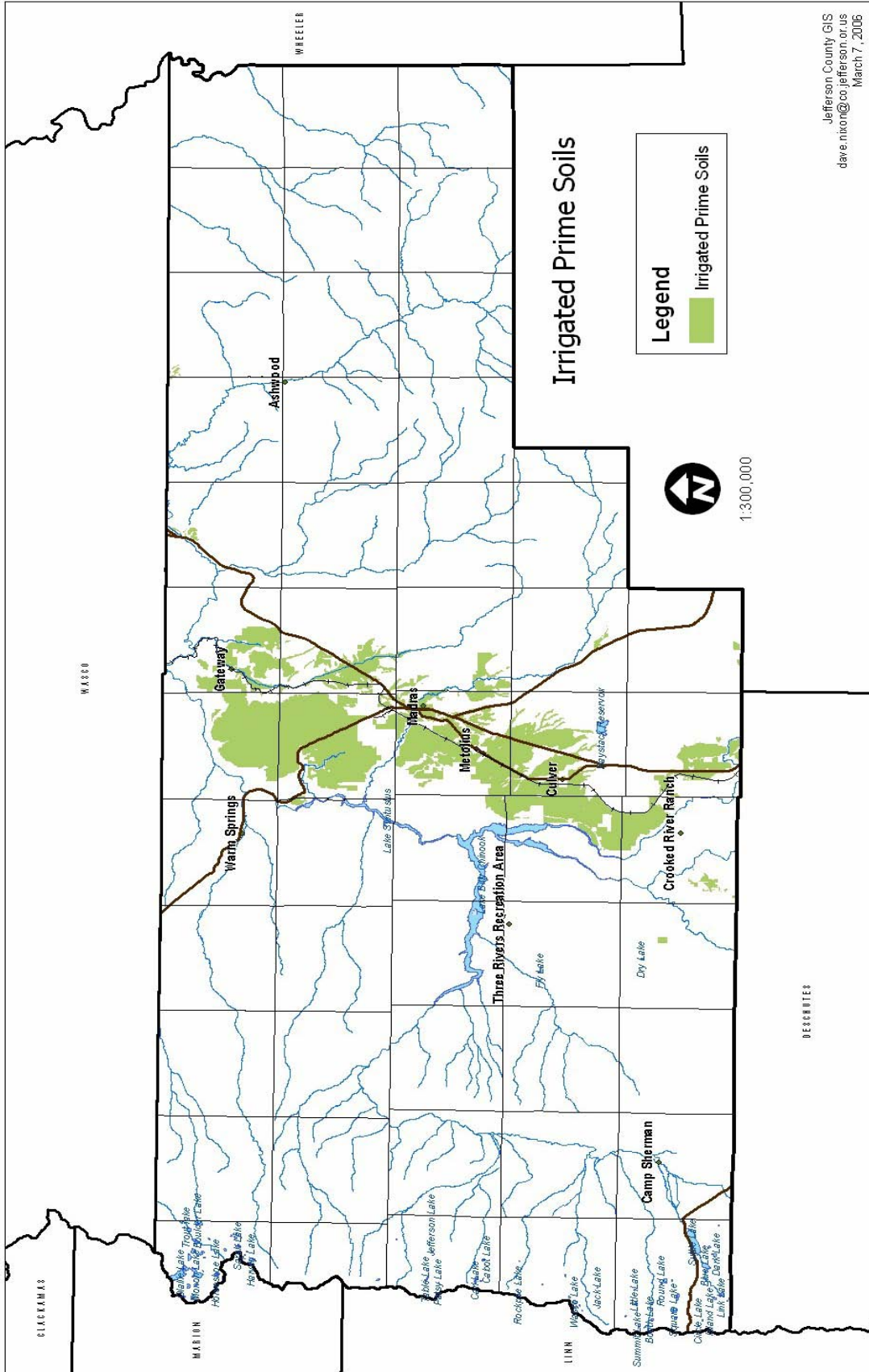
In addition to the areas where destination resorts must be excluded pursuant to ORS 197.455, the County also excluded all federal lands and individual parcels that the property owner requested to have excluded.

A final map showing the areas that were not excluded through the destination resort mapping process was prepared. Upon reviewing the map, the County decided to further limit the areas that will be eligible for siting destination resorts. Destination resort-eligible lands shall be limited to the two areas shown on the “Jefferson County Destination Resort Map of Eligible Lands”, which is adopted as part of the Comprehensive Plan. Destination resorts may only be sited in areas shown on the map.

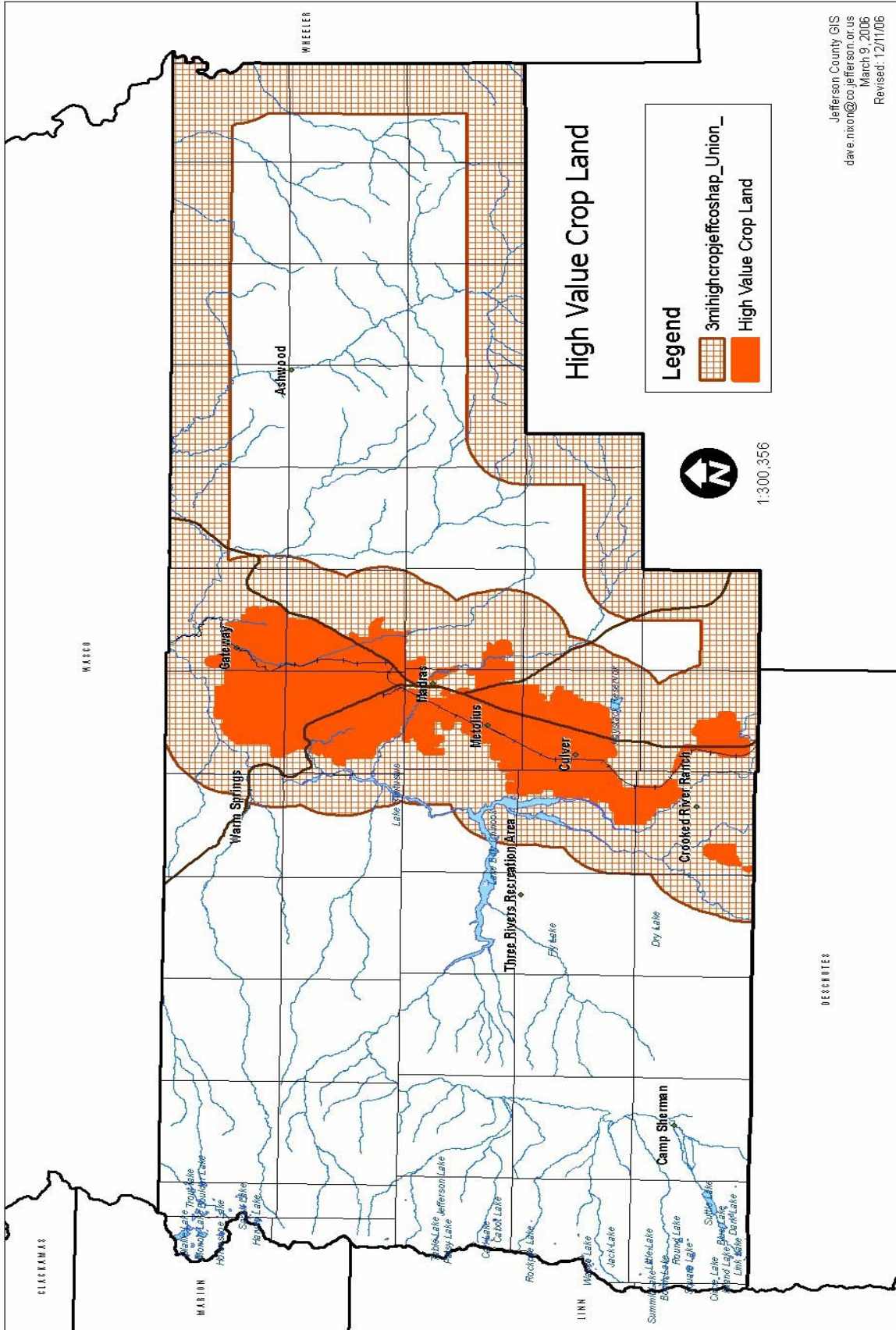
The map may be revised in the future through the Comprehensive Plan amendment procedure in Part 5 to add additional eligible lands, but in accordance with ORS 197.455(2) will not be amended more frequently than once every 30 months. Applications to amend the Destination Resort Map will be collected and will be processed concurrently no sooner than 30 months from the date the map was previously adopted or amended.

Policy 3: Provide opportunities for destination resorts that will include developed recreational facilities and overnight lodging for tourists.

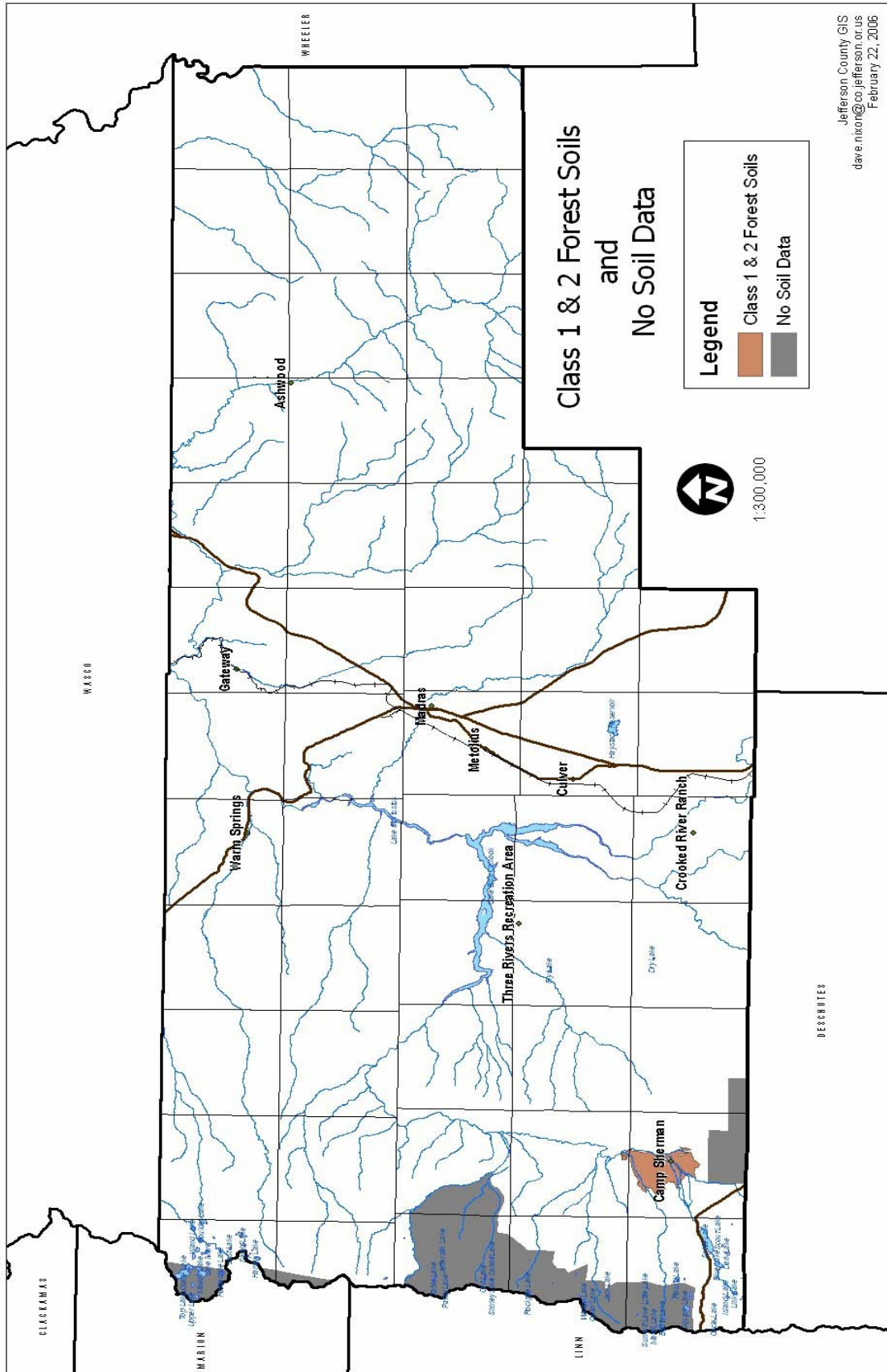
- 3.1 Destination resorts should only be allowed within areas shown on the “Destination Resort Map of Eligible Lands” when in compliance with requirements of Goal 8 and ORS 197.435 to 197.467. Applications to amend the map will be collected and will be processed concurrently no sooner than 30 months from the date the map was previously adopted or amended.
- 3.2 Only those uses and activities allowed by ORS 197.445 should be permitted as part of a destination resort. Developed recreational facilities and key facilities intended to serve the entire development and visitor oriented accommodations must be physically provided or guaranteed through surety bonding or equivalent financial assurances prior to closure of sale of individual lots.
- 3.3 Destination resorts should be compatible with the site and adjacent land uses and should not place inordinate demands on the service structure of the County or on other public utilities or special districts.

