MISSOULA COUNTY GROWTH POLICY
2005 UPDATE
Amended March 22, 2010 by
City Council
EXECUTIVE SUMMARY

GROWTH DATA
The 2005 update of Missoula’s Growth Policy occurs during a period of sustained growth.

- By 2020, the Montana Department of Commerce projects Missoula County’s population will increase to 125,334, an average annual increase of 1.5% per year.
- Almost 83% of the population resides within the Missoula urban area; however, the areas with the greatest rate of population increase over the past 14 years have been outside the urban area of the County.
- Between 1990 and 2004, 15,660 acres were subdivided in Missoula County. Subdivisions located outside the city limits made up 14,354 acres (92%) of this total.
- The median value of a home in Missoula County, adjusted for inflation, increased from $87,220 in 1990 to $136,500 in 2000, or by 56.5%. Income during this time period, with inflation adjustment, increased by 10%.
- As the valley floors reach their development limits, there is increasing pressure to build in floodplains and on hillsides.
- By 2002, the total land in agricultural use had decreased to 258,315 acres (15% of the County).
- Approximately 70-80% of winter range and critical winter range occurs on private land.
- Plum Creek Timber Company, whose 430,357 acres comprise approximately 58% of all private land in the County, has begun to divest its holdings into the real estate market.
- A 2005 survey found that for 2/3 of Missoula residents, the pace of growth is “too fast.”

SURVEY RESULTS
That survey was commissioned by the Missoula Planning Policy Committee as part of local government’s commitment to update this Growth Policy. Conducted by the University of Montana’s Bureau of Business and Economic Research in Summer 2005, its results reflect the community’s continuing concern about growth and its effects.

Nearly all (91.2%) survey respondents say that protecting the environment is a somewhat or very high priority. City and County residents also rate their support for actions to protect the environment as high or very high in these areas:

- Maintaining and improving water quality (96.7%);
- Maintaining and improving air quality (93.2%);
- Protecting river and stream corridors for habitat and public safety (92.6%);
- Protecting areas important for wildlife survival (89.2%); and,
- Preserving scenic views (81.9%).

Residents also support these development objectives:
- Protect and enhance neighborhood character (81.5%);
- Encourage preservation and re-use of historic structures (80.2%);
- Protect agriculture and forest operations from encroaching residential development (79.0%);
- Concentrate development in or near existing communities (69.2%);
- Improve appearance and function of existing commercial strips (69.1%);
- Support development of smaller town or neighborhood commercial centers (69.0%); and,
- Concentrate development at or near major crossroads (57.6%).
Other high priorities include:
- Attracting businesses and jobs (82.6%);
- Housing for low and moderate income people (83.9%);
- Requiring new developments to provide housing for low and moderate incomes (78.9%);
- Improving street and road systems (83.3%); and,
- Making sure the public is able to get to and use open space (82.5%).

According to the survey, Missoula City and County residents believe that issues raised by growth can be managed by local government and believe that local government should wield significant authority over the development and use of private property. Residents also support a range of implementation tools including:
- Protect sensitive lands by regulation (86.9%);
- Adopt detailed infrastructure plans prior to development (83.5%);
- Require new developments to be linked to roads, trails, and buses (78.2%);
- Use voter approved money to purchase open space (71.3%);
- Use voter approved money to purchase land for affordable housing (70.2%);
- Charge a development fee (68.8%);
- Encourage development that combines commercial and residential uses (67.1%);
- Adopt Countywide zoning standards (61.0%); and,
- Limit the number of building permits each year (55.6%).

PLANNING BOARD FINDINGS

The survey is one component of public process that informs the County Growth Policy. Numerous public meetings of the governing bodies and the Planning Board, as well as a series of formal public hearings, represent a significant portion of the record that supports the policy update. In addition, the Planning Board conducted a series of public forums from December 2003 through February 2004 to gather views and ideas from the public on growth policy issues confronting the County and City of Missoula.

Survey comments reinforced several of the issues and concerns raised in the Planning Board forums. The forum, as well as the other channels for public comment, insisted on the importance of our natural environment and supported a commitment to land use planning measures as means to protect the environment and to guide decisions related to extensions of infrastructure into areas presently undeveloped. The forum and the public hearings identified inclusionary zoning as a specific tool to address the critical lack of affordable housing. All public comment has strongly and consistently supported the identification of implementation tools and strategies to mitigate the most urgent problems related to growth. For this reason, the Planning Board has identified the following "significant public policy issues" and suggested tools to address them.

Growth is outpacing the community's ability to address its impacts.

Adopt Countywide zoning standards that at a minimum address density and use. Review and conduct land capability and suitability analyses to establish density and use standards. Propose zoning districts and review through public process. Design districts recognizing differences among city, urban edge and rural areas that will require different standards.

Rationale: The Growth Policy is not a regulatory document. Legislation in 2001 and 2003 has limited the use of a Growth Policy in land use decisions. Many subdivisions have been approved that do not comply with the applicable comprehensive plan. Countywide zoning will provide regulatory implementation of the land use designations developed through comprehensive land use planning because development must meet zoning requirements.
Conduct detailed infrastructure planning. Identify those developed and developing areas that are inadequately served by public infrastructure. Establish standards derived from a community process for each category of infrastructure that may be applied to development of various types and locations. Identify the most critical infrastructure needs. Explore alternative strategies to encourage new development coincident with infrastructure service. Prevent development that does not have the adequate infrastructure to support it.

Rationale: Infrastructure planning supports existing development, directs new development to suitable locations, and protects the environment. A primary objective of managing growth is to ensure the availability and affordability of infrastructure such as sewer, water, transportation, public safety, health and social services, public lands, parks, and other open spaces, cultural resources, and education. Adequate infrastructure is essential to a healthy natural, economic, and social environment in Missoula County. More than 83% of respondents in the Growth Policy survey support the adoption of detailed infrastructure plans prior to development.

Lobby for State law changes. Review and identify barriers to use and implementation of the Growth Policy. Recommend and support legislative changes to address these.

Missoula's housing stock is critically lacking units affordable to low and moderate income residents.

Develop and adopt inclusionary zoning and subdivision requirements for affordable housing. Require developers to provide a percentage of comparable housing affordable to people with low and moderate incomes. Include a provision for a cash-in-lieu program to an affordable housing fund. Require the long-term affordability of housing so created.

Require the advancement of other home ownership opportunities for low and moderate income households through such means as partnering with community housing development organizations, land trusts, and other non-profit groups; and participating in grant and loan programs targeting low income populations. Success could be measured by an increase in the percent of home ownership and a decrease in the percent of the population experiencing undue housing cost burden, as defined by Housing and Urban Development (HUD).

Rationale: Housing costs grew five times faster than income between 1990 and 2000. The Growth Policy Survey indicates that affordable housing is the most severe growth related problem. Almost 80% of respondents considered it a high priority to require new developments to provide housing for those with low and moderate incomes.

Articulate and pursue a coordinated economic development strategy aimed at increasing employment opportunities with a resulting increase in average wages. Clearly a major problem with housing affordability is low wages.
Natural resources are threatened by development.

In a resource rich area where diversity and complexity of resources are so deeply valued, the pressures brought on by growth create competing values and possible degradation. Specific concerns are aquifer protection/water quality, transportation and land use for air quality, wildlife habitat, and wildland/urban interface issues.

Implement subdivision and zoning compliance regulations to protect the aquifer and other water quality resources. Develop regulations that limit the disturbance of wetland and riparian areas in order to maintain the functions they provide including flood protection, wildlife habitat and maintenance of surface and groundwater quality. Include enforcement provisions and mitigation requirements. Additional measures may include vegetative buffers, the use of sedimentation barriers during construction and recommendations for native vegetation.

Rationale: The Missoula Valley has a sole source aquifer designation. More than 96% of respondents to the Growth Policy survey support maintaining and improving water quality as a high priority. Almost 87% of respondents support protecting sensitive lands by regulation.

Implement streamside setbacks. Riparian resources are among the most threatened in the County. Current County regulations do not require specific building setbacks from rivers and streams. County subdivision regulations do require that riparian vegetation be mapped and that a management plan be prepared. The City has a riparian resource zoning district, which addresses construction and road building in riparian areas, but does not address other removal of riparian vegetation. The County does not have comparable zoning protections.

Consider issues of air quality; wildlife, including elk winter range, grizzly habitat and linkage zones, and wildlife movement corridors; and wildland/urban interface areas during the Countywide zoning process.

Develop standards that require the creation and maintenance of firesafe defensible space around all structures constructed within forested areas throughout the County.
# MISSOULA COUNTY GROWTH POLICY 2005 UPDATE

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CHAPTER ONE: INTRODUCTION

PURPOSE OF GROWTH POLICY

Legislation passed by the 1999 Montana State Legislature gave Planning Boards authority to prepare and propose a Growth Policy. Certain required elements were specified (see Appendix A). The intent of the legislation was to encourage counties to plan for growth.

This Growth Policy is intended to meet the requirements outlined in State law and to provide a framework for continued planning efforts in Missoula City and County. According to State law, the Growth Policy provides guidance to the City Council and Board of County Commissioners in the:

- authorization, construction, alteration, or abandonment of public ways, public places, public structures, or public utilities;
- authorization, acceptance or construction of water mains, sewers, connections, facilities, or utilities; and
- adoption of zoning ordinances or resolutions.¹

The Missoula County Growth Policy also provides guidance for subdivision regulation and review. All planning and community development decision making should be in accordance with the Growth Policy. However, changes in State law have limited the use of the Growth Policy in land use decisions. The 2001 Legislature passed a bill that removed the provision for conformance with the Growth Policy as a basis for the governing body’s decision on a subdivision. The 2003 Legislature passed a bill that provides that a governing body may not withhold, deny, or impose conditions on any land use approval based solely on compliance with a Growth Policy.²

The Growth Policy contains the following elements: information on existing conditions and trends, a summary of countywide goals and objectives, and implementation strategies for achieving goals and meeting objectives. The Growth Policy synthesizes over 30 years of existing planning work. It provides a framework for articulating existing goals and policies and establishes the legal and philosophical foundation upon which future plans and regulations will be based.

The overarching goals are: Manage growth in a proactive rather than reactive way, considering both immediate and cumulative impacts. Create a truly healthy community by: 1) protecting critical lands and natural resources, such as wildlife habitat; riparian resources; hillsides; air and water quality; and open spaces; and 2) enhancing the community’s resources in the areas of health and safety; social, educational, recreational, and cultural services; employment; housing and the valued characteristics of communities.

The Growth Policy applies equally to all areas of the County and is therefore necessarily broad in scope and general in application. While the Growth Policy gives guidance for the entire County, it is the regional or issue plans that provide specific guidance through land use designations, design and development guidelines, and recommendations for specific action steps.

¹ MCA 76-1-605 (1).
² MCA 76-1-605(2)(b).
2005 UPDATE

The City and County adopted the Growth Policy in 2002. At least once every five years after adoption, they are required to review the Growth Policy and to determine whether revisions are necessary according to a process established by the governing bodies. In the resolutions adopting the 2002 Growth Policy, both the City Council and Board of County Commissioners included statements indicating their intent to conduct a review of the document within three years of its adoption. The 2005 update is a result of the three year review.

The 2002 adopting resolutions also state that “(T)o...look to the future while implementing the Growth Policy, language must be included to address changing developments in specific areas, including for example: transportation, air and water quality, open space and parks, housing and the economy.” This document includes updated information available since the 2002 adoption and addresses issues raised during the 2002 review process where appropriate.

The 2002 Growth Policy also provided for an annual forum to consider public comment including, but not limited to, new citizen-initiated amendments, new factual information, and clarification of any inconsistencies that exist between stated goals and objectives for implementation. The Planning Board conducted a series of public forums on growth issues from December 2003 through February 2004. The Planning Board also held public hearings on the Growth Policy on November 1 and 29, 2005, and January 17, 2006. The Board of County Commissioners and City Council held a joint hearing on March 29, 2006.

Additional public input was received through a 2005 countywide survey. The purpose was to review existing Growth Policy goals and objectives, solicit feedback about implementation tools, and ask about general perceptions of growth. The University of Montana’s Bureau of Business and Economic Research (BBER) conducted the telephone survey of residents across the County. Some survey results are reported in Chapters 3 and 4. A full summary of survey results is attached in Appendix D.