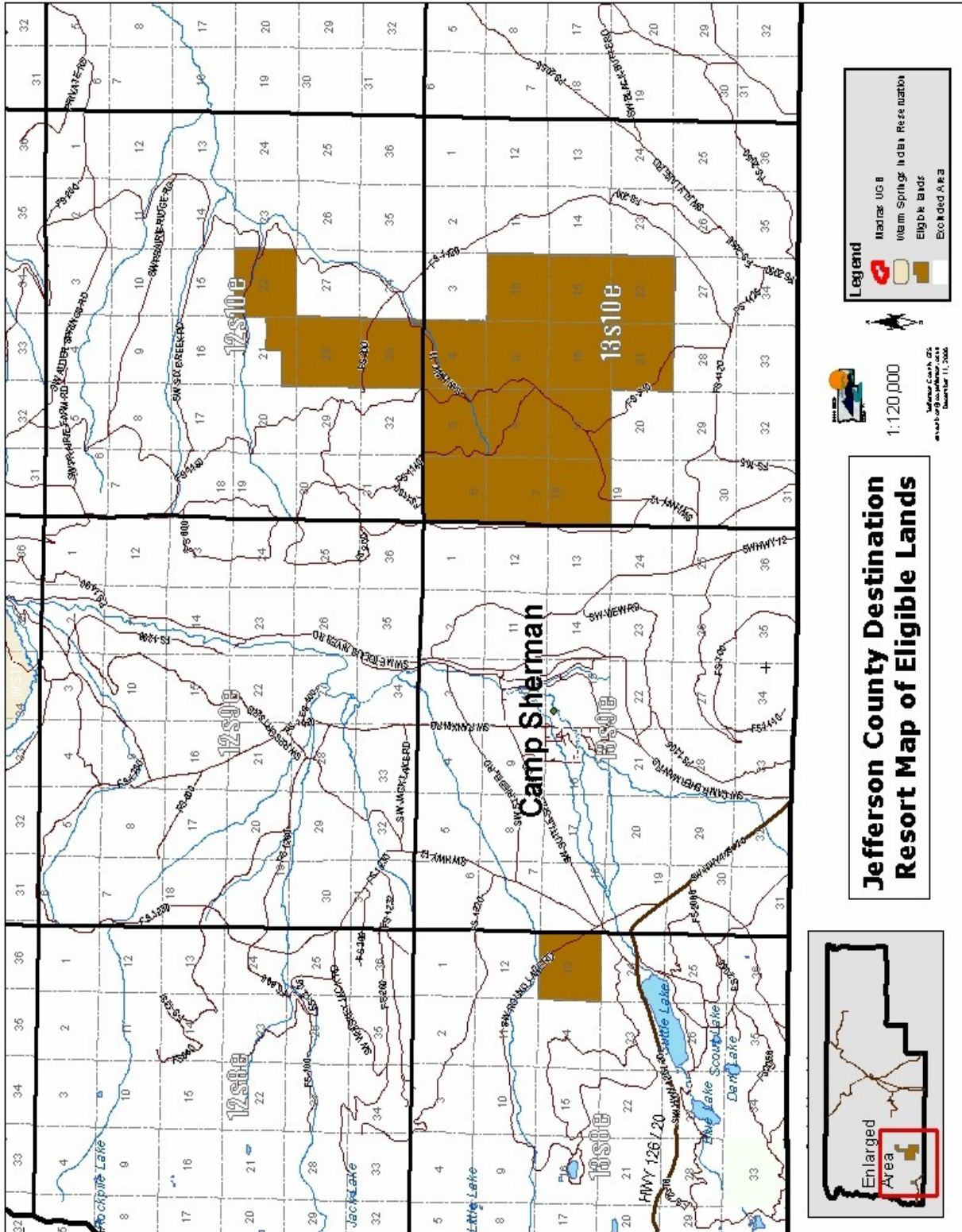


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 March 7, 2006



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 March 9, 2006
 Revised: 12/11/06





GOAL 9: ECONOMIC DEVELOPMENT

Goal: To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

Jefferson County is considered to be economically distressed by the Oregon Economic and Community Development Department. Unemployment rates in the County are consistently higher than the state and national averages, and wages are consistently lower.

Agriculture has historically been one of the primary economic generators in the County. Gross value of sales of crops, livestock and livestock products produced in the county in the last 25 years is shown in the following table:

VALUE OF AGRICULTURAL SALES

YEAR	Crops	Livestock and Livestock Products	Total
1980	\$28,669,000	\$9,036,000	\$37,705,000
1990	\$39,330,000	\$7,762,000	\$47,092,000
2000	\$39,701,000	\$8,121,000	\$47,822,000
2004	\$34,697,000	\$14,925,000	\$49,622,000

Source: OSU Oregon Agricultural Information Network, Extension Economic Information Office

While the total dollar value of agricultural sales has increased, when inflation is taken into consideration there has been a decline in gross farm sales. Value is added to the economic impact of agriculture by "first handlers", which are companies that process farm commodities before shipping it out to market. It is estimated that first handlers increase crop value by 65 percent and livestock by 10 percent.

Policy 1: Agriculture and forestry are important to the economy of the County.

- 1.1 The zoning ordinance should allow for value-added agricultural activities, including processing and agricultural tourism, to the extent allowed by state law in order to support the continuation of farming in the County.

In 1997 there were 399 farms in the County. 231 of these farm operators reported working on the farm four or more hours per day, while 168 worked at other occupations four or more hours per day. An additional 2,057 people were hired as farm labor. This was a decrease of 20 percent from 1982. The decrease was primarily due to mechanization and shifts to crops needing less labor. The downward trend of reduced labor is expected to continue.

Local government employment and wood products manufacturing are the primary sources of non-agricultural employment in the County. 2004 nonfarm employment figures for the entire County (including employment on the Warm Springs Reservation) are shown in the following table:

2004 NONFARM EMPLOYMENT

<i>Government, total</i>	<i>2,420</i>
Federal government	170
State government	100
Local government	2,150
<i>Manufacturing, total</i>	<i>1,650</i>
Wood Products	1,110
<i>Services, total</i>	<i>1,150</i>
Financial activities	140
Professional and business services	160
Education and health services	220
Leisure and hospitality	470
Information	20
Other services	140
<i>Trade, Transportation and Utilities, total</i>	<i>810</i>
Wholesale trade	200
Retail trade	510
Transportation, warehousing, utilities	100
Construction	110
Natural resources and mining	30

By 2010 there will be a significant increase in the number of state employees with completion of the Deer Ridge Correctional Institution, which will employ between 400 and 500 people. This may result in growth in retail and service sectors to meet the needs of correctional institution employees.

Most employment in the County takes place inside the incorporated cities or on the Warm Springs Reservation. Apart from farm and forest land, where resource-based industrial uses may be approved, the only land in the unincorporated area of the County that is currently zoned for industrial development is a 48 acre parcel owned by the City of Madras that is located off Belmont Lane, adjacent to the railroad tracks, just east of the city limits. The parcel is currently undeveloped. Because all of the land surrounding the cities of Culver and Metolius, and much of the land surrounding Madras is zoned for farm use, the County acknowledges that rezoning additional lands for industrial uses will likely result in the loss of some farm land.

Policy 2: Adequate land in appropriate areas should be provided for industrial development.

- 2.1 When possible, industrial lands should be located adjacent to or near existing industrial uses or an urban growth boundary.
- 2.2 Industrial uses may be appropriate in unincorporated areas of the County when necessary to be near a resource utilized by the industry, when a location adjacent to rail lines is important for shipping needs, or when warranted because of space needs or probable impacts from the use.

- 2.3 The area north of the Madras City-County airport, adjacent to the existing city industrial park, may be a suitable location for additional industrial land, provided new industry in that area would not produce dust, steam or other emissions that would obscure visibility for pilots.
- 2.4 “Clean” or light industrial uses are preferable near city limits.
- 2.5 When considering whether land should be rezoned for industrial use, preference should be given to lands that are not irrigated, that have adequate sanitation and water, and that have adequate road access.
- 2.6 The permitting and approval process for new industrial development should be streamlined if possible.
- 2.7 When considering whether an industrial use should be permitted, the potential social, economic, environmental and energy impacts on the local area should be taken into account.

Policy 3: The development of high-speed communication and technology is encouraged within the County.

There are several commercial zoning designations in the County. Currently, several parcels located inside the Madras urban growth boundary are zoned County Commercial. There is a commercial zone in Crooked River Ranch, a rural center zone in Camp Sherman, and a waterfront zone that allows some commercial uses in Three Rivers Recreation area. The intent of these three zones is to provide limited services to the local community. All of the commercial zones limit the type or size of commercial uses that are permitted.

Policy 4: The County should allow commercial zoning in appropriate areas.

- 4.1 Commercial uses may be appropriate in unincorporated areas of the County when needed to support recreation, to allow the expansion of existing businesses, and to serve the needs of local residents.
- 4.2 The permitting and approval process for new commercial development should be streamlined if possible.

In addition to agriculture and other resource-based employment, tourism and recreational activities are likely to be the greatest contributors to the economy from unincorporated lands. The Three Rivers Recreation Area Waterfront zone, Camp Sherman Vacation Rentals zone, Camp Sherman Rural Center zone, and Blue Lake zone were specifically designed to recognize existing tourism-related businesses and allow limited new development that is in harmony with the surrounding area and carrying capacity of the land. Tourism-related businesses have also been developed in Crooked River Ranch. The development of destination resorts could also bring new tourism dollars to the County.

Policy 5: Provisions should be made for tourism and recreational development.

- 5.1 The County should consider the adoption of provisions to allow destination resorts in appropriate areas, in accordance with state statutory requirements.
- 5.2 A variety of types of tourist accommodations should be allowed in rural areas near recreational sites.

GOAL 10: HOUSING

Goal: To provide for the housing needs of citizens of the state.

The 1981 Comprehensive Plan projected a 2.9 percent annual growth rate for the 20 year period from 1980 to 2000. This broke down into a projected population of 7,503 in the City of Madras, including the urban growth area, 800 in Culver, 850 in Metolius, and 10,708 in unincorporated areas, for a total projected population of 19,861 for the entire County by the year 2000. This projection turned out to be slightly higher than the actual average growth rate of 2.55 percent, primarily due to the economic downturn in the 1980s. Actual US Census figures for population in 2000 were 5,078 in Madras, 802 in Culver, 635 in Metolius, and 12,494 in the unincorporated area, for a total of 19,009. During the period from 2000 to 2005, Metolius and Culver experienced high growth rates of 4.83 and 4.91 percent respectively. Madras's growth rate was 1.95 percent and the unincorporated area grew at only 1.08 percent. Overall Jefferson County growth from 2000 to 2005 slowed to 1.62 percent.

The County contracted with ECONorthwest to prepare a population forecast for the purposes of the 2006 Comprehensive Plan update. Their report indicated that population in Jefferson County is expected to grow at a higher rate than the state average due to spillover from Bend (a result of lower housing prices), influence of retirement communities and destination resorts, and construction of the Deer Ridge Correctional Institution east of Madras, which will house approximately 2,000 inmates by 2010 and employ between 400 and 500 people. In 2004 the County saw a significant jump in the number of building permits issued for dwellings from the previous five years, suggesting that population will increase considerably, at least in the short term.

It is assumed that most of the future population growth will continue to occur inside cities rather than in the unincorporated areas of the county, unless there is a significant change in state regulations protecting farm, range and forest lands. The percentage of County residents living in unincorporated areas has decreased over the years, from 72.4 percent in 1980 to 64 percent in 2005. This trend is expected to continue, with the unincorporated population expected to decrease to 57 percent in 2025 and to 46 percent by 2056. The population forecast did not take into consideration the potential growth that may occur in unincorporated areas of the County as a result of Ballot Measure 37 (ORS 197.352), which was approved by the voters in 2002.

The following chart shows the population forecast for the County and cities. The forecast includes the population of the Warm Springs Reservation, but does not include the projected inmate population that will be housed at the Deer Ridge Correctional Institution, which will add approximately 2,100 persons to the unincorporated area of the County by 2010.

POPULATION FORECAST

YEAR	Madras Pop.	percent change	Culver Pop.	percent change	Metolius Pop.	percent change	Unincorporated	percent change	COUNTY	percent change
2005	5,592		1,019	3.2	804		13,185		20,600	
2006	5,844	4.5	1,052	3.2	822	2.3	13,541	2.7	21,259	3.2
2007	6,107	4.5	1,085	3.2	841	2.3	13,906	2.7	21,939	3.2
2008	6,381	4.5	1,120	3.2	861	2.3	14,279	2.7	22,642	3.2

YEAR	Madras Pop.	percent change	Culver Pop.	percent change	Metolius Pop.	percent change	Unincorporated	percent change	COUNTY	Percent change
2009	6,669	4.5	1,156	3.2	881	2.3	14,661	2.7	23,366	3.2
2010	6,969	4.5	1,193	3.2	901	2.3	15,052	2.7	24,114	3.2
2011	7,282	4.5	1,231	3.2	922	2.3	15,451	2.7	24,885	3.2
2012	7,574	4.0	1,265	2.8	943	2.3	15,726	1.8	25,508	2.5
2013	7,876	4.0	1,301	2.8	964	2.3	16,004	1.8	26,145	2.5
2014	8,192	4.0	1,337	2.8	987	2.3	16,283	1.7	26,799	2.5
2015	8,519	4.0	1,375	2.8	1,009	2.3	16,566	1.7	27,469	2.5
2016	8,860	4.0	1,413	2.8	1,032	2.3	16,850	1.7	28,156	2.5
2017	9,214	4.0	1,453	2.8	1,056	2.3	17,136	1.7	28,859	2.5
2018	9,583	4.0	1,493	2.8	1,081	2.3	17,424	1.7	29,581	2.5
2019	9,966	4.0	1,535	2.8	1,105	2.3	17,714	1.7	30,320	2.5
2020	10,365	4.0	1,578	2.8	1,131	2.3	18,004	1.6	31,079	2.5
2021	10,779	4.0	1,622	2.8	1,157	2.3	18,297	1.6	31,855	2.5
2022	11,211	4.0	1,668	2.8	1,183	2.3	18,590	1.6	32,652	2.5
2023	11,659	4.0	1,715	2.8	1,211	2.3	18,884	1.6	33,468	2.5
2024	12,125	4.0	1,763	2.8	1,238	2.3	19,178	1.6	34,305	2.5
2025	12,610	4.0	1,812	2.8	1,267	2.3	19,473	1.5	35,162	2.5
2026	13,115	4.0	1,863	2.8	1,296	2.3	19,768	1.5	36,042	2.5
2027	13,451	2.6	1,898	1.9	1,317	1.6	19,953	0.9	36,618	1.6
2028	13,795	2.6	1,934	1.9	1,338	1.6	20,137	0.9	37,204	1.6
2029	14,148	2.6	1,971	1.9	1,359	1.6	20,321	0.9	37,799	1.6
2030	14,510	2.6	2,008	1.9	1,381	1.6	20,504	0.9	38,404	1.6
2031	14,882	2.6	2,047	1.9	1,403	1.6	20,687	0.9	39,019	1.6
2032	15,263	2.6	2,085	1.9	1,426	1.6	20,869	0.9	39,643	1.6
2033	15,653	2.6	2,125	1.9	1,448	1.6	21,050	0.9	40,277	1.6
2034	16,054	2.6	2,165	1.9	1,472	1.6	21,230	0.9	40,922	1.6
2035	16,465	2.6	2,207	1.9	1,495	1.6	21,409	0.8	41,576	1.6
2036	16,887	2.6	2,248	1.9	1,519	1.6	21,587	0.8	42,241	1.6
2037	17,319	2.6	2,291	1.9	1,543	1.6	21,764	0.8	42,917	1.6
2038	17,762	2.6	2,335	1.9	1,568	1.6	21,939	0.8	43,604	1.6
2039	18,217	2.6	2,379	1.9	1,593	1.6	22,112	0.8	44,302	1.6
2040	18,683	2.6	2,424	1.9	1,619	1.6	22,284	0.8	45,011	1.6
2041	19,162	2.6	2,470	1.9	1,645	1.6	22,454	0.8	45,731	1.6
2042	19,652	2.6	2,517	1.9	1,671	1.6	22,622	0.7	46,463	1.6
2043	20,155	2.6	2,565	1.9	1,698	1.6	22,788	0.7	47,206	1.6
2044	20,671	2.6	2,614	1.9	1,725	1.6	22,951	0.7	47,961	1.6
2045	21,201	2.6	2,664	1.9	1,752	1.6	23,112	0.7	48,729	1.6
2046	21,743	2.6	2,714	1.9	1,780	1.6	23,270	0.7	49,508	1.6
2047	22,300	2.6	2,766	1.9	1,809	1.6	23,426	0.7	50,300	1.6
2048	22,871	2.6	2,818	1.9	1,838	1.6	23,578	0.7	51,105	1.6
2049	23,456	2.6	2,872	1.9	1,867	1.6	23,728	0.6	51,923	1.6
2050	24,057	2.6	2,926	1.9	1,897	1.6	23,873	0.6	52,754	1.6
2051	24,673	2.6	2,982	1.9	1,927	1.6	24,016	0.6	53,598	1.6
2052	25,304	2.6	3,039	1.9	1,958	1.6	24,154	0.6	54,455	1.6
2053	25,952	2.6	3,096	1.9	1,990	1.6	24,289	0.6	55,327	1.6
2054	26,616	2.6	3,155	1.9	2,021	1.6	24,419	0.6	56,212	1.6
2055	27,298	2.6	3,215	1.9	2,054	1.6	24,544	0.5	57,111	1.6
2056	27,997	2.6	3,276	1.9	2,087	1.6	24,665	0.5	58,025	1.6

Methodology used and justification for this forecast can be found in the “Jefferson County Coordinated Population Forecast” prepared by ECONorthwest, April, 2006.

When the County justified its Exception (rural residential) areas in 1981 (see Appendix II), it assumed a 2.3 person per household ratio for the central portion of the County, and a 3.2 person per household ratio for the remainder of the County. These figures were used in conjunction with the population projection as the rationale for the amount of rural residential land needed. Future housing needs analyses should use the most recent U.S. Census figures for the number of persons per household. The 2000 Census indicates there are 2.8 persons per household in the Madras vicinity and 2.6 persons per household in other unincorporated areas of the County.

By far the largest amount of rural residential land in the County is in Crooked River Ranch, which contains 2,642 lots, approximately 75 percent of which were developed as of 2006. The next largest area is the Three Rivers Recreation Area, with 654 lots, approximately 100 of which are developed with permanent residences. There are a smaller number of rural residential lots in Camp Sherman, north and south of Madras, and in various other locations. Many of these areas were originally thought of as being recreational lands, where it was assumed only seasonal or vacation residences would be established. As time has passed, many of these areas have gradually changed to a preponderance of full-time residents.

There is a high demand for rural residential parcels, but currently a low availability, particularly in proximity to Madras. This may change as a result of Ballot Measure 37 (ORS 197.352), which was approved by the voters in 2004. Measure 37 allows property owners to request compensation or a waiver of land use regulations to allow them to use the property for a use that was permitted at the time they acquired the property. This may result in a significant increase in the amount of new housing in unincorporated areas of the county.

The County is concerned about where new rural residential lands might be located. Proximity to services such as fire protection and schools is important in order to minimize the costs of providing the service. However, rural residential development is not appropriate in a location that would hinder the expansion of a city unless the parcel sizes are large enough to allow efficient redevelopment at an urban scale. Any land that is rezoned to rural residential that is near a city should provide a “shadow plat” as part of the land division process. A shadow plat shows how the area can be redeveloped at an urban scale if it is annexed into a city. Development of individual lots and parcels should conform to the shadow plat.

Policy 1: Sufficient rural residential land should be provided to meet the need to accommodate population growth and the demand for rural home sites outside city limits.

1.1 Rural residential areas should have minimum lot or parcel sizes of from 2 to 20 acres. These sizes typically permit septic disposal systems while not increasing densities beyond levels which would conflict with other rural and agricultural uses.

1.2 Increasing the density in existing rural residential areas is preferable to rezoning new areas, except when the existing area is in close proximity to a city and increasing the density would limit the ability of parcels to be used for future urban development.

Policy 2: Criteria for rezoning lands to Rural Residential should be established.

- 2.1 Whenever possible, irrigated farm land should not be rezoned for rural residential development. Nonirrigated farm land or range land is more appropriate for rezoning, provided there will be no significant impact to nearby farming operations.
- 2.2 Whenever possible, areas proposed to be rezoned for rural residential development should be located near or adjacent to existing rural residential development, but should not be in a location where a city is likely to expand unless the minimum lot size will be ten acres or larger. Divisions of rural residential land near a city should include a shadow plat to show how the land can be efficiently redeveloped at an urban scale if annexed.
- 2.3 Areas proposed to be rezoned for rural residential development should have adequate water, road access, law enforcement, fire protection and schools.

Rural Residential zones are intended to provide for low density acreage home sites in an open-space environment, with minimal public services. Higher density housing that requires public sewer is considered to be urban in nature and should be located inside city limits, except in the case of destination resorts, which are self-contained developments. Most zoning districts in the county permit only one permanent single-family residence on any parcel. An additional temporary dwelling unit may be permitted in instances where there is a medical or age related hardship that requires a caregiver to live on the property. The County allows placement of a manufactured home in any location where a single-family residence is permitted. Residential homes, which provide adult foster care, treatment or training for five or fewer individuals, are permitted in any single-family residence.