This document includes revisions in these areas:
- Updates to existing conditions and trends since 2002;
- Updates based on legislative changes since 2002;
- Updates based on governing body changes to local policy since 2002; and
- Changes to goals and objectives and implementation strategies based on public process.

URBAN FRINGE DEVELOPMENT AREA (UFDA) PROJECT – 2008 AMENDMENT

Growth trends suggest that the Missoula Urban Service Area (URSA) could see as many as 15,000 new residential units by 2030. The Urban Fringe Development Area Project (UFDA) project provides a regional context for residential growth within the URSA and addresses land within the City and adjacent unincorporated land. The Residential Development Allocation Map allocates residential growth for approximately 15,000 new dwelling units in fourteen areas within the URSA to meet the housing demand.

This City and County joint sponsored project began with collecting data from numerous City, County, and other agencies. The data focused on demographics, existing development patterns, natural resources, and infrastructure elements. The data established a baseline
for consideration of where new growth should occur. An inventory of developable lands identified lands suitable for development. Developable lands have an assessed land value equal to or greater than the value of the land’s improvements. Land assessed as agricultural was considered “developable” because of its low assessed value. The data, methodologies, and scenarios were presented at over fifty public presentations.

Three growth scenarios – Scenario A: Business As Usual, Scenario B: Suburban Satellites, and Scenario C: Focus Inward – were created from the Envision Missoula Long Range Transportation Plan update and data analysis. At four open houses and subsequent presentations, the public had the opportunity to comment on the scenarios. Public comment emphasized concerns over the growth rate, density, zoning, transportation, agricultural lands, and infrastructure.

OPG staff produced an analysis of suitability for residential development. The suitability analysis balances consideration of efficient public services, preservation of natural resources, continuation of agricultural opportunities, and availability of existing lands. Suitability criteria included Access to Mountain Water, City Sewer, Transit and Bike Routes; City Fire Travel Response Time; Prime Soils and Open Space; Sensitive Lands, and Key Wildlife Habitat. Combined with information regarding lands constrained from development, the analysis identified areas most appropriate for residential development.

A fourth scenario was developed from the Growth Policy goals, public comments, agency input, existing zoning, constrained lands, changing market/demographics, entitled lots, and infrastructure investment and was forwarded to the governing bodies for their review. The Residential Development Allocation within the Urban Service Area Map is a result of the review and approval of the City and County governing bodies and is incorporated as Map 18 in this Growth Policy amendment.

The UFDA project can be implemented through targeted future public infrastructure investments, future neighborhood plans, annexation discussions, and development proposals. UFDA does not change zoning but provides a context within the Growth Policy for the review and recommendation of future zoning change proposals. The UFDA project directs residential density into certain URSA areas with existing public infrastructure that can accommodate increased residential development.

*URSA is the same in geographic extent as the Missoula City Waste Water Service Boundary. Area covers the City of Missoula and unincorporated Missoula County land within that boundary.

**PLANNING HISTORY**

Missoula County has a long history of planning. Zoning, an important tool for implementing a growth policy or regional plan, pre-dates adoption of land use goals and objectives in both the City and the County. The City’s first zoning ordinance was adopted in 1932 and consisted of only four zoning districts. County residents initiated and adopted zoning restrictions within the urban area as early as 1955. By 1974, when the Board of County Commissioners adopted zoning, more than 30 citizen-initiated zoning districts had been created within the urban area of the County.³

In 1961, a master plan for the Missoula Urban Area was completed under contract with the Montana State Planning Board and the Missoula City-County Planning Board. In 1966, an inventory of physical and socio-economic conditions and resources was completed. The **Missoula County Comprehensive Plan and Missoula: A Policy Guide for Urban Growth** were adopted in 1975.

A separate plan for the community of Lolo was initiated and adopted in 1978. After the **Missoula Urban Plan**, this was the first in a series of neighborhood, or area plans, devised to address the unique characteristics of individual areas in the context of adopted public policies and goals. Appendix B includes a list of these plans.

In 1983, citizens of the City and County attempted to update the 1975 **Comprehensive Plan** for the urban and rural areas of the County. When rural residents expressed significant concern that the product of planning task forces did not fully represent their needs, the planning process was restructured to separate rural and urban issues. The urban area effort resulted in the 1990 update to the **Missoula Urban Area Comprehensive Plan**. This Plan encouraged continued planning at the neighborhood level to address citizens’ needs more specifically; it provided the greatest possible opportunities for citizen participation. Rural area planning efforts shifted to regional planning.

Recognizing the need to plan for future growth and development, the Missoula Board of County Commissioners joined with the Mayor of Missoula, representatives of the Missoula City Council, the Missoula Chamber of Commerce, and the Neighborhood Network in 1994 to form the “Growth Management Task Force.” This group met twice monthly for four years in structured, facilitated sessions. Not only did the Task Force reach consensus on a series of themes to guide and manage growth, but it also identified potential solutions to urban growth issues. **Planning for Growth in Missoula County**, the "Growth Management Themes Document," was adopted in 1994 and revised in 1996.

As the first step in implementing recommendations or strategies in the **Growth Management Themes Document**, the City and County worked together to update the **Missoula Urban Comprehensive Plan**. The first phase of amendments to zoning and subdivision regulations was adopted by the City and County in 1999 and 2000 respectively. The City began work on a second phase of zoning revisions in 2001. During this phase, the City adopted zoning changes regulating standards for parking, landscaping, multi-dwellings, wireless communications facilities and historic districts. In response to citizen complaints, City Council amended some of the growth management tools adopted in the first phase in 2004 and 2005. City Council rescinded density bonus provisions and placed a moratorium on certain planned neighborhood cluster provisions. The Council has stopped work on the second phase of revisions.

Missoula County staff also worked with the Confederated Salish and Kootenai Tribes, Lake County and the Montana Department of Transportation on the U.S. Highway 93 Land Use and Growth Projection Study, completed in 1996. This study projected growth trends for different regions within the Flathead Reservation, polled residents about their concerns for growth and resource protection, mapped sensitive resource areas and areas suitable for development, and listed a range of tools that could be used to guide growth on the Flathead Reservation.
DOCUMENT ORGANIZATION

The Growth Policy includes text and supplemental appendices and maps to meet the requirements of State law, to affirm City and County strategies for managing growth, and to provide a framework for continued community development, resource conservation, and planning efforts.

Chapter 2 is a Missoula County Profile that summarizes existing conditions and trends. It provides a snapshot of City and County land use, population, housing, economic conditions, local services, public facilities, natural resources, and cultural resources, incorporating the most recently available information in these areas.

Chapter 3 lists community goals and objectives, primarily derived from three documents:
- Missoula Urban Comprehensive Plan, 1998 Update;
- Planning for Growth in Missoula County, 1994 Policy Document, revised in 1996; and
- 1975 Missoula County Comprehensive Plan,
as well as input from public process.

Chapters 4 through 8 address implementation of the Growth Policy. Chapter 4 provides general information about implementation tools. It also includes a list of strategies to implement the Growth Policy’s goals and objectives. Chapter 5 defines and describes the role of regional, vicinity, and issue plans. Chapter 6 describes subdivision review criteria and evaluation. Chapter 7 describes coordination and cooperation among jurisdictions. Chapter 8 includes a strategy for development, maintenance, and replacement of public infrastructure.

Chapter 9 describes the process for reviewing the Growth Policy. The Growth Policy describes current conditions and trends, reflects public values and goals, and articulates policies guiding development and resource conservation decisions made by governing bodies. Its relevance and utility depend on regular review and revision, if needed.
CHAPTER TWO: MISSOULA COUNTY PROFILE

INTRODUCTION

OVERVIEW
Missoula County encompasses 1,673,698 acres, or approximately 2,600 square miles, which is roughly equivalent to the size of Delaware. Missoula County ranks 25th among counties in Montana for land area. Approximately 104,678 acres in the County are located within the Confederated Salish and Kootenai Tribes’ Flathead Reservation. There are an estimated 99,018 residents in the County, which ranks second in the State for population, behind only Yellowstone County.\(^1\) It has a population density of 39 persons per square mile, which is significantly denser than the State’s population density of 6.4 persons per square mile. Missoula County is governed by the Board of County Commissioners, which has three members who serve six-year terms. Within the County, there are several unincorporated communities and one incorporated City (pictured on Map 1). The incorporated City of Missoula has an estimated 61,790 residents and is the County Seat.\(^2\) The City is governed by a Mayor and City Council, which has 12 members who represent six wards.

This chapter is a profile of Missoula County's human and natural resources. The information presented is general and intended to provide a picture of existing conditions and projected trends.\(^3\) More detailed information is available from other sources and more detailed analyses of human and natural resources will be provided in regional, vicinity, and issue plans as needed. This chapter is organized into the following sections:

A. Land Use and Development Patterns
B. Population
C. Housing
D. Economic Conditions
E. Local Services
F. Public Facilities
G. Natural Resources
H. Cultural Resources

The information presented below provides a synopsis of the existing conditions and trends that are detailed in this chapter.

SUMMARY OF EXISTING CONDITIONS AND TRENDS

Land Use
- In Missoula County, 49% of the land is owned by the State, Federal, or Local government; 6% is owned by the Confederated Salish and Kootenai Tribes; and 26% is corporately owned, predominantly by timber corporations. The remaining 19% is in private ownership.
- Approximately 86% of the land in Missoula County is classified by the Department of Revenue as agricultural land or tax exempt. Most tax exempt land is public forest land.
- The number of acres in approved subdivisions in Missoula County and City increased by 15,660 acres between 1990 and 2004. Subdivisions located outside the Missoula City limits made up 14,354 acres of this total.
- The Missoula Valley Planning Region accounted for 83% of the lots and 46% of the acres subdivided in the County.

\(^3\) MCA 76-1-601(2)(3).
- Although the total number of farms in Missoula County increased 5.4% from 1997 to 2002, the total land in agricultural use decreased by 4%.
- In 2002, the total area of the County used for farming was 258,315 acres, down from 262,419 acres in 1997.

**POPULATION**
- Missoula County’s population increased by an average annual growth rate of 2% per year between 1990 and 2000. During that decade, the County population increased by 17,115 people, or by 22%.
- The areas of the County that showed the greatest rates of increase in population were Ninemile/Frenchtown, Wye/Mullan, East Missoula, Potomac/Seeley and Lolo/North Bitterroot Valley.
- From 1990 to 2000, the proportions of the population under 18 years of age and 65 years or older increased less than the proportion of the population between the ages of ages 18 and 65.
- Between 2000 and 2020, the Montana Department of Commerce projects Missoula County population to increase to 125,334, an average annual increase of 1.5% per year.
- In 2000, Missoula County had 38,439 households, an increase of 25% from 1990.

**HOUSING**
- Increases in population combined with a trend toward smaller households will create an increased need for housing units.
- Changes in demographic characteristics in the County, such as an aging population, may create a need for new types of housing.
- As of 2000, Missoula County had 38,439 occupied housing units.
- The median value of a home in Missoula County, adjusted for inflation, increased from $87,220 in 1990 to $136,500 in 2000 or by 56.5%. Income during this time period, with inflation adjustment, increased by 10%.
- Missoula County single-family home prices grew 16.2% from 2003 to 2004, well above State and national averages.\(^4\)
- Increases in household income have not kept pace with increases in housing costs during the past 14 years, making housing affordability an issue in need of further attention.

**ECONOMY**
- Missoula County is the second largest trade and service center in Montana, behind Yellowstone County.
- In 1990, there were 34,000 non-farm jobs in the County. This increased to an estimated 49,900 in 2000 and 54,000 in 2004.
- Government, retail trade, health care and social assistance jobs are the largest contributors to the employment base.
- The average per capita income in 1992 was $17,312; in 2002 it was $26,823.
- Average per capita income increased at an average annual rate of 4.5% between 1992 and 2002.
- In 1990 the median household income was $23,388 while in 2002 it was $35,731.
- Economic growth in Missoula County, as measured by projected percent change in non-farm labor income, is expected to continue to increase between approximately 3% and 4% annually for the next several years.