Policy 3: Manufactured homes should provide stability, safety, and reliability to their occupants.

- 3.1 Only structures which are defined as dwelling units in the International Building Code should be permitted as new residences. Recreational vehicles are not dwelling units.

Policy 4: Any single-family dwelling should be allowed to be used as a residential home to provide care, treatment or training for up to five individuals, provided the home has been properly licensed.

GOAL 11: PUBLIC FACILITIES AND SERVICES

Goal: To develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

DOMESTIC WATER

The Deschutes Valley Water District (DVWD) operates a domestic water system that serves a large part of the population of Jefferson County. The district's water supply comes from Opal Springs and three artesian wells, all of which are located in the Crooked River Canyon about five miles southeast of Culver. Opal Springs and the three wells produce approximately 121,000 gallons per minute, of which the district appropriates approximately 20 percent. The excess capacity of Opal Springs is sufficient to serve increased development in Jefferson County well into the next century. The district is continually enlarging and extending the distribution system to meet the needs of the population.

In order to serve the varying elevations within the service area, the DVWD currently has eight reservoirs, with plans to construct additional reservoirs and install additional water lines. The district's transmission and distribution facilities currently consist of about 650 miles of line, serving about 4,000 customers and selling about 32 million gallons of water per month.

The DVWD provides water service to the cities of Metolius and Culver. The city of Madras operates its own public water supply system, obtaining water both from DVWD and from wells. Crooked River Ranch Water Company operates a community water system on portions of the Ranch, obtaining its water from wells. There also are a number of small community water systems serving developments in the Camp Sherman area.

Since so many parcels in the unincorporated area of the County are served by DVWD, it is not considered to be an urban service.

Policy 1: The presence or availability of water from the Deschutes Valley Water District should not be the basis for allowing increased density or a smaller minimum lot size than would otherwise be approved if water service were not available.

SEWER

The cities of Madras, Culver, and Metolius each operate a sanitary sewer system. These systems serve areas inside their respective city limits. Each system has the capacity to serve a considerably larger population than is served at this time. Sewer systems, because of their urban nature and potential creation of non-resource development pressures, are considered to be an urban rather than a rural service. Sewer systems are not an appropriate facility for rural lands except where existing septic systems are failing and a new or extended sewer system is the only practicable alternative to mitigate a health hazard, or to serve a destination resort or unincorporated community as allowed by state administrative rule.

Policy 2: Sewer systems shall not be established or extended outside an urban growth boundary unless there is a documented health hazard and state requirements are met, except when the system will serve a destination resort, unincorporated community, or other use allowed by state administrative rule.

ELECTRIC POWER

There are two suppliers of electric power to consumers in Jefferson County: Central Oregon Co-Op which, purchases their power from the Bonneville Power Administration through its Redmond substation, and Pacific Power and Light which generates its own power which is transmitted through its own lines from Bonneville Power Administration at Redmond and Portland General Electric at Round Butte.

Central Electric Co-Op supplies electric power to the rural areas north and southeast of Madras from their Madras substation, which is fed by their 69 kilovolt line from Redmond. In addition, CEC has a line penetrating four miles into the county just west of the Deschutes River, and another line serving the Suttle Lake and Camp Sherman areas. Both of these lines are supplied from the Cloverdale substation east of Sisters.

Pacific Power Company generally serves the area south of Madras and west of the Prineville Highway, plus the Madras urbanizing area and the cities of Metolius and Culver. The Madras substation, located one mile south of the city on old U.S. 97, supplies the area north of Metolius, while the Culver substation, located two miles west of Culver, supplies the remainder of the area south of the county line. Both substations are fed by 69 kilovolt lines from the Cove substation at Round Butte and from Redmond.

The Pelton and Round Butte hydroelectric dams, which are jointly owned by the Confederated Tribes of the Warm Springs Reservation of Oregon and Portland General Electric Company, have a total annual energy production of 1.36 billion kilowatt-hours. Much of this power is transmitted from the Round Butte switchyard to Portland and Salem.

SOLID WASTE DISPOSAL

There are no landfills in Jefferson County. Solid waste from most of the County is currently delivered to the Box Canyon Transfer Station southeast of Madras, and then is transferred to a landfill in Crook County. The Camp Sherman community also operates a transfer station for local residents.

The Crook County landfill is approximately 1600 acres in size, and as of 2006 only 40 acres of the site is being used. Consequently, it has the capacity to handle solid waste from Jefferson County for well over twenty years, so additional planning for solid waste disposal is not needed at this time.

However, in order to reduce the amount of material that must be landfilled and to conserve energy and resources, recycling should be encouraged throughout the County. Recycling drop-

off stations are currently provided at the Box Canyon Transfer Station and near the Madras Sanitary Service offices in Madras.

SCHOOLS

The 509J Madras and Culver #4 school districts serve the majority of students in Jefferson County. Other school districts that serve students in the County include Redmond School District #6, which serves students from Crooked River Ranch; Black Butte School District #41, which serves students in the Camp Sherman area; Ashwood School District #8, which operates a grade school only; and Deschutes County School District #6, which serves only two lots adjacent to Squaw Flat Road. There are high schools and middle schools in Culver and Madras, and elementary schools in Culver, Metolius, Madras, Camp Sherman, Ashwood and Warm Springs. There are plans for a Central Oregon Community College branch campus in Madras.

FIRE PROTECTION

Jefferson County Fire District #1 provides fire protection to the central portion of the county, including to Metolius, Culver and Madras. Crooked River Ranch has its own Fire and Rescue department, and Three Rivers Recreation Area has a volunteer fire department. Part of the southwestern part of the county receives fire protection from the Sisters Fire District. The Bureau of Land Management, US Forest Service, Crooked River National Grassland and Oregon Department of Forestry provide fire protection to public lands. A large part of the east half of the County has no fire protection. As indicated in Goal 7, Policy 4.2, property in a farm or forest zone should not be rezoned to rural residential unless the property will have structural fire protection.

LOCATION OF PUBLIC FACILITIES

Key public facilities such as sewage treatment plants, water systems, schools and fire stations which are necessary to service concentrations of people should primarily be located in urban areas. Such facilities may also be appropriate to meet the needs of existing rural residents in rural service centers and rural communities such as Crooked River Ranch. Key facilities outside urban areas, rural service centers and rural communities should be discouraged unless the facility is needed to serve existing development, is at the most efficient and economic location, and is consistent with the capabilities of the land and the planned growth of the County.

Rural development should not exceed the availability of public services such as law enforcement, snowplowing, schools and school busing.

PUBLIC FACILITY PLAN

The City of Madras has an adopted Public Facilities Plan which addresses existing and planned water, wastewater, storm drainage and transportation facilities, including a capital improvement plan for future construction of facilities and general financing plan. The Public Facilities Plan

was prepared with the coordination of Jefferson County and the Deschutes Valley Water District. It was developed to help assure that development within the urban growth boundary is guided and supported by types and levels of urban facilities and services are appropriate for the needs and requirements of the community and are provided in a timely, orderly and efficient manner.

Policy 3: Public facilities and services should be provided at levels and in areas appropriate for such uses based upon the carrying capacity of the land, air and water.

3.1 Public facilities and services proposed for areas outside urban growth boundaries should be provided at levels appropriate for rural rather than urban uses.

3.2 Utility lines and facilities should be located on or adjacent to existing public or private rights-of-way where feasible in order to avoid interference with farm units.

GOAL 12: TRANSPORTATION

Goal: To provide and encourage a safe, convenient, and economic transportation system.

Owing to its large area and low population density, Jefferson County will almost certainly continue to rely on private vehicles as its major form of transportation for the foreseeable future. Relatively small numbers of people dispersed across large amounts of land present overwhelming problems for development of mass transit and other cost and energy efficient forms of transportation.

Three major highways pass through Jefferson County. Highways 97 and 26 join at Madras and traverse the center of the County in a broad X-shaped pattern. Highway 20 runs about 10 miles through the extreme southwestern corner of the County.

There are 621.5 miles of county roads, with 408.1 miles of gravel surface, and 213.4 miles of paved surface. As can be expected, the greatest concentration of county roads is in the central portion of the county where the irrigated land and population centers are located.

There are two public use airports in the County: the City-County Airport at Madras and Lake Billy Chinook Airport near Cove Palisades State Park. The Lake Billy Chinook Airport is privately owned, but is open for use by the flying public. The City-County airport serves private aircraft which are based in Madras, and is the base of operations for agricultural spraying operations in the county. A significant number of landings also result from business and pleasure trips into and out of Jefferson County.

The Central Oregon Council on Aging (COCOA) operates a dial-a-ride program to provide transportation to Jefferson County seniors and the disabled.

The Oregon Trunk Line of the Union Pacific Co. and Burlington Northern Inc. passes through the central portion of the county, through Gateway, Madras, Metolius and Culver. A spur line serves the Madras Industrial Area, where a number of industrial operations are located.

One major interstate gas pipeline runs for 30 miles through Jefferson County from the Cove Canyon area to the Lone Pine area. It transmits from 800,000,000 to 1 billion cubic feet of Canadian natural gas to California each day.

Policy 1: Adequate access should be required for all new development and proposed new lots or parcels.

1.1 Road access to new development should be adequate to safely handle the anticipated traffic load.

Policy 2: Airports should be protected from conflicting uses.

2.1: New development near existing airports should not create a hazard for aircraft.

Jefferson County will comply with Goal 12 through its Transportation System Plan.

GOAL 13: ENERGY CONSERVATION

Goal: To conserve energy.

Jefferson County's most effective contribution to energy conservation will be the reduction of unnecessary automobile travel. This can be accomplished in two ways. First, the creation of new residential development in the more remote rural parts of the county will be discouraged. Such developments result in increased daily travel for job commuting and shipping. These developments also make inordinate demands on the service structure of the county. Urban growth boundaries and limited rural residential development areas will contribute to this energy saving effort. Second, the county should permit basic commercial and service development in the more remote rural areas to serve the rural population residing in the area. Small food stores and auto and farm implement services located in the rural areas could reduce long travel times into one of the cities for small items or basic service.

Policy 1: Conservation of energy should be considered when an application is submitted to rezone property.

1.1 Areas proposed to be rezoned to industrial, commercial or rural residential should be in close proximity to existing cities or rural communities in order to reduce transportation energy costs.

Policy 2: Applications for new energy generation facilities, whether public or private, should consider impacts on neighboring properties.

GOAL 14: URBANIZATION

Goal: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

“Urban Lands” are those places which are inside an urban growth boundary, including lands within an incorporated city.

“Urbanizable Lands” are those places which are within an established Urban Growth Boundary (UGB) but outside city limits which, due to the present unavailability of urban facilities and services or for other reasons, have not been developed to urban densities and uses.

“Rural Lands” are those lands which are outside urban growth boundaries and that are:

1. Non-urban agricultural, forest or open space;
2. Suitable for sparse settlement, small farms or acreage home sites with no or minimal public services, and not suitable, necessary or intended for urban use; or
3. In an unincorporated community.

URBAN GROWTH BOUNDARIES (UGB)

Urban Growth Boundaries are established to identify and separate urbanizable land from rural land. Jefferson County contains three incorporated cities which have acknowledged comprehensive plans and urban growth boundaries. The urban growth boundaries were established through a coordinated process between the cities and the County.