\(^4\) Outlook, Bureau of Business and Research, The University of Montana, 2005.
LOCAL SERVICES AND PUBLIC FACILITIES

- The number of 9-1-1 calls in Missoula County increased slightly from 1990 to 2000.
- The number of emergency fire and medical calls received in Missoula County has been increasing steadily since 1992.
- In October 2004, there were 13,259 students enrolled in public schools in Missoula County. An additional 183 high school students and 337 elementary students attended a joint district located outside of the County.
- Total enrollment within the elementary school districts in the County decreased from 10,585 in 1993 to 8,893 in 2004, a decrease of 15.9%.
- To meet water quality protection goals, there has been an effort to increase the number of connections to sewer. Approximately 25,000 residential units were connected to City sewer in 2004.
- Between 1997 and 2004, 4,025 new residential units on 2,209 parcels were connected to sewer in Missoula County.
- In the Missoula Urban Area, Vehicle Miles Traveled (VMT) has increased 1.5 to 2 times faster than population growth.
- As population increases and VMT increases at an even higher rate, development will require more roads and transportation facilities. In addition to new or expanded road systems, there are efforts to increase the use of alternative modes of transportation.

NATURAL RESOURCES

GEOLGY

- Over half of the land in the County is on slopes of 25% or more.

BIOLOGY

- The biological resources in Missoula County include critical habitat such as big game winter range and a wide variety of species including two that are federally listed as endangered. Approximately 70-80% of winter range and critical winter range is found on private land.
- Noxious weeds including spotted and Russian knapweed, leafy spurge, dalmation toadflax, Canada thistle, field bindweed, houndstongue, and sulfur cinquefoil limit agricultural productivity, alter wildlife habitat, and threaten native grasslands.
- Spotted knapweed has infested approximately 500,000 acres in the County.
- Human-wildlife conflicts are on the rise, with significant increases occurring since 1999.

WATER

- County watercourses provide groundwater recharge, water for drinking and irrigation, habitat for fish and other aquatic life, riparian vegetation, and recreational opportunities.
- There are 29,600 acres within the 100-year floodplain.
- Increases in population and development increase use of streams, rivers, and floodplains in Missoula County for water and recreation.
- In order to meet State and Federal standards for water quality in the Clark Fork River, the City of Missoula and Missoula County have entered into a Voluntary Nutrient Reduction Program (VNRP) to reduce nitrate and phosphorus contaminants in the Clark Fork River.

AIR

- Air quality in the Missoula Valley, as measured by particulates, carbon monoxide levels, and days of poor air quality, has improved over the last decade.

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HAZARDOUS WASTE SITES
- The Environmental Protection Agency (EPA) has issued a final plan for the removal of Milltown dam, which could occur as early as January, 2007.

LAND CONSERVATION
- By 2004, there were 29,833 acres of land in conservation easements in Missoula County.
- The City’s Open Space Bond has been used to purchase 3,250 private acres including land on Mt. Sentinel, Mt. Jumbo, and the North Hills.

CULTURAL AND HISTORIC RESOURCES
- The Salish, Kootenai, Pend d’Oreille, Blackfeet, and Shoshone tribes once inhabited or traveled through Missoula to and from buffalo hunting grounds.
- Seventy-five historic sites, districts, landmarks and trails in Missoula County are listed on the National Register.
- A recent trend in historic preservation efforts in Missoula County is the preservation of historic landscapes, such as lumber camps and mining districts in the Upper Ninemile Valley, Coloma (near Garnet), and Lothrop (east of Alberton).

A. LAND USE AND DEVELOPMENT PATTERNS
The information presented below provides an overview of the land use and development patterns in Missoula County by looking at land ownership, land uses based on tax assessment, recent development, and subdivision activity.

LAND OWNERSHIP
Land ownership within the County can be broken down into five general categories: Federal, corporate, private, State and Confederated Salish and Kootenai Tribal (CS&KT) lands. As shown in Figure 1, more than one-half of the property within the County is managed by State, Federal or Tribal entities. In addition, more than one quarter of the land in Missoula County is under private corporate ownership, much of which is Plum Creek timberland. Land ownership in Missoula County is illustrated in Map 2.

Private Ownership
In 2005, 736,648 acres (44%) were privately owned in Missoula County. The Plum Creek Timber Company, Inc. is the largest private land owner in the County and in 2005 owned and managed approximately 430,000 acres (58% of all private land and 25% of all County land). Plum Creek typically manages land for long term timber production and permits public and recreational use. The company assesses land according to the highest or best use as defined by the company. In some cases, recreation and residential development have higher values than timber production. In such cases, Plum Creek may sell portions of land holdings, as it has recently done in Missoula County. Some of this land has been traded with other agencies, bought by land trusts, or sold through the real estate market. Plum Creek lands are primarily located in outlying forested areas of the County, usually in a “checkerboard” ownership pattern with Forest Service lands. Issues, including habitat loss or fragmentation, wildfire hazard, and access, may limit the suitability of these lands for residential development on those lands.

Federal and State Ownership
The Federal government owns 721,284 acres (43%) of all land in the County, including portions of Lolo, Flathead and Bitterroot National Forests. Forestland is managed under
Land and Resource Management Plans, more commonly known as Forest Plans. As of 2005, the Forest Plans for the Lolo, Flathead and Bitterroot Forests were being revised.6

Forest Plan recommendations and subsequent revisions define the land uses allowed on forest land. Forest Plan recommendations are based on a Desired Future Condition (DFC) of the forest as defined by goals and objectives reflecting social, economic and environmental considerations of land suitability for various uses.7 Allowed land uses derived from DFC goals and objectives can affect land uses on bordering public and private land.

The State owns 103,891 acres (6%), 69,102 acres (4%) of which is owned by the Montana Department of Natural Resources and Conservation (DNRC) in the form of school trust lands (see Table 1). The main purpose of this land is to generate revenue for Montana's schools, primarily through agriculture and grazing as well as mineral, timber, and special uses. Special uses include leasing the land for residential housing and commercial and industrial uses such as large retail stores and hotels.8 The DNRC also has a Real Estate Management Programmatic Plan that compares population and economic growth to the use of trust lands for real estate projects. DNRC considers real estate projects as either residential, commercial/industrial, or conservation leases, licenses, sales, easements, or exchanges.

Tribal Ownership
The Salish and Kootenai Tribes own the majority of land on the Flathead Reservation. Other Reservation land was allotted to Tribal members in parcels through the Flathead Allotment Act of 1908. Despite the Tribes' continued opposition of such practices, the federal government allotted parcels to Tribal members and continues to retain those titles on behalf of owners. Parcels are also assigned through inheritance or purchase by a Tribal member. Other land on the Reservation is held in Federal, State or fee ownership.9

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7 Forest Plan Five Year Review for the Bitterroot, 1994 (p.10).
Table 1
Ownership of Missoula County by Acre

<table>
<thead>
<tr>
<th>Owner</th>
<th>Acres</th>
<th>Percent of Total Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>721,284</td>
<td>43.1%</td>
</tr>
<tr>
<td>Bureau of Land Management</td>
<td>20,866</td>
<td>1.2%</td>
</tr>
<tr>
<td>Bitterroot National Forest</td>
<td>7,684</td>
<td>0.5%</td>
</tr>
<tr>
<td>Flathead National Forest</td>
<td>177,011</td>
<td>10.6%</td>
</tr>
<tr>
<td>Lolo National Forest</td>
<td>515,694</td>
<td>30.8%</td>
</tr>
<tr>
<td>U.S. Department of Defense</td>
<td>29</td>
<td>0.0%</td>
</tr>
<tr>
<td>State</td>
<td>103,891</td>
<td>6.2%</td>
</tr>
<tr>
<td>DNRC, School Trust</td>
<td>69,102</td>
<td>4.1%</td>
</tr>
<tr>
<td>Fish, Wildlife, and Parks</td>
<td>13,905</td>
<td>0.8%</td>
</tr>
<tr>
<td>University of Montana</td>
<td>20,827</td>
<td>1.2%</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>56</td>
<td>0.0%</td>
</tr>
<tr>
<td>Salish &amp; Kootenai Tribal Lands</td>
<td>93,692</td>
<td>5.6%</td>
</tr>
<tr>
<td>Private</td>
<td>736,648</td>
<td>44.4%</td>
</tr>
<tr>
<td>Plum Creek</td>
<td>430,357</td>
<td>25.7%</td>
</tr>
<tr>
<td>Other Private</td>
<td>306,291</td>
<td>18.7%</td>
</tr>
<tr>
<td>Land Trusts</td>
<td>90</td>
<td>0.0%</td>
</tr>
<tr>
<td>Water</td>
<td>9,341</td>
<td>0.6%</td>
</tr>
<tr>
<td>City/County Lands</td>
<td>8,308</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total</td>
<td>1,673,253</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Figure 1
Ownership of Missoula County by Acre

Source: Montana Natural Heritage Program, 2005.
**LAND USES**

The tax classifications used by the Montana Department of Revenue provide a general idea of the different types of land uses currently occurring within Missoula County. The classifications allow identification of lands that are taxed based on residential, commercial, industrial, agricultural, vacant, exempt, and tribal uses. Table 2 provides information on how the land is classified in Missoula County. The category of agricultural land includes corporate timberland and is valued on productivity. The exempt classification primarily comprises public forest land. Farmsteads are one acre parcels that are a part of agricultural land but have built structures on them such as farmhouses and barns. The built on acreage is then taxed at a different rate than the rest of the agricultural land.

As shown in Table 2, exempt property and agricultural land comprise 86% of the land area in Missoula County.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
<th>Percent of Total Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt Property</td>
<td>908,407</td>
<td>54.3%</td>
</tr>
<tr>
<td>Agricultural</td>
<td>531,381</td>
<td>31.7%</td>
</tr>
<tr>
<td>Farmstead</td>
<td>114,844</td>
<td>6.9%</td>
</tr>
<tr>
<td>Residential</td>
<td>51,326</td>
<td>3.1%</td>
</tr>
<tr>
<td>Missing*</td>
<td>34,352</td>
<td>2.1%</td>
</tr>
<tr>
<td>Vacant</td>
<td>20,321</td>
<td>1.2%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9,127</td>
<td>0.5%</td>
</tr>
<tr>
<td>Industrial</td>
<td>2,349</td>
<td>0.1%</td>
</tr>
<tr>
<td>Tribal Property**</td>
<td>1,269</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other***</td>
<td>272</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,673,809</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

* Missing is a combination of public right-of-way, water courses and other misc. lands.
** Does not include individually owned land held in trust status.
*** Includes classifications of centrally assessed, condo rural, condo urban, assessed utility, non-valued property, townhouse rural, and townhouse urban.


**AGRICULTURAL LAND USES**

The 2002 Census of Agriculture, a tool used by the U.S. Government to track farming information, reports that although the total number of farms in Missoula County increased 5.4% from 1997 to 2002, the total land in agricultural use decreased by 4%. In 1997, 262,419 acres were used for farming in Missoula County, decreasing to 258,315 acres in 2002. Although the number of farms in the County has risen to over 640, a level not seen

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10 Legislative Fiscal Division, 2005. leg.State.mt.us/content/publications/ fiscal/ba_2007/vol_2/property.pdf
11 Another way to determine how much land is used for agricultural purposes is to consult the Assessor’s database for land taxed as agricultural. These figures will differ from those listed here because agricultural land is defined differently for tax purposes.

The Census of Agriculture defines a farm as “any place from which $1000 or more of agricultural products were produced and sold or normally would have been sold during the census year.” The 2002 Census of Agriculture was published using a different method of research than previous censuses. The 2002 Census adjusted and re-published the 1997 count data so that is was comparable with 2002 data.
since 1954, over half of these “farms” are timberland. As such, fewer than half (312) of Missoula farms produced crops, with only 17% in cropland and 29% in pasture in 2002.12

Table 3
Trends in Farming for Missoula County
1997-2002

<table>
<thead>
<tr>
<th>Farm Size</th>
<th>Number of Farms 1997</th>
<th>Number of Farms 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9 acres</td>
<td>104</td>
<td>127</td>
</tr>
<tr>
<td>10-49 acres</td>
<td>241</td>
<td>229</td>
</tr>
<tr>
<td>50-179 acres</td>
<td>122</td>
<td>141</td>
</tr>
<tr>
<td>180-499 acres</td>
<td>68</td>
<td>71</td>
</tr>
<tr>
<td>500-999 acres</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>1000 acres or &gt;</td>
<td>45</td>
<td>40</td>
</tr>
</tbody>
</table>


Decreasing prices for agricultural products, economic factors, and development pressures deeply affect farmers and ranchers in Missoula County.13 As the total market value of farm and ranch products declines, farm and ranch lands become more profitable when sold for development. As shown in Table 4, 60% of farms had sales of less than $2,500 in 2002. Less than 1% of the County’s total net income is derived from raising livestock and crops.14

Table 4
Number of Farms by Value of Sales
1997-2002

<table>
<thead>
<tr>
<th>Farm Value</th>
<th>1997</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $2,500</td>
<td>286</td>
<td>385</td>
</tr>
<tr>
<td>$2,500-$4,999</td>
<td>99</td>
<td>74</td>
</tr>
<tr>
<td>$5,000-$9,999</td>
<td>78</td>
<td>54</td>
</tr>
<tr>
<td>$10,000-$24,999</td>
<td>69</td>
<td>53</td>
</tr>
<tr>
<td>$25,000-$49,999</td>
<td>37</td>
<td>33</td>
</tr>
<tr>
<td>$50,000-$99,999</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>


---

In response to decreasing farmland and other issues in the food system, a collaborative group of students, faculty, and citizens initiated the Missoula County Community Food Assessment (MCCFA) to comprehensively research local food and farming systems. A primary recommendation resulting from the MCCFA was to create a Food Policy Council. Out of that recommendation, a multi-stakeholder coalition called the Community Food and Agriculture Coalition (CFAC) was formed in 2005 to address community needs related to food and agriculture. CFAC focuses on increasing dialogue among a wide array of individuals in order to support the local food and farm system. They intend to facilitate projects that will increase food production, improve access to nutritious food for low-income people, raise funds and create educational campaigns.

Missoula farmers’ markets continue to expand. One market operates downtown from May to October each year and another operates at the Fairgrounds. In 2005, the City Council approved a third farmers’ market for the area between the Millennium Building on Higgins Ave. and the Clark Fork River to provide a sales outlet for local meat producers.

**DEVELOPMENT PERMIT AND SUBDIVISION ACTIVITY**

Building permit review has been conducted by the City of Missoula since the 1940s. In 1974, at the request of the County, the City started reviewing building permits within 4.5 miles of the City limits. In 2003, the State legislature repealed the City’s ability to review building permits outside the City limits. Zoning compliance permits are still required for new construction in zoned areas that are outside of the City limits.

In 2005, the County adopted a building code enforcement program and established a building inspection division of the Public Works Department. A chief building officer will lead the division. Agricultural structures not designed for human occupation and owner-built for owner-occupancy/single family residential structures are exempt from obtaining building permits.\(^{15}\)

Zoning was first established in the City of Missoula in 1932; the zoning resolution currently in effect in the County was originally adopted in 1976. Although the County has been involved in land use planning for many years, relatively little development within the County is now regulated through zoning. Of the land in the City of Missoula, 96% is zoned (minus rivers and rights-of-way), while 6.1% of land outside of the City limits is zoned.

Subdivision activity provides an idea of how and where development is occurring in Missoula County. However, land division through processes exempt from subdivision review is also prevalent and contributes to the land development pattern throughout the County. From 1990 to 2004, the Missoula Board of County Commissioners approved 540 minor and major subdivisions that divided 14,354 acres into a total of 6,396 lots. During this same period, the Missoula City Council preliminarily approved 142 minor and major subdivisions of 1,306 acres and created 2,259 lots. The average lot size for County subdivisions was 2.2 acres and 0.6 acres per lot for the City. Most subdivision activity resulted in residential lots; however, some lots were for commercial or industrial uses. Most subdivisions were located within the Missoula urban area, defined as the Missoula Valley Planning Region.\(^{16}\) Table 5 shows the subdivision activity in Missoula County and the City from 1990 to 2004, including acreage, number of lots, and average lot size.

\(^{15}\) County Public Works, 2005.

\(^{16}\) Missoula Office of Planning and Grants, 2005.
Table 5
Subdivision Activity in Missoula City and County 1990-2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Missoula County</th>
<th>City of Missoula</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Subdivisions</td>
<td>Acres Subdivided</td>
</tr>
<tr>
<td>1990</td>
<td>13</td>
<td>136.3</td>
</tr>
<tr>
<td>1991</td>
<td>19</td>
<td>264.4</td>
</tr>
<tr>
<td>1992</td>
<td>33</td>
<td>527.8</td>
</tr>
<tr>
<td>1993</td>
<td>16</td>
<td>239.4</td>
</tr>
<tr>
<td>1994</td>
<td>32</td>
<td>1536.0</td>
</tr>
<tr>
<td>1995</td>
<td>38</td>
<td>771.5</td>
</tr>
<tr>
<td>1996</td>
<td>67</td>
<td>1834.8</td>
</tr>
<tr>
<td>1997</td>
<td>36</td>
<td>533.1</td>
</tr>
<tr>
<td>1998</td>
<td>53</td>
<td>1464.2</td>
</tr>
<tr>
<td>1999</td>
<td>25</td>
<td>772.7</td>
</tr>
<tr>
<td>2000</td>
<td>38</td>
<td>1071.2</td>
</tr>
<tr>
<td>2001</td>
<td>34</td>
<td>1531.2</td>
</tr>
<tr>
<td>2002</td>
<td>33</td>
<td>676.0</td>
</tr>
<tr>
<td>2003</td>
<td>59</td>
<td>2174.2</td>
</tr>
<tr>
<td>2004</td>
<td>44</td>
<td>821.6</td>
</tr>
<tr>
<td>Total</td>
<td>540</td>
<td>14,354</td>
</tr>
</tbody>
</table>

Source: Missoula Office of Planning and Grants, 2005. Subdivisions for lease/rent are included in totals and counted as one lot each.

Between January 1, 1996 and December 31, 2004, 11,456 acres were subdivided into 5,930 lots. The urban area (defined as the Missoula Planning Region on Map 15) accounted for 83% of the lots and 46% of the acres subdivided in the County. Together, the Seeley-Swan area and Frenchtown/Huson area accounted for 33% of all acres subdivided, but only 6% of the total lots. Figures 2 and 3 illustrate the number of acres and lots subdivided by region.17

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17 Data presented by planning region exclude subdivisions for lease/rent. See Map 15: Regional Planning Boundaries. The Missoula Valley Region includes land within the City limits and some land outside of the City limits.
**FIGURE 2**
**Number of Acres Subdivided by Region**
**January 1, 1996 – December 31, 2004**

- Seeley-Swan, 1,495.0
- Potomac-Greenough, 695.2
- Clinton-Turah, 830.5
- Lolo, 696.6
- Frenchtown-Huson, 2,323.6
- Missoula Valley, 5,327.9
- Ninemile, 97.2
- Evaro, 16.7

**Figure 3**
**Number of Lots Subdivided by Region**
**January 1, 1996 – December 31, 2004**

- Seeley-Swan, 142
- Potomac-Greenough, 32
- Clinton-Turah, 209
- Lolo, 407
- Frenchtown-Huson, 237
- Ninemile, 17
- Evaro, 2
- Missoula Valley, 4,982
Much of the County is constrained for development due to steep terrain, difficult access, distance from services, and the locations of rivers and streams. (See Natural Resources for information on environmental constraints.) As a result, much of the subdivision and development activity in Missoula County has occurred in the valleys, near existing communities and in areas that were previously in agricultural production. (See Natural Resources for information about development on agricultural lands.) As housing in the valley reaches capacity, pressure is increasing to develop other areas such as floodplains and hillsides.

B. POPULATION

GENERAL INFORMATION

According to the 2000 Census, the population of Missoula County was 95,802. The County’s population increased 21.8% between 1990 and 2000, an average annual growth rate of 2%. By comparison, between 1990 and 2000, the population in the State of Montana increased by 14.7% with an average annual growth rate of 1.2%. During this period, the County ranked eighth in the State in terms of the rate of growth. Missoula County’s growth rate is similar to counties in the western portion of the State, which had an overall growth rate of 23.9% between 1990 and 2000, or an average annual increase of 2.2%. The 2004 County population is estimated to be 99,018 based on an estimated annual average growth rate of .8% since 2000.

The primary factors affecting population change are natural change (the difference between births and deaths) and in-migration. According to the Census, between 1990 and 2000, Missoula County gained 6,208 residents through a net migration rate of 7.9%. During this period, the County also gained 4,694 residents due to a natural change rate of 6%. The Montana Department of Commerce estimates that Missoula County’s population will increase by 30.8% to 125,334 between 2000 and 2020, which amounts to an average annual growth rate of 1.5% per year. During the same time period, it estimates that the State’s population will increase by 20.9% to 1,090,686 in the year 2020, or by approximately 1.0% per year.

Figure 4 shows past and projected population growth for Missoula County based on the Department of Commerce projection. The University of Montana anticipates minimal growth in student population for the next several years, mostly due to a projected decrease in graduating high school seniors. Therefore, the student population of the University of Montana is not expected to be a significant influence on population growth in the next 20 years.

18 The western region includes Sanders, Ravalli, Powell, Mineral, Lincoln, Lake, Granite, Flathead and Missoula Counties.
Census data indicate that the majority of the population in Missoula County, almost 83%, resides within the Missoula urban area; however, the area with the greatest rate of population increase over the past 14 years has been outside the urban area of the County. The rural sub-area, including the Lolo region, Ninemile/Frenchtown, Potomac/Seeley and Confederated Salish and Kootenai Tribal lands, had a 46% increase in population as shown in Table 6. This table also shows that within the urban area some of the highest population rate increases were at the edges of the urban core, such as in the Wye-Mullan area and East Missoula. The information presented on population growth in Table 6 is derived from Census tract data that corresponds to the neighborhoods in the Missoula urban area and to rural regions of the rest of Missoula County. The tracts have been labeled according to general descriptions of the areas they cover (see Map 2a).
Table 6  
Missoula County Population 1990-2000  
By Neighborhood

<table>
<thead>
<tr>
<th>Tract</th>
<th>Description (Census tract)</th>
<th>1990</th>
<th>2000</th>
<th>Change</th>
<th>Average Annual % Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lower Rattlesnake/North Hills/Lower Grant Creek (1)</td>
<td>4,965</td>
<td>5,443</td>
<td>478</td>
<td>0.9%</td>
<td>10%</td>
</tr>
<tr>
<td>2.01</td>
<td>Northside/Westside (2.01)</td>
<td>4,812</td>
<td>6,285</td>
<td>1,473</td>
<td>2.7%</td>
<td>31%</td>
</tr>
<tr>
<td>2.02</td>
<td>Airport/Wye/Mullan Road (2.02)</td>
<td>4,040</td>
<td>6,215</td>
<td>2,175</td>
<td>4.4%</td>
<td>54%</td>
</tr>
<tr>
<td>3</td>
<td>City Center (3)</td>
<td>2,238</td>
<td>2,083</td>
<td>-155</td>
<td>-0.7%</td>
<td>-7%</td>
</tr>
<tr>
<td>4</td>
<td>East Missoula/Mount Sentinel (4)</td>
<td>1,861</td>
<td>2,666</td>
<td>805</td>
<td>3.7%</td>
<td>43%</td>
</tr>
<tr>
<td>5</td>
<td>University of Montana/University District (5)</td>
<td>6,163</td>
<td>6,893</td>
<td>730</td>
<td>1.1%</td>
<td>12%</td>
</tr>
<tr>
<td>7</td>
<td>Southside (7)</td>
<td>2,426</td>
<td>2,560</td>
<td>134</td>
<td>0.5%</td>
<td>6%</td>
</tr>
<tr>
<td>8</td>
<td>N. Russell to N. Reserve/Orchard Homes (8)</td>
<td>4,505</td>
<td>4,978</td>
<td>473</td>
<td>1.0%</td>
<td>10%</td>
</tr>
<tr>
<td>9</td>
<td>Target Range/Lolo National Forest (9)</td>
<td>7,020</td>
<td>7,872</td>
<td>852</td>
<td>1.2%</td>
<td>12%</td>
</tr>
<tr>
<td>10</td>
<td>S. Russell to S. Reserve (10)</td>
<td>4,248</td>
<td>4,526</td>
<td>278</td>
<td>0.6%</td>
<td>7%</td>
</tr>
<tr>
<td>11</td>
<td>Slant Street (11)</td>
<td>2,905</td>
<td>2,964</td>
<td>59</td>
<td>0.2%</td>
<td>2%</td>
</tr>
<tr>
<td>12</td>
<td>Mount to SW Higgins (12)</td>
<td>4,451</td>
<td>4,645</td>
<td>194</td>
<td>0.4%</td>
<td>4%</td>
</tr>
<tr>
<td>13.1 &amp; 13.2</td>
<td>Carline/Wapikiya/Linda Vista/Lower Miller Creek/South Hills/Mt. Dean Stone (13.1 &amp; 13.2)</td>
<td>12,657</td>
<td>15,893</td>
<td>3,236</td>
<td>2.3%</td>
<td>26%</td>
</tr>
<tr>
<td>14</td>
<td>Upper Rattlesnake/Upper Grant Creek/ Bonner/Milltown/West Riverside (14)</td>
<td>5,040</td>
<td>6,239</td>
<td>1,199</td>
<td>2.2%</td>
<td>24%</td>
</tr>
<tr>
<td>&quot;Urban Area&quot; Sub-Total</td>
<td></td>
<td>67,331</td>
<td>79,262</td>
<td>11,931</td>
<td>1.6%</td>
<td>18%</td>
</tr>
<tr>
<td>15</td>
<td>Lolo/North Bitterroot Valley (15)</td>
<td>4,447</td>
<td>5,983</td>
<td>1,536</td>
<td>3.0%</td>
<td>35%</td>
</tr>
<tr>
<td>16</td>
<td>Ninemile/Frenchtown (16)</td>
<td>3,671</td>
<td>6,112</td>
<td>2,441</td>
<td>5.2%</td>
<td>66%</td>
</tr>
<tr>
<td>17</td>
<td>Potomac/Seeley (17)</td>
<td>2,534</td>
<td>3,543</td>
<td>1,009</td>
<td>3.4%</td>
<td>40%</td>
</tr>
<tr>
<td>9407</td>
<td>Flathead Reservation (9407)</td>
<td>704</td>
<td>902</td>
<td>198</td>
<td>2.5%</td>
<td>28%</td>
</tr>
<tr>
<td>&quot;Rural Area&quot; Sub-Total</td>
<td></td>
<td>11,356</td>
<td>16,540</td>
<td>5,184</td>
<td>3.8%</td>
<td>45.6%</td>
</tr>
<tr>
<td>County Total</td>
<td></td>
<td>78,687</td>
<td>95,802</td>
<td>17,115</td>
<td>2.0%</td>
<td>21.8%</td>
</tr>
</tbody>
</table>