The City of Madras Comprehensive Plan, including the UGB and the zoning therein, was originally adopted by the Madras City Council on June 20, 1979. The County adopted same as it pertains to the UGB on June 27, 1979. The Plan was acknowledged by the Land Conservation and Development Commission (LCDC) on January 30, 1980. The Madras UGB has been expanded since that time, most recently in 2003.

The Metolius Comprehensive Plan and implementing ordinances including the UGB were originally adopted by the Metolius City Council on December 11, 1978. The County adopted the program as it pertains to the UGB area on March 15, 1979. The Plan was acknowledged by the LCDC on July 12, 1980. Lands within the urban growth area retained Exclusive Farm Use A-1 zoning.

The Culver Comprehensive Plan and implementing ordinances were originally adopted by the Culver City Council on September 6, 1977. Due to the presence of considerable undeveloped land inside the City, the plan designated the existing City Limits as the Urban Growth Boundary. Therefore the County did not need to adopt a UGB management package for Culver. The LCDC acknowledged the Culver Comprehensive Plan on September 15, 1978. The Culver UGB was expanded in 1997 to incorporate two parcels. The land was given a city Comprehensive Plan

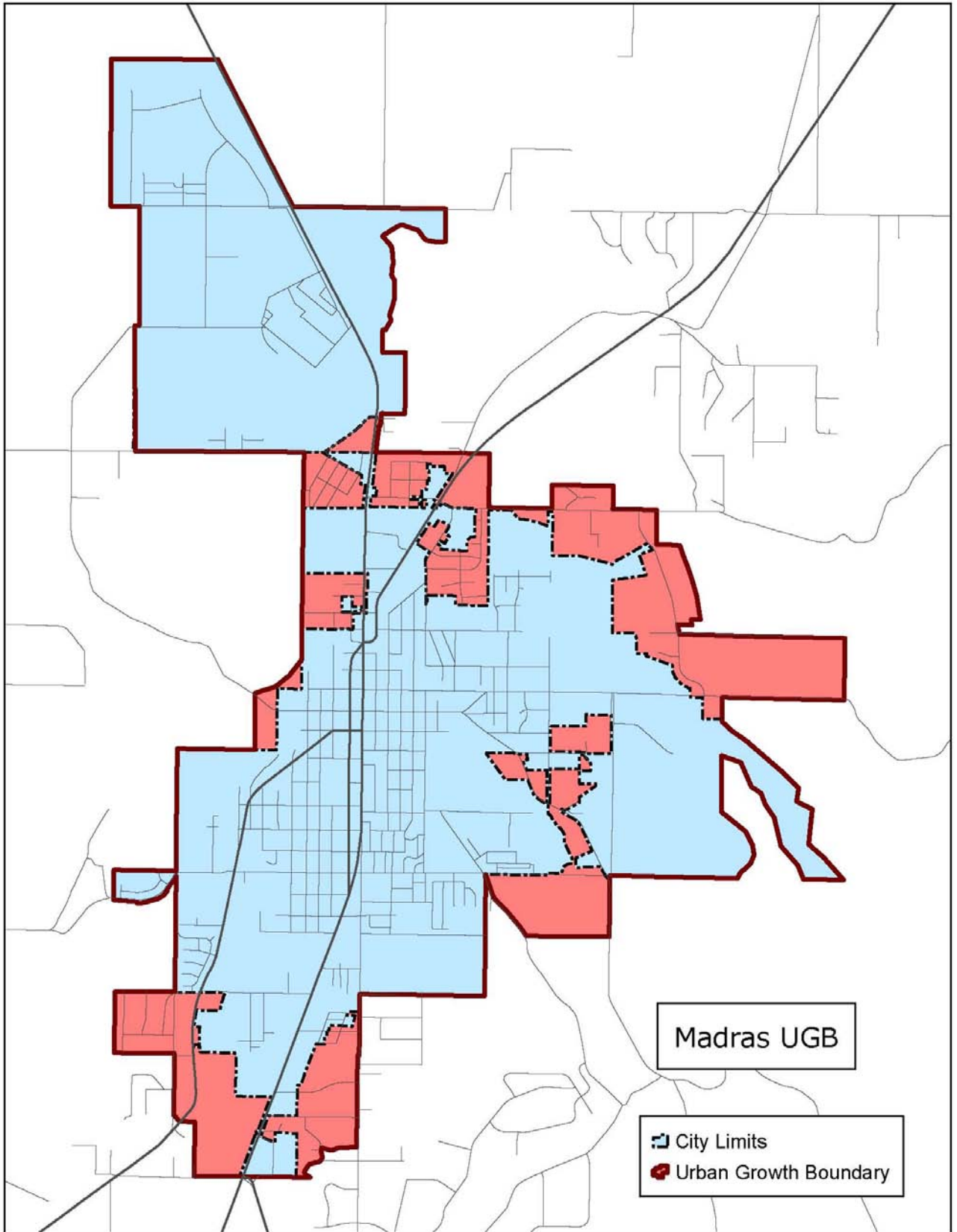
Map designation of Park/School/Civic Center, but the zoning remained Exclusive Farm Use A-1. The UGB was also expanded in 2006 to add two parcels on the north side of the city for the future expansion of industrial/manufacturing businesses, and to add 45 acres on the south side of the city for future residential development to accommodate projected population growth. Both areas will remain zoned Exclusive Farm Use A-1 until they are annexed.

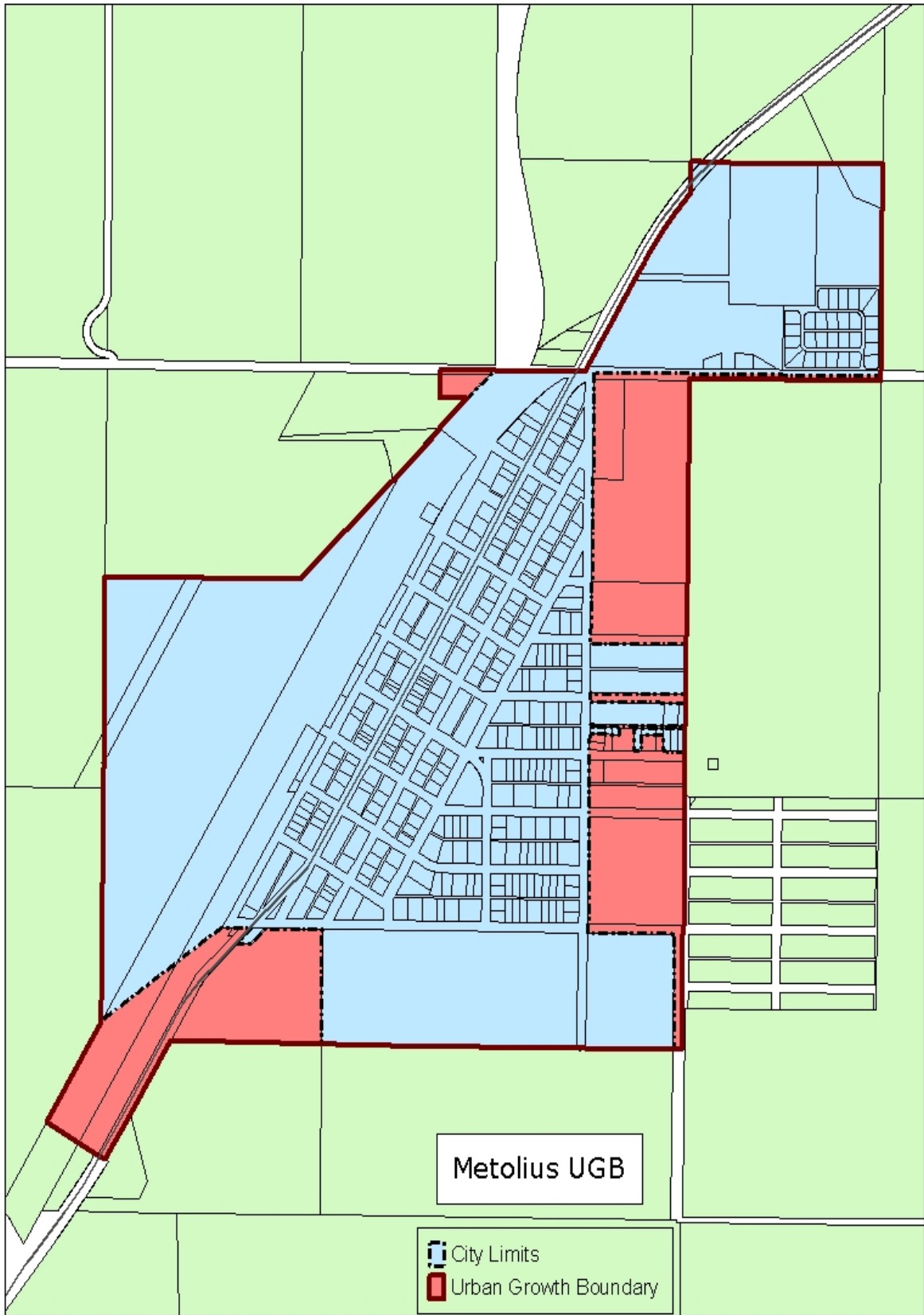
The location of each city's UGB is shown on the following maps.

URBAN RESERVE AREAS

Oregon Administrative Rule 660-021 authorizes cities and counties to identify urban reserve areas, which are lands outside a UGB that have been identified as having the highest priority for inclusion in the UGB when the boundary is expanded. Identification of urban reserve areas can aid in long-term planning by preventing small-lot subdivisions or other development that would impede future development at an urban scale.

As of 2006, no urban reserve areas have been identified or mapped in the County. However, the County supports the concept and, if requested by a city, is willing to coordinate with the city in identifying and mapping an urban reserve area and adopting any necessary land use regulations to protect the area for future urban development.





- F. Compatibility of the proposed urban uses with nearby agricultural activities on land outside the UGB; and
- G. Priority of land as required by ORS 197.298, with the additional requirement that non-irrigated land shall be a higher priority for inclusion in the UGB than irrigated land.

Policy 1: The County should cooperate with each city to determine where and when an urban growth boundary should be expanded.

- 1.1 Expansion of an existing urban growth boundary shall be in accordance with state requirements, including the priority of land to be included within the urban growth boundary. Non-irrigated land should have a higher priority for inclusion in the boundary than irrigated land.
- 1.2 If requested by a city, the County should cooperate in the identification and mapping of urban reserve areas.

Rural lands should remain rural in nature in order to maintain open space and minimize conflicts with agriculture and forestry. Urban-scale development should be restricted to areas inside urban growth boundaries, where appropriate facilities and services can be provided, unless otherwise permitted such as destination resorts.

Policy 2: Urban development should not be permitted outside of established urban growth boundaries unless an exception to Goal 14 can be justified.

- 2.1 Commercial uses on rural lands should be small-scale and low impact. Commercial zones outside urban growth boundaries and unincorporated communities should limit the size of buildings for commercial uses.
- 2.2 Industrial uses on rural lands should be small-scale and low impact. Industrial zones outside urban growth boundaries and unincorporated communities should limit the size of buildings for industrial uses.

Land within the urban growth boundary (referred to as the urban growth area) is considered to be available over time for urban uses. The conversion of urbanizable land to urban uses shall be at the discretion of the city, based on the availability and orderly extension of urban services. Land in the urban growth area should be managed in a manner that maintains its potential for future urban development until such time as public facilities and services are available and the land is annexed into the city.

The County and each city may enter into an intergovernmental agreement establishing procedures and approval authority for land use decisions and other development actions concerning unincorporated lands inside the urban growth area. Absent an intergovernmental

agreement stating otherwise, the County has jurisdiction over land use activities within urban growth areas.