SELECTED POPULATION CHARACTERISTICS
As with the rest of the United States, Missoula County’s population is aging. Table 7 indicates that the population growth rate for persons under 18 years was 8.4% from 1990 to 2000. During the same time, the growth rate for persons between 18 and 65 years of age was 27.7% and for persons over 65 years of age was 18.3%. The median age of Missoula County residents also increased from 31.6 years in 1990 to 33.2 years in 2000. This median remained less than the State median age of 37.5 in 2000.

Table 7
Selected Population Characteristics for Missoula County
1990-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Persons</td>
<td>78,687</td>
<td>95,802</td>
<td>21.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Total under 18 years</td>
<td>20,213</td>
<td>21,917</td>
<td>8.4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Percent of total population</td>
<td>25.7%</td>
<td>22.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 18-65 years</td>
<td>50,351</td>
<td>64,300</td>
<td>27.7%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Percent of total population</td>
<td>64.0%</td>
<td>67.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 65 years and older</td>
<td>8,103</td>
<td>9,585</td>
<td>18.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Percent of total population</td>
<td>10.3%</td>
<td>10.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median age</td>
<td>31.6</td>
<td>33.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*AAGR is the average annual growth rate.


Missoula County’s population is largely homogenous ethnically, with approximately 6% of the population of non-white ethnicity as of the 2000 Census. The largest, single non-white ethnic group in Missoula County was “American Indian and Alaska Native,” with 2,193 individuals.22

HOUSEHOLD CHARACTERISTICS
According to the 2000 Census, there were 38,439 households in Missoula County, an increase of 25% from 1990, with an average annual growth rate of 2.3%. From 1990-2000, the population grew 21.8% or 2% per year, and the household size decreased from 2.47 persons in 1990 to 2.4 persons in 2000. By comparison, the 2000 Census indicates that the average household size for the State of Montana was 2.45 persons.

Recent demographic analysis conducted for Missoula County indicates that the average number of persons per household will decrease to 2.37 in 2010 and 2.35 in 2020.23 This analysis also predicts that the number of households will increase an average 1.6% per year to 50,642 in 2020. These trends have implications for housing which are discussed in the section below.

Of the 38,439 households in Missoula County in 2000, 3,524 (9.2%) had a female head of household. Households headed by females with children comprised 6.1% of the total number of households. Overall, 31% of the total number of households had children living

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22 U.S. Census, 2000. The Confederated Salish and Kootenai Tribes have noted that typically all American Indians are not counted. The Tribes have contested Census numbers over the years due to undercounts.

in them and 7.5% had one or more persons over 65 years of age. More than a quarter (28%) of all households comprised a single individual living alone and there were 2,880 households (7.5%), comprised of elderly persons living alone.

C. HOUSING

HOUSING STOCK
As of the 2000 Census, there were 41,319 housing units in Missoula County. Of these, 38,439 units were occupied. In 2000, the Census indicated that 63% (26,068) of the housing units (occupied and unoccupied) in Missoula County were single family residential, 23% (9,624) were duplex or multi-family dwelling units, and 13% (5,528) were mobile homes. A conservative 2004 housing unit estimate for Missoula County is 43,950 units, an increase of 2,631 units over four years (see Table 8). City building permits, however, indicate housing numbers may be even higher. The difference is due in part to the lag times between permit issuance, unit construction, and when the information reaches the assessor’s database (see Table 8).

Using County and U.S. Census data, Table 8 illustrates by census tract the trends in residential construction in Missoula County from 1990 to 2004. New development is widespread throughout the County, including Missoula, its urban fringe and rural parts of the County. See Map 2a for an illustration of 14-year housing trends by census tract. Between 2000 and 2004 the most development occurred in the Lower Miller Creek/South Hills/Mt. Dean Stone area (tracts 13.01 & 13.02) with 381 units. The Potomac-Seeley (census tract 17) added 364 dwelling units and the Northside/Westside area (tract 2.1) added 293 units. The University district (tract 5) added 280 units, which includes the new 198-unit University Lewis and Clark Village.

The number of multi-family housing units increased 12.3% between 2000 and 2004, comprising 42.8% of all new residential construction. Continued increase in multi-family residences is expected as more multi-family housing units have been permitted in the last few years than have been built. Countywide, single-family residential construction grew by 2.0%, and constituted 22.3% of all new residential units.

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24 Residential construction estimates based on Missoula City-County Health Department data and the Montana Department of Revenue Computer Assisted Mass Appraisal (CAMA) data.
25 Missoula City-County Health Department, 2004 and the Montana Department of Revenue Computer Assisted Mass Appraisal (CAMA).
26 City of Missoula Public Works Department and City-County Health Department, 2004.
27 Missoula City-County Health Department, 2004 and the Montana Department of Revenue Computer Assisted Mass Appraisal (CAMA).
### Table 8
Residential Construction in Missoula County
1990 – 2004

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,054</td>
<td>2,456</td>
<td>19.6%</td>
<td>1.8%</td>
<td>70</td>
<td>23.0% 1.5%</td>
</tr>
<tr>
<td>2.01</td>
<td>2,293</td>
<td>2,956</td>
<td>28.9%</td>
<td>2.6%</td>
<td>293</td>
<td>41.7% 2.5%</td>
</tr>
<tr>
<td>2.02</td>
<td>1,505</td>
<td>2,308</td>
<td>53.4%</td>
<td>4.4%</td>
<td>98</td>
<td>59.9% 3.4%</td>
</tr>
<tr>
<td>3</td>
<td>1,422</td>
<td>1,456</td>
<td>2.4%</td>
<td>0.2%</td>
<td>116</td>
<td>10.5% 0.7%</td>
</tr>
<tr>
<td>4</td>
<td>857</td>
<td>1,080</td>
<td>26.0%</td>
<td>2.3%</td>
<td>13</td>
<td>27.5% 1.8%</td>
</tr>
<tr>
<td>*-5</td>
<td>1,961</td>
<td>2,132</td>
<td>8.7%</td>
<td>0.8%</td>
<td>280</td>
<td>23.0% 1.5%</td>
</tr>
<tr>
<td>6</td>
<td>1,265</td>
<td>1,347</td>
<td>6.5%</td>
<td>0.6%</td>
<td>103</td>
<td>14.6% 1.0%</td>
</tr>
<tr>
<td>7</td>
<td>2,047</td>
<td>2,292</td>
<td>12.0%</td>
<td>1.1%</td>
<td>157</td>
<td>19.6% 1.3%</td>
</tr>
<tr>
<td>8</td>
<td>2,743</td>
<td>3,185</td>
<td>16.1%</td>
<td>1.5%</td>
<td>122</td>
<td>20.6% 1.3%</td>
</tr>
<tr>
<td>9</td>
<td>1,930</td>
<td>2,175</td>
<td>12.7%</td>
<td>1.2%</td>
<td>99</td>
<td>17.8% 1.2%</td>
</tr>
<tr>
<td>10</td>
<td>1,461</td>
<td>1,502</td>
<td>2.8%</td>
<td>0.3%</td>
<td>71</td>
<td>7.7% 0.5%</td>
</tr>
<tr>
<td>11</td>
<td>2,018</td>
<td>2,275</td>
<td>12.7%</td>
<td>1.2%</td>
<td>29</td>
<td>14.2% 1.0%</td>
</tr>
<tr>
<td>12</td>
<td>2,832</td>
<td>3,740</td>
<td>32.1%</td>
<td>2.8%</td>
<td>300</td>
<td>42.7% 2.6%</td>
</tr>
<tr>
<td>13.01</td>
<td>1,878</td>
<td>2,371</td>
<td>26.3%</td>
<td>2.4%</td>
<td>81</td>
<td>30.6% 1.9%</td>
</tr>
<tr>
<td>13.02</td>
<td>1,980</td>
<td>2,551</td>
<td>28.8%</td>
<td>2.6%</td>
<td>160</td>
<td>36.9% 2.3%</td>
</tr>
<tr>
<td>14</td>
<td>1,547</td>
<td>2,191</td>
<td>41.6%</td>
<td>3.5%</td>
<td>35</td>
<td>43.9% 2.6%</td>
</tr>
<tr>
<td>15</td>
<td>1,439</td>
<td>2,298</td>
<td>59.7%</td>
<td>4.8%</td>
<td>200</td>
<td>73.6% 4.0%</td>
</tr>
<tr>
<td>16</td>
<td>1,958</td>
<td>2,636</td>
<td>34.6%</td>
<td>3.0%</td>
<td>364</td>
<td>53.2% 3.1%</td>
</tr>
<tr>
<td>17</td>
<td>276</td>
<td>368</td>
<td>33.3%</td>
<td>2.9%</td>
<td>40</td>
<td>47.8% 2.8%</td>
</tr>
<tr>
<td>Total</td>
<td>33,466</td>
<td>41,319</td>
<td>23.5%</td>
<td>2.1%</td>
<td>2,631</td>
<td>31.3% 2.0%</td>
</tr>
</tbody>
</table>

AAGR: Average Annual Growth Rate

*Residential construction estimates based on Missoula City-County Health Department data and the Montana Department of Revenue Computer Assisted Mass Appraisal (CAMA) data.

**A 198 estimated residential units in the University of Montana’s Lewis and Clark Village were added to tract 5 between 2000-2004. University housing is included in the census housing units. However, because University property is not taxed, it does not show up in the assessor’s database.

If average household size in Missoula County remained constant from 2000 to 2020, an estimated 49,970 housing units would be required to house the 2020 population, an increase of 21% or an average of 433 additional units built each year. Since household size is expected to decrease, there will likely be a need for more homes than estimated. Additionally, there are indications that a need for diverse housing types will be required for Missoula County’s growing population and changing demographics. Over the past four years, residential housing development has averaged 650 new units each year.

According to the 2000 Census, 22.4% of the existing housing stock is relatively new, having been built between 1990 and 2000. However, more than a quarter (28.4%) of the housing stock in Missoula County was built prior to 1960. In 2005, the median age of homes in the City of Missoula was 43 years. Countywide the median age of homes was 31 years. The age of housing stock is important because lead-based paint, a health risk particularly to children, was commonly used in homes built prior to 1960.

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28 Montana Department of Commerce for Missoula County
HOUSING COSTS

According to the 2000 Census, 38,439 housing units were occupied in Missoula County. Of those, 23,795 (62%) were owner occupied and 14,644 (38%) were renter occupied.

Household income in Missoula County has not matched increases in housing costs. From 1990 to 2000, the median household income increased from $31,323 (adjusted for inflation in 2000 dollars) to $34,454, or by 10%. In contrast, the median value of a home in 1990 was $87,220 (adjusted for inflation in 2000 dollars) in Missoula County, while the 2000 Census indicates that the median home value was $136,500, an increase of 56.5%. From 1990 to 2000, housing costs increased more than five times the rate of income growth in Missoula County.

Housing costs continue to outpace household income. The 2004 median housing price was $159,900 which is an increase of over $10,000 since 2002 (when adjusted to 2000 dollars). In 2004, the average price for single-family homes in Missoula County grew 16.2%, well above the Statewide and national averages. Missoula County had the 54th highest ranking out of 245 metropolitan areas in the United States in terms of increases in housing prices in 2003.

A household is said to experience cost burden when its housing costs including utilities, exceed 30% of gross income. In Missoula County, the 2000 Census indicates that more than 25% of homeowners and almost 50% of renters spent more than a third of their income on housing (not including utilities). This is an increase from 1990 Census data, which showed 16.7% of homeowners and 44.4% of renters experiencing cost-burden in Missoula County.

An extremely low-income household in Missoula County (one earning about $14,000 or 30% of area median income-AMI) can afford monthly housing costs of no more than $360. In 2004, the Fair Market Rent for a two bedroom unit was $624 in Missoula County. A person earning minimum wage ($5.15 per hour) can afford no more than $268 for monthly housing costs without experiencing cost burden. In 2004, an individual in Missoula County would need to earn $12 an hour and work 40 hours a week in order to afford a two bedroom housing unit.

In comparison, the Fair Market Rent for a two bedroom unit in the State of Montana was $546 in 2004. An individual would need to earn $10.50 an hour and work 40 hours a week not to experience cost burden.

To address the shortage of affordable housing for many Missoula residents, the Missoula Housing Authority hopes to maximize the number of affordable units and increase the number of units available. Other community and nonprofit initiatives include:

- North Missoula Community Development Corporation's acquisition and development of a one acre site for 25 units intended for first time buyers;
- homeWORD's development of 35 multi-family Low Income Housing Tax Credit (LIHTC) rental units; and,
- District XI Human Resource Council, development of 30 units intended for first-time homebuyers.

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31 Missoula County Association of Realtors, 2005.
34 AMI is the Annual Median Income as defined by Housing and Urban Development (HUD).
35 National Low Income Housing Coalition, 2004. [www.nlihc.org](http://www.nlihc.org)
D. ECONOMIC CONDITIONS

ECONOMY
Missoula County serves western Montana’s growing population as the second largest trade and service center in the State (only the City of Billings ranks higher). The County has exceeded the State and national employment growth rates for some time and this trend is expected to continue. Most of Missoula’s recent growth occurred in trade center related activities such as health care, business, and professional services (including advertising, engineering, and similar services). Economic growth in Missoula County, as measured by projected percent change in non-farm labor income, is expected to continue to increase a total of 3% and 4% from 2005-2008.36

Most of Missoula County’s job growth is projected to be in the service sector. In terms of payroll jobs, the largest increases are projected for private education and health services, leisure and hospitality services, retail trade services, and professional and business services. For the goods production segment of the economy, construction is expected to add 100 jobs each year. However, the natural resources sector, which includes agriculture and forestry, is forecast for minimal to no growth, and manufacturing is forecast to decline.37

Although most of the land in Missoula County is classified as agricultural or timberland for tax purposes, these uses contribute relatively little to the County’s employment and income base. Compared to the economies of other Montana counties, Missoula ranked 52nd of 56 counties in the State for total agricultural receipts. Less than 1% of the County’s total net income is derived from raising livestock and crops.38

The most current employment and earnings data from 2003 indicate 20 fewer business and government establishments in Missoula County than in 2002, a decrease of .5%. However, overall jobs increased by 1,301 or 2.6%. Services, retail, and construction, along with government, added the most jobs. Table 9 shows the number of establishments and employment growth in Missoula County for all establishments.39

39 Montana Department of Labor and Industry, 2005. Employment and Earnings (ES-202/QCEW). The data that go into producing Quarterly Census of Employment and Wages (QCEW) numbers comes from employers covered by Montana unemployment insurance. This means that certain workers are not represented, including unpaid family workers, members of the armed forces, the self-employed, proprietors, domestic workers, and railroad workers covered by the railroad unemployment insurance system.
Table 9
Change in Missoula County Establishments and Employment
2002-2003

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Establishments</th>
<th>Average Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>Management of Companies</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Information</td>
<td>79</td>
<td>84</td>
</tr>
<tr>
<td>Administrative and Waste Services</td>
<td>213</td>
<td>201</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>171</td>
<td>159</td>
</tr>
<tr>
<td>Transportation, Warehousing + Utilities</td>
<td>153</td>
<td>143</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>92</td>
<td>91</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>425</td>
<td>424</td>
</tr>
<tr>
<td>Other Services</td>
<td>442</td>
<td>437</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>212</td>
<td>214</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>348</td>
<td>347</td>
</tr>
<tr>
<td>Government</td>
<td>122</td>
<td>124</td>
</tr>
<tr>
<td>FIRE**</td>
<td>407</td>
<td>405</td>
</tr>
<tr>
<td>Professional and Technical Services</td>
<td>439</td>
<td>454</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>547</td>
<td>540</td>
</tr>
<tr>
<td>Educational Services</td>
<td>53</td>
<td>54</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>108</td>
<td>115</td>
</tr>
<tr>
<td>Construction</td>
<td>506</td>
<td>504</td>
</tr>
<tr>
<td>**Total **</td>
<td>4,330</td>
<td>4,310</td>
</tr>
</tbody>
</table>

*Natural Resources include Agriculture, Forestry, Fishing, Hunting and Mining.
**FIRE includes Finance and Insurance plus the Real Estate Rental and Leasing sectors.
Source: Montana Department of Labor and Industry, 2005.

EMPLOYMENT
The number of non-farm jobs in Missoula County increased from 34,000 in 1990 to 49,900 in 2000. By 2004, there were an estimated 54,000 non-farm jobs in the County, an increase of 7% from 2000. In contrast, the population growth rate of 17% was less than half the percentage increase in jobs from 1990 to 2000.40

The civilian labor force increased from 43,476 in 1990 to 54,303 in 2000. Of that number, 52,536 were employed in 2000.41 The civilian labor force also rose from 54,303 in 2000 to approximately 59,277 in 2004. In 2004, 57,139 of the civilian labor force were employed.42 The average annual unemployment rate dropped from 6.0% in 1990 to 3.6% in 2004, according to the U.S. Department of Labor. The average annual State unemployment rate was 4.4% in 2004.43

41 US Department of Labor, Bureau of Labor Statistics, 2005. http://data.bls.gov/PDL/servlet/SurveyOutputServlet Civilian labor force is persons 16 years of age and older residing in Montana, who are not inmates of institutions (e.g., penal and mental facilities, homes for the aged), and who are not on active duty in the Armed Forces, who are classified as either employed or unemployed.
All private employment sectors, with the exception of manufacturing (-21%) and utilities (-18%), demonstrated growth between 1992 and 2002. The professional services grew the most during this time period at 92%, with the information and construction sectors experiencing the next highest growth at 77% and 65% respectively. Figure 5 shows the key industrial sectors for Missoula County based on percent of total employment in Missoula County.

**Figure 5**

Employment by Industrial Sector

Missoula County and Montana, 2002

As indicated above, health care, retail, services, and government jobs significantly contribute to the employment base in Missoula County. Company management, educational services (not including the University of Montana or K-12 public education), and the natural resource extraction sectors (agriculture, forestry/fishery, and mining) are minor employers. According to the Montana Department of Labor and Industry, the top 20 private industry employers for Missoula County based on third quarter 2004 data were as follows (listed in alphabetical order):

- Albertson’s
- Blackfoot Telephone Cooperative
- Community Medical Center
- Costco
- Good Food Store
- Jim Palmer Trucking
- Missoula Development Service Corp.
- Missoula Family YMCA
- Missoulian
- Opportunity Resources, Inc.
- Research Data Design
- Riverside Contracting
- Roseburg Forest Products
- St. Patrick Hospital
- Stimson Lumber Company
- Smurfit-Stone Container Corporation
- Village Health Care Center
- Wal-Mart
- Watkins and Shepard Trucking
- Western Montana Clinic

*Natural Resources include Agriculture, Forestry, Fishing, Hunting, & Mining.
**FIRE includes Finance and Insurance plus the Real Estate Rental and Leasing sectors.

PERSONAL INCOME

According to the Federal Bureau of Economic Analysis, the average per capita income for Missoula County was $26,823 in 2002 as compared to $17,312 in 1992, an average annual growth rate of 4.5%. In 2002, per capita income in Missoula County was 108% of the State average and 87% of the national per capita income. The median household income (the sum of income received by all household members 15 and over) in Missoula County in 2002 was $35,731 up from $23,388 in 1990; whereas the State median income in 2002 was $34,105.

There is a difference in the earning power between women and men in Missoula County, which is also reflected at the State level. In Missoula County the median earnings for male year-round workers is $31,605, whereas female workers on average earn 69% of the wage of male workers, or $21,720.

There are three primary sources of personal income: net earnings, transfer payments such as social security and welfare, and income from dividends, interest and rent. The distribution of income among these sources has changed over time for Missoula County and the State of Montana. Between 1972 and 2002, income from net earnings dropped from 77% to 67% of total income in the County, and from 75% to 62% in the State. During this 30-year period, income from transfer payments and from dividends, interest and rent both increased as a percentage of total income. As the baby boomer generation ages, the Missoula County economy may become less sensitive to shifts in certain employment areas. See Figure 6 for details on income sources for the State and Missoula County.

Figure 6
Personal Income by Source
1972-2002


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As shown in **Figure 7**, personal income in the County is primarily derived from the government, health care and social assistance, services (all sectors combined), and retail trade sectors.

**Figure 7**
Annual Income by Industrial Sector
Missoula County and Montana, 2002

*Natural Resources include Agriculture, Forestry, Fishing, Hunting & Mining.
**FIRE includes Finance and Insurance plus the Real Estate Rental and Leasing sectors.
Source: Montana Department of Labor and Industry, 2002

Although both employment and personal income in Missoula County are heavily concentrated in the retail trade, government, and numerous service sectors, Table 10 shows that the retail trade and service sectors, (especially hospitality) have some of the lowest average annual wages.
Table 10
2003 Average Annual Wage
Missoula County

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry</th>
<th>Average Annual Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Information</td>
<td>$38,064</td>
</tr>
<tr>
<td>2</td>
<td>Management of Companies</td>
<td>$37,801</td>
</tr>
<tr>
<td>3</td>
<td>Manufacturing</td>
<td>$37,396</td>
</tr>
<tr>
<td>4</td>
<td>Government</td>
<td>$35,569</td>
</tr>
<tr>
<td>5</td>
<td>FIRE**</td>
<td>$35,027</td>
</tr>
<tr>
<td>6</td>
<td>Health Care and Social Assistance</td>
<td>$34,559</td>
</tr>
<tr>
<td>7</td>
<td>Professional and Technical Services</td>
<td>$34,506</td>
</tr>
<tr>
<td>8</td>
<td>Utilities</td>
<td>$33,717</td>
</tr>
<tr>
<td>9</td>
<td>Wholesale Trade</td>
<td>$33,040</td>
</tr>
<tr>
<td>10</td>
<td>Natural Resources*</td>
<td>$31,705</td>
</tr>
<tr>
<td>11</td>
<td>Construction</td>
<td>$31,043</td>
</tr>
<tr>
<td>12</td>
<td>Administrative and Waste Services</td>
<td>$21,328</td>
</tr>
<tr>
<td>13</td>
<td>Retail Trade</td>
<td>$20,152</td>
</tr>
<tr>
<td>14</td>
<td>Other Services</td>
<td>$19,405</td>
</tr>
<tr>
<td>15</td>
<td>Educational Services</td>
<td>$17,198</td>
</tr>
<tr>
<td>16</td>
<td>Arts, Entertainment, and Recreation</td>
<td>$12,101</td>
</tr>
<tr>
<td>17</td>
<td>Accommodation and Food Services</td>
<td>$10,440</td>
</tr>
<tr>
<td></td>
<td>Average for all Industrial Sectors</td>
<td>$28,082</td>
</tr>
</tbody>
</table>

*Natural Resources include Agriculture, Forestry, Fishing, Hunting & Mining.
**FIRE includes Finance and Insurance plus the Real Estate Rental and Leasing sectors.