Land within an adopted urban reserve area will remain under County jurisdiction, but should also be managed in a manner that will maintain its potential for future urban-scale development.

Policy 3: Land in the urban growth area or adopted urban reserve area should be managed so that it remains available for future urban development.

3.2 Any proposal to rezone land within an adopted urban reserve area or in close proximity to the urban growth area should take into consideration potential future urban uses. Minimum lot sizes in these areas should be at least ten acres in order to allow the future subdivision of the land at an urban density.

UNINCORPORATED COMMUNITIES

An unincorporated community is a settlement located outside an urban growth boundary which is primarily made up of land not protected as farm land, range land or forest land. Unincorporated communities include “rural communities”, which consist primarily of permanent residences but also have at least two other commercial, industrial or public land uses; and “rural service centers”, which consist primarily of commercial or industrial uses but have some permanent residences. Unincorporated communities must either have been identified in the Comprehensive Plan before October 28, 1994, or be listed in the 1997 Department of Land Conservation and Development (DLCD) “Survey of Oregon’s Unincorporated Communities.”

The 1997 DLCD Survey lists six potential unincorporated communities in Jefferson County. They include Ashwood, Gateway, Camp Sherman, Crooked River Ranch, Chinook Airport and High Chaparral. In 1997 the Service Community zone was adopted for Ashwood and Gateway, to recognize and provide standards for development of those rural communities; a Rural Service Center zone was adopted to apply to High Chaparral and Chinook Village; and various residential, vacation rental and rural center zones were adopted to apply to the Camp Sherman resort community. Zoning regulations for Crooked River Ranch had been in place since 1987.

OAR 660-022-0070 requires that planning for unincorporated communities be completed by January 1, 1998 or a date specified in a Periodic Review work program. Information from DLCD approving completion of the County’s last Periodic Review indicates that the County had not completed the planning process for unincorporated communities in regards to Ashwood, Gateway, Chinook Airport and High Chaparral. In 2003 High Chaparral and Chinook Village were rezoned from Rural Service Center to Rural Residential. Thus these two areas are no longer considered to be unincorporated communities. Although the planning process may not have been completed for Ashwood and Gateway, they will continue to be zoned Service Community and classified as unincorporated communities. When time allows, the County will consult with DLCD about completing planning requirements for these areas. Camp Sherman will continue to be recognized as an unincorporated resort community, and Crooked River Ranch will continue to be recognized as an unincorporated rural community.

Policy 4: Recognize the importance of unincorporated communities in providing services and housing in identified areas of the County.

- 4.1 Unincorporated communities should have a compact commercial area to serve the needs of the local area and surrounding rural lands. The size of buildings for commercial uses should be limited to the size permitted by state rule.
- 4.2 The size and type of industrial uses permitted in unincorporated communities should be small-scale and low impact in order to maintain the rural character of the area. The size of buildings for industrial uses should be limited to the size permitted by state rule.
- 4.3 Both temporary accommodations and permanent residences should continue to be allowed in the Camp Sherman resort community.

PART 3

COMPREHENSIVE PLAN MAP

The Comprehensive Plan Map shows general land use designations within the unincorporated areas of the County. The land use designations reflect the goals and policies outlined in the text of the Comprehensive Plan. Jefferson County has had a Comprehensive Plan Map since 1973. The Map was significantly revised in 1981 in order to comply with the statewide planning goals. At that time, agricultural, range and forest lands were inventoried. Lands that did not fall into those categories or were committed to other uses were then reviewed to determine the appropriate land use category. Exceptions to Goals 3 and 4 were taken for these lands. Detailed information, including the justification for each Exception Area, may be found in Appendix II.

The Comprehensive Plan Map has not been significantly changed since 1981. The Plan Map adopted as part of the 2006 Comprehensive Plan reflects the changes in zoning designations that were approved prior to 2006, but does not attempt to rezone any new lands. The 2006 Plan Map also reverts to generalized land use designations, rather than showing land use zones as the 1981 map did. The Plan map is, and should be, different from the Zoning Map. Zoning is a set of highly specific and detailed ordinances and maps designed to implement the long-range goals and policies of the plan. Within one area having the same Comprehensive Plan land use designation there may be several different zones.

The Comprehensive Plan Map land use designations are described below:

Exclusive Farm Use: Areas designated Exclusive Farm Use lie within the central portion of the County, and include the most productive agricultural land. This map designation closely approximates the boundary of the North Unit Irrigation District. The Exclusive Farm Use designation is predominantly made up of tilled crop land with agricultural capability class I – IV soils. The Exclusive Farm Use designation implements Goal 3.

Range Land: The Range Land designation includes less productive agricultural land. These lands are generally not irrigated and are composed of class IV – VIII soils. Lands in the Range Land designation may be used for low density grazing, dry land agriculture, forestry, open space and wildlife habitat. The Range Land designation applies to the majority of land in the County. The Range Land designation implements Goal 3.

Forest Land: The Forest Land designation applies to lands inside the boundary of the Deschutes National Forest, and other lands that are predominantly forested or are necessary to permit forest operations. These areas generally consist of large holdings and few residential or other uses. In addition to being used for timber production, forest lands are important for providing scenic beauty, open space, and recreational activities, and play a valuable role in helping to maintain air, land and water quality and in serving as habitat for fish and wildlife. The Forest Land designation implements Goal 4.

Rural Land: Rural lands include areas outside urban growth boundaries that are not protected as farm, range or forest land, and for which an exception to Goals 3 and 4 has been taken. Rural Lands provide for a variety of existing and potential types of land uses, including rural

residential lots, commercial and industrial land, airports and park land. Consequently the Rural Lands designation implements a number of Goals, including Goals 8, 9 and 10.

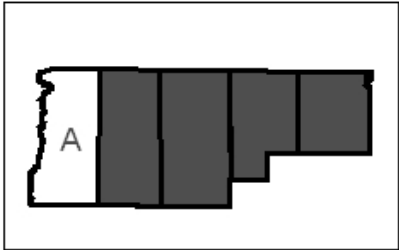
Urban and Urbanizable Land: Urban Land is land that is part of an incorporated city. Urbanizable Land includes areas inside an urban growth boundary but outside city limits. The urbanizable land designation covers areas that are planned to be annexed into the city when additional land is needed for urban development and urban facilities and services are available. The Urban and Urbanizable Land designation implements Goals 10, 11 and 14.







Unincorporated Community: The Unincorporated Community designation reflects existing communities in the outlying areas of the County where there is concentrated residential development and where limited commercial, service and tourist-oriented businesses can meet the needs of tourists or local residents.

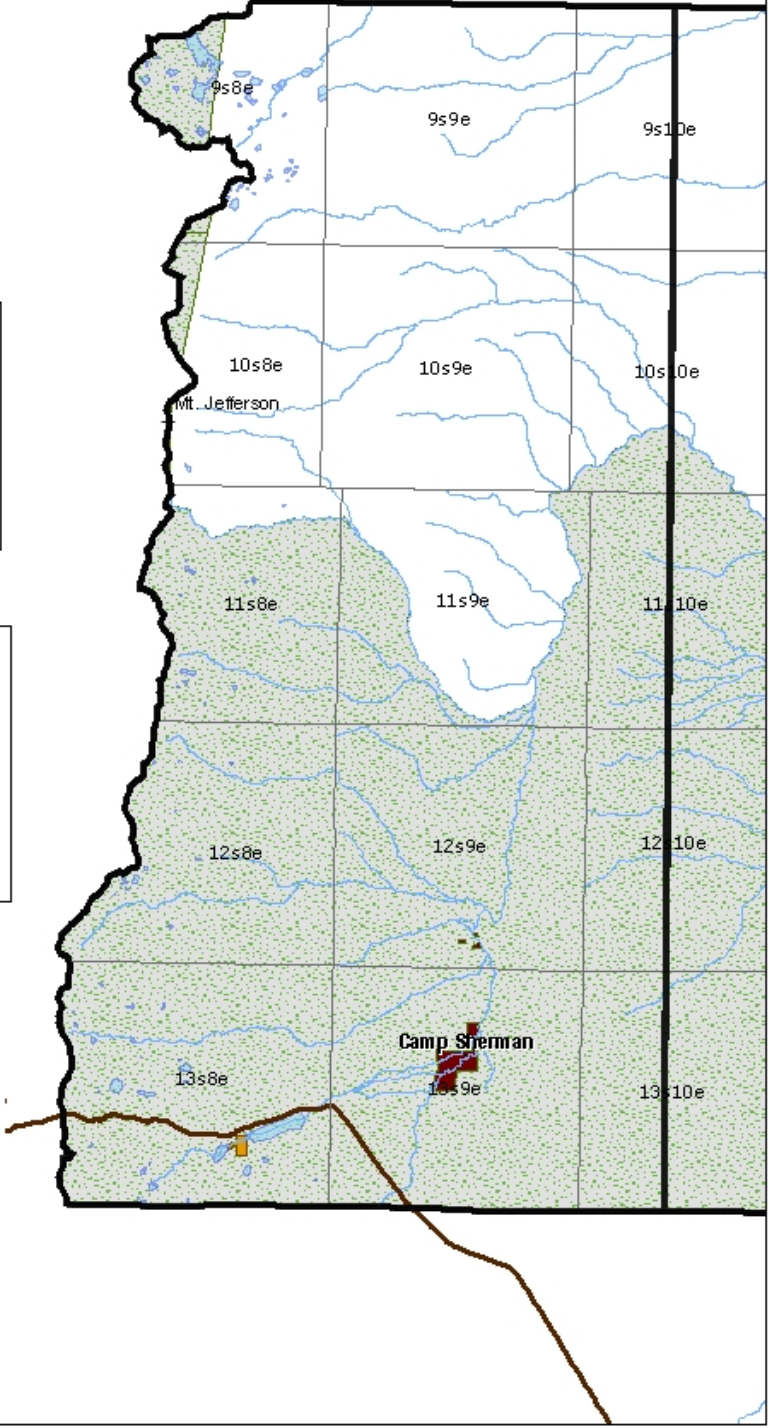
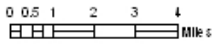
In addition to the Comprehensive Plan Map, other specific maps are included as part of the Comprehensive Plan. These include the Big Game Winter Range map and the Bird Site maps. Bird site maps have not been included in the published Comprehensive Plan in order to protect sensitive nesting sites.

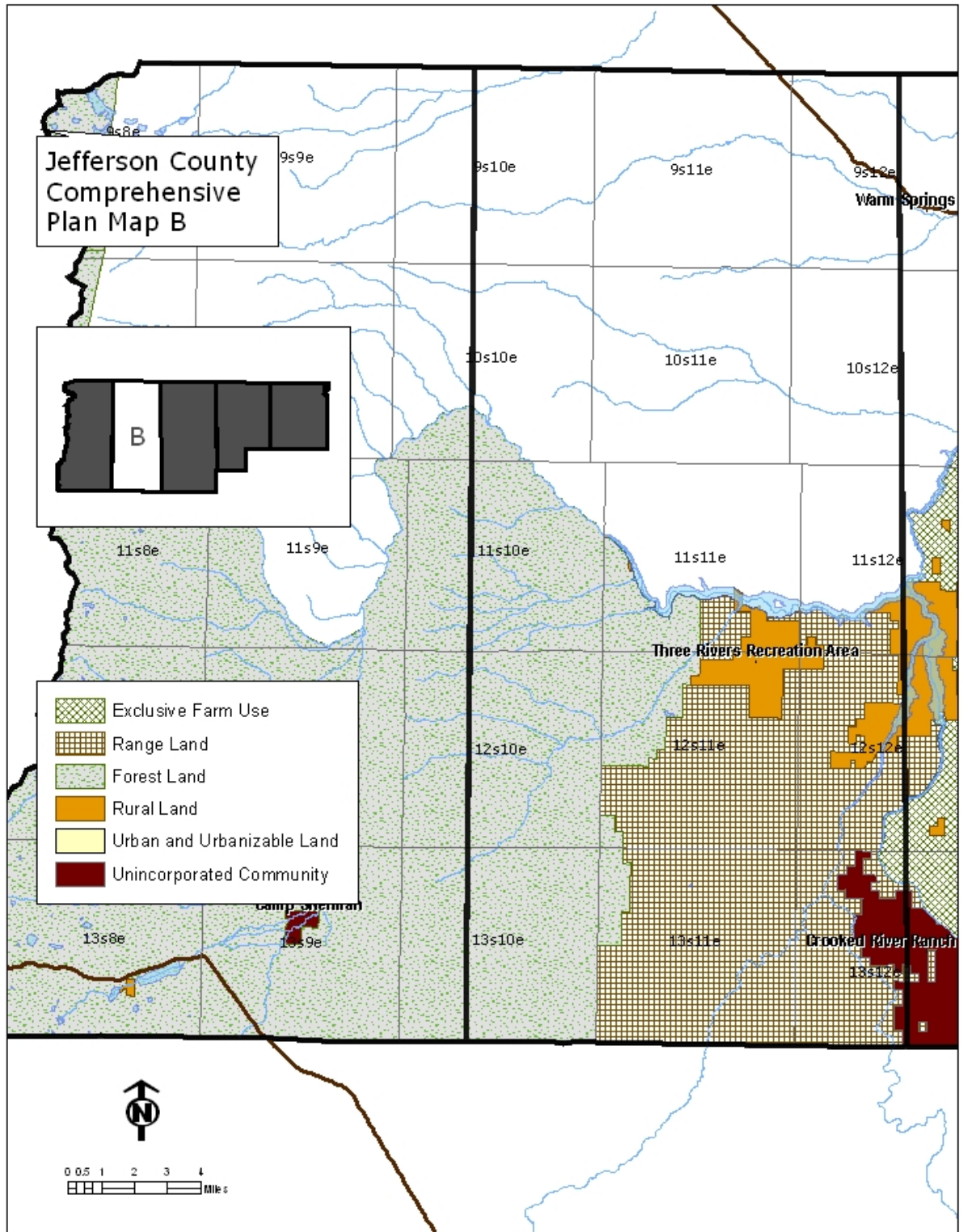
Comprehensive Plan Maps are shown on the following pages.

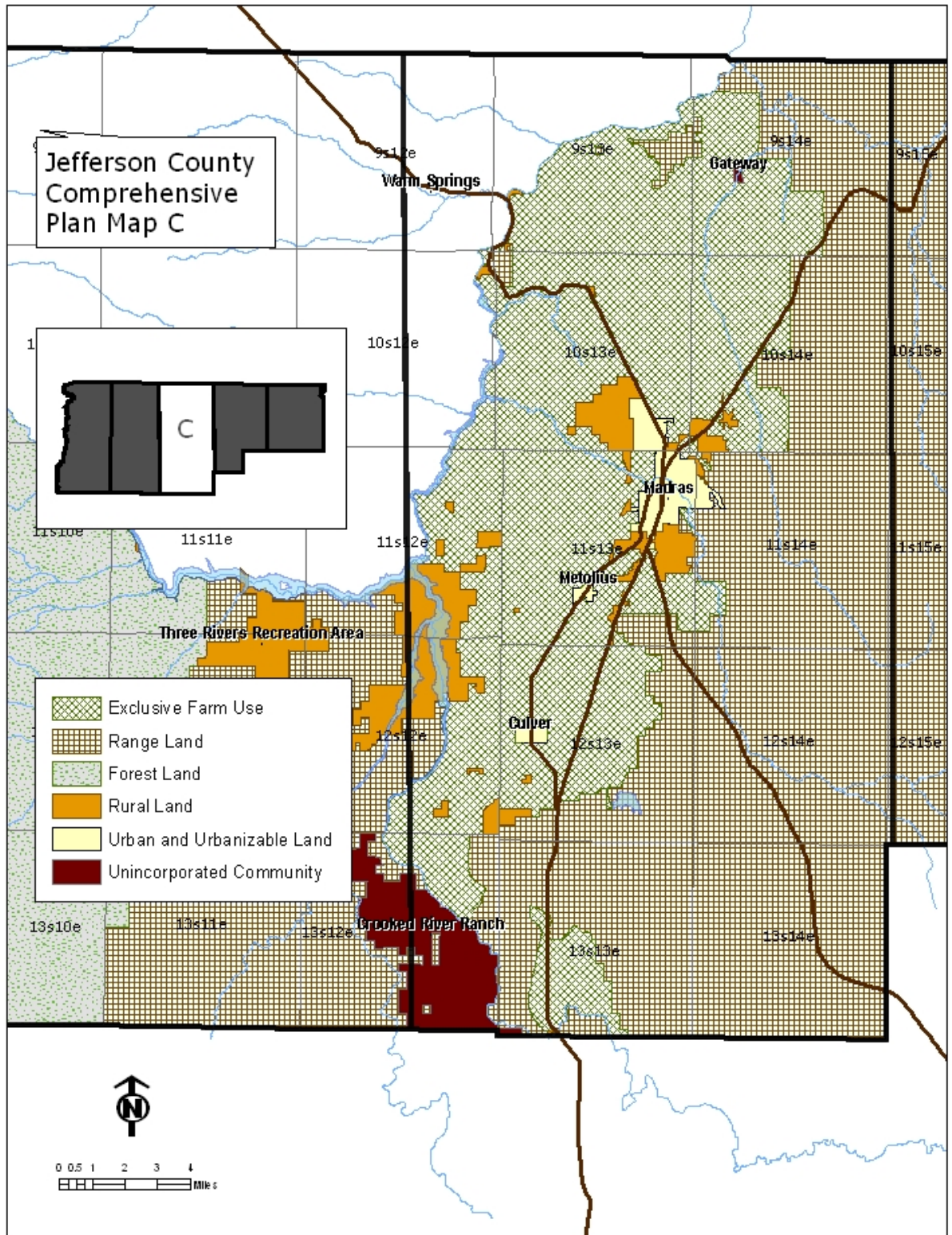
**Jefferson County
Comprehensive
Plan Map A**