POVERTY RATE
In 2000, the Missoula County poverty rate was 14.6% (similar to the State poverty rate of 14.8%). The poverty rate declined for both Missoula County and the State since 1990 when the County poverty rate was 17% and the State poverty rate was 16.1%. In Missoula County, the poverty rate for children under 18 years decreased from 19.1% in 1990 to 15% in 2000. The poverty rate for children in the State as a whole was 18.7% in 2000. However, the poverty rate remains disproportionately high for children and families with a female head of household in both Missoula County and the State at 29.5% and 33.2% respectively. The County poverty rate for persons over 65 years of age decreased from 10.7% in 1990 to 9.1% in 2000. In 2000, the State’s poverty rate for persons over 65 years of age was 8.2%. In 2004, 17% of households in the Missoula metropolitan area had very low incomes, defined for a 4-person household as $13,450 or less.

E. LOCAL SERVICES

LAW ENFORCEMENT
The Missoula County Sheriff’s Office and the Missoula City Police Department are the primary law enforcement agencies within the county. The Montana Highway Patrol maintains traffic enforcement and accident investigation on state highways and areas.

47 U.S. Census Bureau, 2000.
outside the city limits. In the Flathead Reservation portion of the County, Tribal Police also have law enforcement capabilities. Other government agencies have enforcement authority over such activities as fishing, hunting, boating, recreational and other uses of state and federal lands, etc. Some of these agencies with offices in Missoula County include: Montana Fish, Wildlife & Parks; Lolo National Forest; Northern Region Headquarters of the USDA Forest Service; United States Bureau of Land Management; and U.S. Fish & Wildlife Service. Tribal game wardens, most of whom are cross-deputized with the State, enforce Tribal and joint Tribal-State hunting and fishing regulations. Tribal officers also enforce federal wildlife conservation laws within and adjacent to Flathead Reservation.

MISSOULA COUNTY SHERIFF’S DEPARTMENT
The Sheriff’s Office is responsible for the investigation and enforcement of criminal and traffic laws throughout Missoula County, although its primary efforts are concentrated outside the incorporated limits of the City of Missoula. In addition to traditional law enforcement, the Missoula County Sheriff serves as coroner, handles registration of violent and sexual offenders, and administers the county jail.\(^49\) The Sheriff’s Office also serves civil papers, administers the countywide misdemeanor and felony warrant program, administers the abandoned vehicle program, and assists in programs such as fingerprinting and photographing children for identification purposes.\(^50\) The Department also has management and operational responsibilities for a wide variety of disasters and emergencies.

The Missoula County Sheriff’s Department is the largest sheriff’s department in the state.\(^51\) The Department has 47 full time officers and employs other part-time officers as necessary. The department also maintains a reserve deputy force, a search and rescue unit, and a small cadet unit. The County Detention Facility employs 97 detention/correction officers and a support staff of about 32, all of whom are also employees of the Sheriff’s Department. Based on 2000 Census data, the Sheriff’s Department estimates a shortfall of at least five officers to serve the population.\(^52\)

MISSOULA POLICE DEPARTMENT
The primary responsibility of the Missoula Police Department is to provide law enforcement within the city limits of Missoula. In addition to its immediate jurisdiction, the department also provides back-up services for the Missoula County Sheriff’s Office and collaborates with the Sheriff’s Department to provide certain services. For example, the Sheriff’s Department and the Missoula City Police Department jointly maintain Explosive Ordinance Disposal and Hostage Negotiations teams. The Missoula Police Department employs 96 sworn personnel and 23 civilians.\(^53\) The department has three divisions: Administrative, Detective, and Patrol.

CALLS FOR SERVICE
Calls for Service (CFS) include all phone calls made to 9-1-1. Each 9-1-1 call is added to previous calls and given a CFS number. The CFS number is used to track the call itself and the aggregate number of calls made to 9-1-1.

The Missoula County Sheriff’s Department experienced an average annual increase of 1% in 9-1-1 calls from 1995 to 2004. The number of emergency 9-1-1 calls to the Sheriff’s Department (including traffic stops) rose from 25,244 in 1996 to 30,169 in 2002, and then

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\(^{49}\) Missoula County, 2005. [http://www.co.missoula.mt.us](http://www.co.missoula.mt.us)

\(^{50}\) Missoula County Sheriff’s Department, 2002.

\(^{51}\) Missoula County Sheriff’s Department, 2002.

\(^{52}\) Missoula County Sheriff’s Department, 2002.

\(^{53}\) City of Missoula, 2005. [http://www.ci.missoula.mt.us](http://www.ci.missoula.mt.us)
decreased to 27,778 in 2004. The average rate of Calls for Service was less than the population growth rate from 1995 to 2004.\textsuperscript{54}

Since 1996, the City of Missoula Police Department has experienced an average annual increase in Calls for Service of 2\%, from 36,718 in 1996 to 37,398 in 2004. The population has increased at a greater rate than Calls for Service.

Increases in the number of Calls for Service place additional demand on law enforcement agencies to respond. However, average response times for calls have decreased slightly in recent years for both the City Police Department and the Sheriff’s Department. Response times can be related to several factors including urgency, distance traveled to emergency, or number of available officers. The City Police Department responds in less than 3 minutes for in-progress crimes and 30 minutes or less for non-emergency events.\textsuperscript{55} Average response times for the Sheriff’s Department for in-progress crimes are estimated at 15-20 minutes.\textsuperscript{56} The City’s response times are generally several minutes lower than the Sheriff’s Department, reflecting the smaller area of jurisdiction.

**REPORTED CRIME**

The number of reported crimes in Missoula County increased slightly from 1990 to 2000. Aggravated assaults increased the most, by 131\% between 1991 and 1999.\textsuperscript{57} From 1990 to 2000, the number of total arrests in the County increased by 28.6\%.

Crime Victims Advocates (CVA) are available in both the City and the County to provide legal advocacy to victims of violent personal crime. In general, civil and legal advocacy services are provided to victims who seek short-term crisis response. The CVA Program also coordinates the Pro Bono Attorney Project in which volunteer attorneys provide representation for Order of Protection Petitioners during hearings in Missoula County when the petition is based on domestic violence. In 2004, the CVA program provided services to 1,432 crime victims, including 732 victims of domestic violence.

**FIRE PROTECTION**

The Missoula County Fire Protection Association (MCFPA) is a voluntary, non-profit association of fire professionals attentive to fire safety and natural resource issues in western Montana.\textsuperscript{58} Association membership includes all fire organizations in the County: Clinton Rural Fire District, East Missoula Rural Fire District, Florence Rural Fire District, Frenchtown Rural Fire District, Arlee Rural Fire District, Missoula Rural Fire District, Missoula City Fire Department, Greenough-Potomac Fire Service Agency, Seeley Lake Rural Fire District, Lolo National Forest, and Montana Department of Natural Resources and Conservation.\textsuperscript{59} Map 4 shows the fire jurisdictions throughout the County.

The City Fire Department and the Missoula Rural Fire District, which also provide emergency medical services, serve most of the urban area. There are also areas without fire services that are served by the Sheriff’s Department. However, the agency closest to the fire responds at the request of the Sheriff. The Tribes also have a Fire Control Division that works with federal, state, and local agencies on wildland fires.

\textsuperscript{54} 9-1-1 Center Statistics and Missoula County Sheriff’s Department, 2005.
\textsuperscript{55} Missoula Police Department, 2005.
\textsuperscript{56} County Information Services and Missoula County Sheriff’s Department, 2002.
\textsuperscript{57} Missoula Measures, 2005. \url{http://www.co.missoula.mt.us/measures}
\textsuperscript{58} MCFPA, 2005. \url{http://www.mcfpa.org}
\textsuperscript{59} Missoula Urban Comprehensive Plan Update, 1998.
Wildland firefighting is coordinated by federal, state, and local agencies that exchange leadership roles depending on the location of an event. Public safety officials and land managers have concerns about the ability of these agencies to provide adequate fire and emergency services in wildland-urban interface areas (WUI). These are areas where residential uses, located near natural vegetative cover, create high fire danger. Constricted access routes in narrow drainages and elements such as slope, lack of water supply, access, density, and structural type also contribute to the problem. WUI development has occurred in much of Missoula County on private land.

Figure 8 shows recent trends in the number of fire and medical responses in Missoula County.

![Figure 8](image)

**Figure 8**

*Figure 8 shows recent trends in the number of fire and medical responses in Missoula County.*

Emergency response times for fire and medical calls in Missoula County increased during the late 1990s but have decreased in the last several years. Changes in response times are the result of many factors including increased call volumes, population and traffic congestion, increased distance traveled to the site of the emergency, number of wildland fires (particularly in WUI areas), and non-traditional responses such as HazMat, special rescue, or public service type calls.

The fire districts in Missoula County use a variety of factors when determining need for additional resources due to growth. The most significant factors are population density for residential areas and hazard potential for commercial and industrial areas.

**COMMUNITY DEVELOPMENT AND HUMAN SERVICES**

The City and County support a variety of programs that address community development needs and human services. In addition to basic needs such as food, shelter, clothing, transportation, child care, safety, and medical care, programs providing homebuyer assistance, jobs, and assistance with infrastructure costs are available to the indigent and to low and moderate income households. Households are considered moderate-income if they have incomes at or below 80% of the Area Median Income (AMI) as defined by the U.S. Census.

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60 Missoula Rural Fire District, 2002.
Department of Housing and Urban Development (HUD). In Missoula County, the 2005 Area Median Income is $53,500 for a four person household, and a moderate-income four person household earns $42,800 per year. 61

Many services are organized in collaborative structures such as the At-Risk Housing Coalition (ARHC), Missoula Forum for Children and Youth, the Family Violence Council, and the Basic Needs Assistance Program, with individual non-profit agencies providing services. The Crime Victim Advocate Program is administered by the Missoula Office of Planning and Grants (OPG).

The tribes also administer multiple human service programs for eligible Indian and low-income applicants in Missoula County, including welfare assistance, crime victim advocacy, commodities distribution, housing, transportation, childcare and medical services.

HOUSING/SHELTER
Missoula’s strategy to address homelessness is based on the Continuum of Care (CoC) approach required by HUD for communities seeking homeless assistance funds. Missoula’s strategy was developed, and is implemented and coordinated by, ARHC an ongoing formal task force comprised of representatives of health and human service agencies and City and County governmental agencies. Office of Planning and Grants (OPG) guides the work of ARHC by providing staff time, coordination, and clerical support. Agencies providing shelter for the homeless include the Poverello Center, Salvation Army, and YWCA. 62

As part of a statewide effort, Missoula County conducts biennial, single-point-in-time counts of homeless individuals and families. A survey conducted in January 2005 counted 295 homeless individuals, including 160 single adults and another 61 adults with 74 children. These numbers are considered to be a low estimate because a new State system used to count the surveys discarded those considered incomplete or otherwise flawed. According to this survey, Missoula has 18% of the State’s homeless individuals and 28% of beds available in the State for the homeless, including 115 emergency shelter beds, 166 transitional housing beds and 90 Permanent Supportive Housing beds. As of January 2005 the unsheltered rate in Missoula was 8%.

People who are homeless in Missoula do not have easy access to shelter, transitional housing or subsidized housing. Homeless individuals and families who qualify for subsidized housing because of income or disability could wait up to two years for a voucher or unit.

Transitional housing for homeless families and special populations are provided by the YWCA, the Poverello Center’s Joseph Residence, Mountain Home of Montana for Parenting and Pregnant Teens, Western Montana Mental Health Center’s SHARE House for homeless adults with addictions, and the Carole A. Graham Homes for chemically dependent individuals and their children. A total of 46 units or spaces in group facilities were available as of the end of 2004.