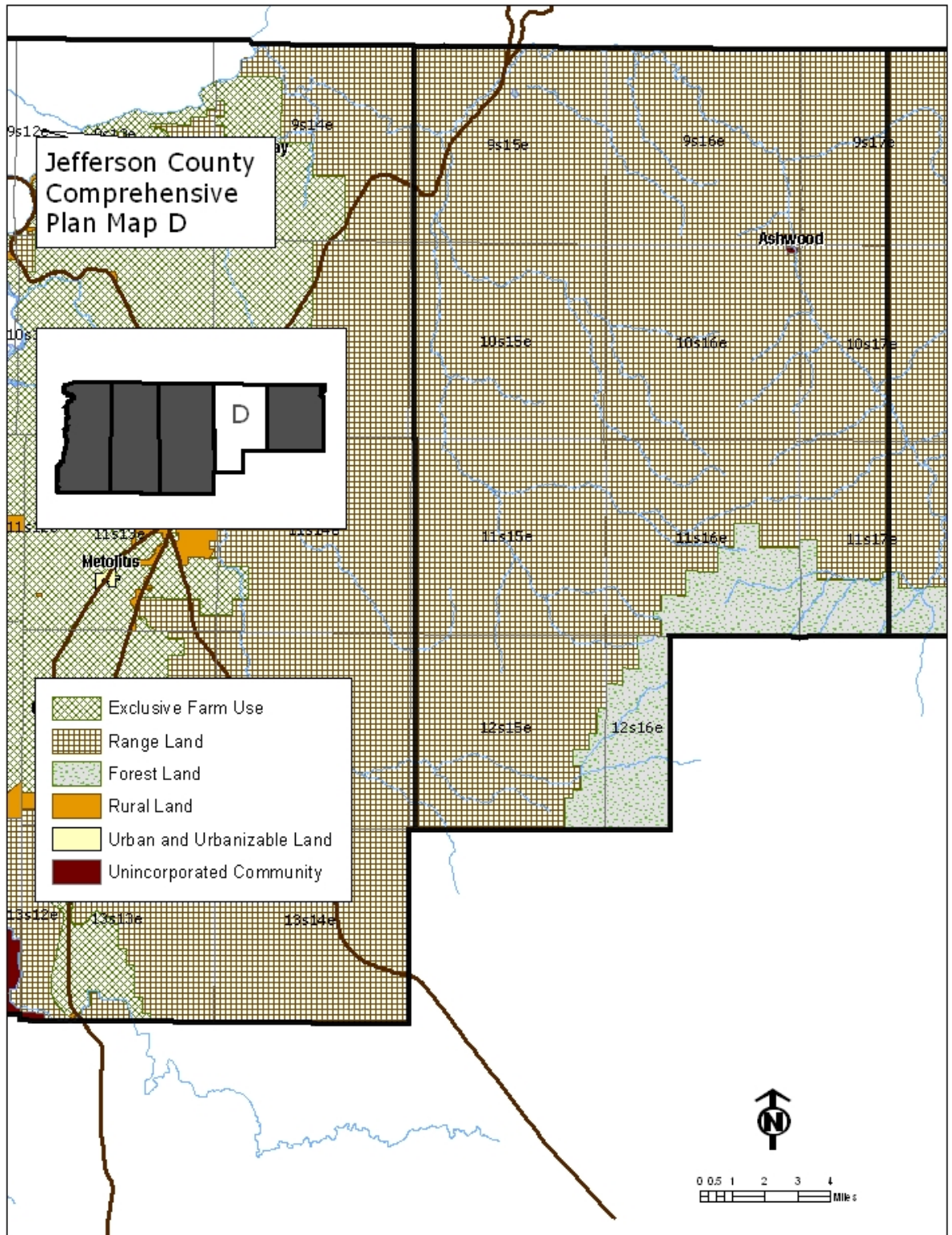


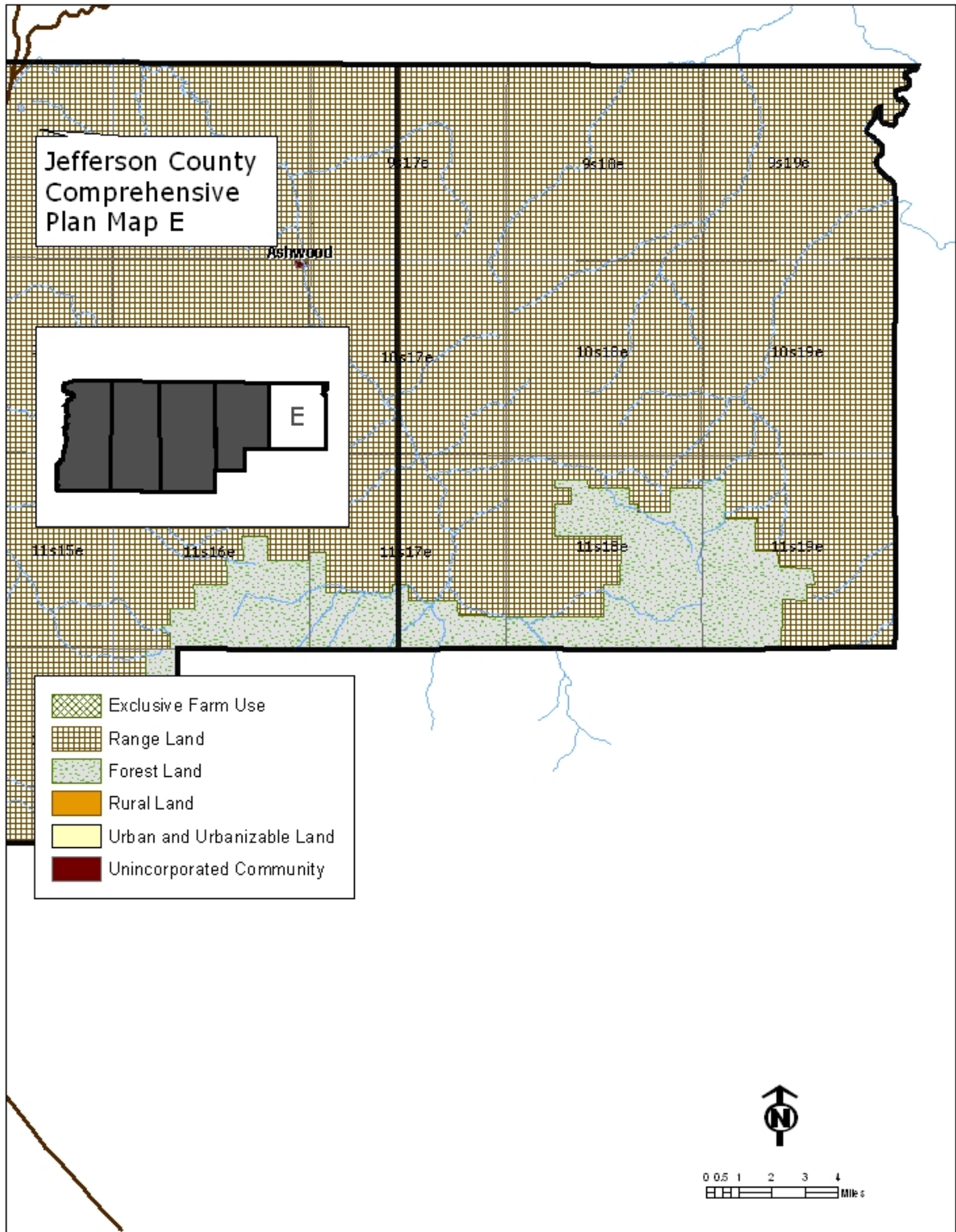
-  Exclusive Farm Use
-  Range Land
-  Forest Land
-  Rural Land
-  Urban and Urbanizable Land
-  Unincorporated Community











PART 4

IMPLEMENTATION

The Comprehensive Plan contains the guiding policies for land use activities in Jefferson County. The policies themselves are not approval criteria for individual land use decisions, but rather form the basis for more specific implementation measures. Implementation measures must be consistent with and adequate to carry out the Plan policies.

The primary implementation measures are the Zoning Ordinance and the corresponding Zoning Map. In the past, the County also had a Subdivision Ordinance which contained standards and procedures for land divisions. Land division regulations are now included in the Zoning Ordinance. Other implementation measures include sanitation and building codes, access and road construction standards, and enforcement provisions contained in the Jefferson County Code.

The Zoning Ordinance and corresponding Zoning Map are the most important tools to implement the goals and policies outlined in the Comprehensive Plan. Zones are a further refinement of the generalized land use designations shown on the Comprehensive Plan Map. The Zoning Map shows the location of each zone, and the Zoning Ordinance contains the list of uses that are permitted outright in each zone, uses that might be allowed under certain circumstances, standards and criteria which must be met, and procedures for processing applications for various kinds of land uses.

The following table shows the zones that implement each of the Comprehensive Plan land use designations:

RELATIONSHIP OF ZONES TO LAND USE DESIGNATIONS

COMP PLAN DESIGNATION	ZONE
Exclusive Farm Use	Exclusive Farm Use A-1 (EFU A-1) Exclusive Farm Use A-2 (EFU A-2)
Range Land	Range Land (RL)
Forest Land	Forest Management (FM)
Rural Land	Rural Residential (RR-2, RR-5, RR-10) Existing Rural Development (ERD) County Commercial (CC) County Industrial (CI) Industrial Reserve (IR) Airport Management (AM) Park Management (PM) Three Rivers Recreation Area (TRRA) Three Rivers Waterfront (TRRAW) Blue Lake (BL)
Urban and Urbanizable Land	Various. Properties usually retain County zoning until property is annexed into city, at which time they are rezoned to a city zone.
Unincorporated Community	Service Community Ashwood (SC-Ashwood) Service Community Gateway (SC-Gateway) Crooked River Ranch Commercial (CRRC) Crooked River Ranch Residential (CRRR) Camp Sherman Rural Center (CSRC) Camp Sherman Vacation Rentals (CSVV) Camp Sherman Rural Residential (CSRR-3, CSRR-5)

There are additional overlay zones not listed in the previous table that implement Goals 5 and 7. Overlay zones do not allow specific uses, but contain regulations that apply in addition to any requirements of the underlying zone. For instance, the Wildlife Area Combining Zone contains regulations specifying where buildings may be located on a parcel in order to minimize the impact to deer, elk and antelope winter range. These regulations apply to all areas that are in a designated winter range habitat area, regardless of whether the property is in a Range Land, Forest Management or Three Rivers Recreation Area zone. Consequently, overlay zones are not linked to a particular zone or Comprehensive Plan land use designation.

PART 5

AMENDMENTS TO THE COMPREHENSIVE PLAN

The Comprehensive Plan should be evaluated periodically and updated or amended when necessary to reflect changes in land use patterns that have occurred or when the citizens of the County, as represented by the Planning Commission and Board of Commissioners, feel it is desirable.

There are two types of procedures that may be used to amend the Plan – legislative and quasi-judicial. An amendment to the text of the Comprehensive Plan is legislative when it will result in a change in policies that apply countywide. A text amendment will be a quasi-judicial land use decision if the proposed change will affect only a single tract of land or small number of contiguous parcels. For example, a request involving the application of Goal 5 to a single parcel, or a request for an exception to one or more of the Goals as they apply to a small group of parcels, would be a quasi-judicial decision.

An amendment to the Comprehensive Plan Map may also be either legislative or quasi-judicial. A legislative amendment applies to a broad area or multiple parcels. A quasi-judicial map amendment is initiated by a land use application and applies to a specific property or small number of contiguous parcels. An amendment to the Comprehensive Plan Map will only change the general land use designation; it will not change the zone unless a concurrent application for a zone change is approved. Procedures and requirements for zone changes are contained in the Zoning Ordinance.

LEGISLATIVE AMENDMENTS

A proposal for a legislative amendment to the Comprehensive Plan may be initiated by a majority vote of the Planning Commission or Board of Commissioners, by the Planning Director, or in the case of a proposal to amend an urban growth boundary a city may initiate the amendment.

If the proposed amendment will substantively change a county-wide policy, it should be referred to the Citizen Advisory Committee for a recommendation to the Planning Commission. The Planning Commission will hold at least one hearing on the proposed amendment to solicit public input. In the case of a proposed change in an urban growth boundary, the Planning Commission may hold one or more joint hearings with the City Planning Commission. At the conclusion of the hearing, the Planning Commission will make a recommendation on the proposed amendment to the Board of Commissioners. The Board of Commissioners will hold at least one public hearing to consider the Planning Commission's recommendation.

At least ten days advance notice of each hearing shall be published in a newspaper of general circulation in the County. Notice may also be published in other newspapers with county readership, or be provided by other means. At least 20 days, but not more than 40 days before the date of the first hearing, written individual notice of the land use change shall be mailed to each owner whose property would have to be rezoned in order to comply with the amended plan.

At least 45 days before the first hearing the proposed amendment shall be sent to DLCD if it will involve any of the statewide planning Goals.

The Board of Commissioners will make the final decision on whether to amend the Plan. If approved, the amendment will be adopted by Ordinance accompanied by written findings addressing how the amendment complies with applicable statewide planning goals, Oregon Revised Statutes and Administrative Rules.

In order to be approved, the proposed amendment must:

1. Comply with applicable Statewide Planning Goals, Oregon Revised Statutes and Administrative Rules; and
2. Be consistent with other Comprehensive Plan goals and policies.

Within five working days after the Board of Commissioners makes a final decision on a legislative Plan amendment, notice shall be mailed to persons who participated in the proceedings leading to the adoption of the amendment and who requested in writing that they be given such notice. The notice shall briefly describe the action taken; state the date of the decision; include a certificate of mailing containing a statement signed by the person mailing it indicating the date the notice was deposited in the mail; list the place and time where the amendment and findings may be reviewed; and explain the requirements for appealing the decision. A decision to not adopt a legislative amendment is not appealable except where the amendment is necessary to address the requirements of a new or amended state goal, rule or statute.

QUASI-JUDICIAL AMENDMENTS

A proposal for a quasi-judicial amendment to the Comprehensive Plan or Comprehensive Plan Map may be initiated by the owner(s) of a specific parcel. The following requirements shall apply subject to any future changes or requirements under state law:

An application must be submitted by the property owner(s), and must contain the signatures of all owners of property that would be part of the amendment. The application must be accompanied by the appropriate filing fee.

An application for a quasi-judicial Plan amendment will not be acted upon until it has been deemed complete by the Community Development Department (CDD). Within 30 days of the date an application is filed, CDD will notify the applicant in writing, specifying any additional information that is required. The applicant shall have 180 days from the date of submittal in which to provide the requested information. The application shall be deemed complete upon receipt of the missing information. If an applicant who receives notice of an incomplete application refuses in writing to submit the missing information, the application shall be deemed complete on the day the written refusal is received by the CDD. When an applicant fails to submit the requested information without refusing in writing to do so, the application shall be deemed withdrawn on the 181st day after the application was filed. In the event CDD fails to notify the applicant within 30 days of the date the application was filed, the application shall be deemed complete on the 31st day.

The Planning Commission will hold a public hearing to consider the proposed amendment. In the case of a proposed change in an urban growth boundary, the Planning Commission may hold one or more joint hearings with the City Planning Commission. Notice of the hearing will be provided in accordance with statutory requirements.

A written staff report will be mailed to the applicant at least seven days prior to the Planning Commission hearing. The staff report will be available for review at the CDD offices at the same time, and copies will be provided at reasonable cost.

The Planning Commission will make a written recommendation to the Board of Commissioners to approve or deny the amendment. The Board of Commissioners will hold a de novo public hearing to review the Planning Commission recommendation. The Board decision will be the final County decision.

In order to be approved, the proposed amendment must:

1. Comply with applicable Statewide Planning Goals, Oregon Revised Statutes and Administrative Rules, or comply with requirements for an exception to the goal(s);
2. Comply with all applicable Comprehensive Plan goals and policies; and
3. Be necessary due to changes in physical, economic or social conditions, population growth, or development patterns which require an adjustment in the land uses designations in the area where the amendment is proposed.

Written notice of the decision will be mailed to the applicant, owners of property subject to the amendment, and all parties who participated either in person or in writing at the Board level or at an earlier proceeding on the application. An appeal of the Board's decision must be to the state Land Use Board of Appeals (LUBA).

ANNEXATION OF URBANIZABLE LANDS

Lands located inside an urban growth boundary are expected to be annexed into the city when needed to meet housing and other urban levels of development. A Comprehensive Plan Map amendment is not required to remove the Urbanizable Lands designation from these lands – the designation will automatically be removed upon annexation.

APPENDIX I

Goal 5 Inventory and Significance Determinations

APPENDIX II

Exception Statements