As of November 2003 Missoula County had 1400 permanent, below-market housing units to assist low-income populations, seniors, and people with mental illness and physical disabilities. However, there continues to be a shortage of affordable housing for all eligible populations. In 2004 the Missoula Housing Authority had 726 individuals on its public

61 HUD Income Limits for Missoula County, 2005.
housing waiting list, 838 on its Housing Choice Vouchers list, and 65 waiting for Shelter Plus Care.

Households at or below 80% of Area Median Income are generally unable to purchase affordable, safe, decent housing without assistance. Subsidy programs offering down payment and closing cost assistance are provided by the City and County of Missoula primarily through the City and State administered CDBG Entitlement Program, and HOME Participating Jurisdiction Programs. OPG often collaborates with local non-profit organizations to administer these funds. To prevent a financial hardship to all households, infrastructure projects such as sewer and sidewalk installation often require substantial grant assistance and low-interest loans.

FOOD
Several agencies including the Missoula Food Bank, Garden City Harvest, Poverello Center, Joseph Residence, Missoula Aging Services, and Salvation Army provide food or meals to individuals and families in need. In FY2006 the Missoula Food Bank anticipates providing a three-day supply of food to more than 35,000 individuals from distribution centers in Missoula, Frenchtown and Potomac. In FY2005 Garden City Harvest produced and distributed approximately 30,000 pounds of produce to the Food Bank and Poverello Center.

The Women, Infant and Children’s (WIC) Program is a federal program that safeguards the health of low-income women, infants and children up to age five who are at nutritional risk. Approximately 60% of eligible households, or 2,600 clients per month, receive nutritious foods, information on healthy eating, and referrals to health care.

During the nine month period from July 1, 2004 to March 31, 2005 the Poverello Center provided 71,409 meals to single individuals and families with children. The Joseph Residence provided 19,715 meals to 37 families with children.

In FY 2005, Missoula Aging Services Meals on Wheels program anticipated delivering 80,377 meals to 422 homebound seniors and individuals with disabilities, 88% of whom were low to moderate income. In the first nine months of FY2005, 713 seniors participated in the agency’s Senior Diner Club program, which offers discount coupons to mostly low-income seniors for use at local restaurants and senior centers, and replaced the previous “congregate dining” model.

Prior to 1998, the Food Stamp Program in Missoula County averaged 3,500 cases or households per year. This number dropped after 1998 to 2,700 households per year. As of April 2005 the current caseload was 3,816 households or between 7,800 and 8,000 individuals. Approximately 50% of eligible Missoula County residents use the Food Stamp Program. More than 1/3 of Missoulians who receive food stamps are employed.

SPECIALIZED TRANSPORTATION
The Missoula Urban Transportation District (MUTD), Missoula Development Service Corp. (MDSC), and Opportunity Resources, Inc. (ORI) provide specialized transportation services for seniors and persons with disabilities to their places of employment, medical appointments, shopping, church, and other destinations. In FY2004, MUTD provided 19,086 rides. Based on the number of rides through March 2005, the anticipated number of rides in FY2005 will exceed 20,000. ORI provides approximately 80,000 rides per month, most of which are ORI clients traveling to and from work.63 Both agencies anticipate increased demand for their services.

63 A trip consisting of stops at the doctor, the store and then home is considered three rides.
YOUTH SERVICES
The Missoula Forum for Children and Youth was developed by community leaders who recognized the need for a better infrastructure to link, coordinate, and build community-wide efforts to prevent at-risk behaviors and promote positive development of Missoula’s youth. Formally established in 1996, and staffed by OPG, the Forum creates an environment for youth, families, and service providers to come together in a collaborative, proactive way to formulate a unified vision for prevention planning and program implementation.

HEALTH CARE
Missoula is a regional medical center for western Montana. The County has two hospitals: Community Medical Center and St. Patrick Hospital and Health Sciences Center. Community Medical Center serves almost 6,000 patients annually and is licensed for 146 acute-care beds. 64 St. Patrick Hospital served 9,705 patients in 2003 and is licensed for 195 acute-care beds. 65 These two hospitals, affiliated clinics, and specialty health centers, such as St. Patrick’s International Heart Institute of Montana, serve residents within Missoula County, as well as residents in several surrounding counties.

Partnership Health Center (PHC) provides primary health care services, including dental, mental health, and pharmacy, both on-site and by referral. PHC serves Missoula’s indigent and low and moderate income populations, uninsured and underinsured, workers, and homeless individuals and families. As a community health center, PHC relies heavily on funding from federal and local government.

EDUCATION
Public education is provided by thirteen school districts located throughout the City and County, each with its own governing board. Of the 13 elementary school districts in the County, one elementary district is part of a unified high school district, and one is part of a K-12 district. These district boundaries are illustrated in Maps 5 and 6. The Frenchtown High School District is part of a K-12 district. The other secondary district is part of Missoula Unified School District No. 1.

In October 2004, there were 13,259 students enrolled in public schools who were Missoula County residents. 66 An additional 183 high school students and 337 elementary students attended joint districts located outside of the County. These three joint districts are Arlee (Lake County), Alberton (Mineral County), and Florence-Carlton (Ravalli County). In 2004, 247 students were enrolled in home school programs and 1,173 in private schools. 67 As shown in Figure 9, Missoula County and Montana have experienced decreases in public school enrollment since the 1993 school year. From 1990 to 1993, public school enrollment rose from 13,469 to 14,524. However, from 1993 to 2004, public school enrollment declined to 13,259 students. In contrast, enrollment has continued to grow at the national level, although at declining rates. Generally, enrollment losses have been less extreme in Missoula County than in the rest of the State.

64 Community Medical Center, 2005. http://www.communitymed.org
67 ibid
Figure 9
Percent Change in Public School Enrollment, 1991-92 to 2004-05


Total enrollment within the elementary school districts in the County decreased from 10,585 in 1993 to 8,893 in 2004, a decrease of 15.9%. As a consequence, Mount Jumbo School in East Missoula and Prescott School in the Rattlesnake were closed and combined into a K-5 school, and the former Rattlesnake Middle School was converted to a K-5 school in 2004. Secondary public school enrollment levels rose from 3,581 in 1990 to 4,482 in 2001 and then slightly dropped in 2004 to 4,366. Figure 10 shows elementary, secondary, and total enrollment levels for public schools in Missoula County for the 1990-91 and 2004-2005 school years.\(^{68}\) Totals do not include joint district enrollment.

\(^{68}\) Missoula County Superintendent of Schools, 2005. [http://www.co.missoula.mt.us/supschools](http://www.co.missoula.mt.us/supschools)
Figure 10
Public School Enrollment for Missoula County, 1990-91 to 2004-05

Source: Missoula County Superintendent of Schools, 2005.

HOME AND PRIVATE SCHOOLS
Both home and private school enrollment have fluctuated since 1990 but aggregately rose over time. In 1990, 84 students were enrolled in home school. By 2004, 247 students were enrolled. Private school enrollment was 1,181 in 1990 and 1,173 in 2004. The number of students in private schools or home school continues to remain a small percentage (9.6%) of the overall student-age population.

LIBRARIES AND MUSEUMS
LIBRARIES
The purpose of the Missoula Public Library and its branches is to strive to provide the programs, materials, and services that meet the informational, cultural, recreational, and educational needs of the Library's service area population. The Missoula Public Library contains over 225,000 volumes and receives over 350,000 patron visits per year. In addition to its primary location in Missoula, the library has branches located in Seeley Lake and Condon. In May 2004, the library started a Partner program with four other libraries in western Montana. Currently there are six participating libraries with an exchange of over 3,000 volumes a month, effectively doubling the amount of materials available to patrons.

Missoula County voters approved a 3.5-mill levy increase for the library in November 2000, which nearly doubled the Library’s materials budget, and allowed for increased open hours on Sundays as well as the hiring of several new staff members. Annual circulation increased to 802,216 in 2004, or by roughly 40% since 2002. Compared to the six other large library systems in the state, Missoula ranks at the top in the number of borrowers per capita, collection size per capita, and items circulated per capita.

69 Missoula County Superintendent of Schools, 2005.
71 Missoula Public Library, 2005.
72 Missoula Public Library, 2002.
The Mansfield Library at the University of Montana contributes significantly to the library resources within Missoula County. In addition to its extensive literature collection, the library offers many special collections and services to the community.

**MUSEUMS**

Missoula County has a number of museums that reflect both current and historical aspects of the community. Most museums are located in and around the City of Missoula. Museums that receive local government funding include the Missoula Art Museum and the Historical Museum at Fort Missoula. In January 2005, the Art Museum embarked on a renovation of the historic Carnegie Library Building, which houses its collections. Completion is expected in 2006. Over half of the money for the renovation has been raised from private donations. In 2002, the Historic Museum at Fort Missoula was successful in getting a permissive tax mill levy of 2 mills passed to fund basic operations.

**UTILITIES**

**WATER**

Drinking water for 80% of Missoula County residents is supplied from groundwater in the Missoula Valley aquifer, which has been designated a sole source aquifer. Mountain Water Company owns and operates the drinking water system serving the majority of the urban area and East Missoula. Mountain Water Company is a private, investor-owned utility (whose parent company is Park Water of California) with regulatory oversight by the Montana Public Service Commission and the Montana State Department of Environmental Quality. The system relies on 37 wells drawing from the Missoula Valley aquifer. The water receives no treatment except for chlorination before distribution. Mountain Water Company also operates the Rattlesnake Creek surface supply as an emergency backup supply and future resource if needed.

Missoula County owns and operates four water systems including the Lolo, El Mar/New Meadows, Sunset West, and Lewis and Clark systems. The Confederated Salish and Kootenai Tribes maintain two community water systems in Missoula County. There are additional public water systems (PWS) within and outside the urban area, providing drinking water. The number of new private wells within Missoula County over the past ten years is approximately 3,820.73

**SOLID WASTE**

Allied Waste Services (ALS), formerly Browning Ferris Industries (BFI), operates the landfill serving Missoula County. The landfill has sufficient capacity for the next 15 years. As landfill capacity is reached, ALS will pursue one of the following three options: a reengineering of the current facility to increase capacity, the purchase of additional land to accommodate future solid waste, or the construction of a transfer facility.74

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73 Missoula County Health Department, 2005.
74 Browning Ferris Industries, 2005.
ELECTRICITY AND NATURAL GAS
Two companies provide most electric service in the City and County: Northwestern Energy Company (formerly Montana Power Company) and the Missoula Electric Cooperative (MEC). Additionally, the Tribes manage Mission Valley Power, which also serves the area of the County within the Flathead Reservation boundary. Natural gas service is provided only by Northwestern Energy and is generally less available outside the City. The primary limitation on extension of either gas or electricity is that of cost to a developer and eventually the consumer. Ability to obtain the necessary easements is also a consideration.75 Bonneville Power Company, Northwestern Power Company, and Yellowstone Pipeline Company operate transmission lines and gas pipelines that cross the County.

TELEPHONE SERVICE
Qwest, Blackfoot Telephone Cooperative, and Clark Fork Telecommunications provide telecommunication services within the County. Long distance service is available from a variety of sources. Cellular and digital telecommunications are available throughout the County; however, due to terrain, there are areas that experience problems with these services. Digital Subscriber Lines (DSL) are also available.

CABLE TELEVISION
Cable television service is available throughout the City and outlying areas but is generally less available in the more rural portions of the County. Satellite systems are also being used more frequently for television reception both in the more remote areas of the County as well as in the City.

F. PUBLIC FACILITIES

SEWER
The City of Missoula is the primary provider of sewer service within the urban area. An upgrade to the facility was completed in the fall of 2004, increasing the capacity from 9 million gallons per day (mgd) to 12 mgd and upgrading the level of water treatment. At the current population growth rate, this capacity is expected to be sufficient for 10 years.

Approximately 25,000 residential units had been connected to city sewer by 2004.76 Several community systems have been connected to city sewer in the past 15 years. Most recently, the Golden West and El Mar wastewater facilities were connected to the city system. The 1999 Wastewater Facilities Plan Update identifies a sewer service area where extension of sewer service is anticipated within the next 20 years. This area was updated in 2004 and is depicted in Map 7. Sewer collection systems were recently extended to East Missoula and the Mullan Road Area. Plans are being developed to extend sewer collection systems in the Rattlesnake, the Wye intersection of Highway 93 and Interstate 90, McCauley Butte, and west of Reserve Street south of the Clark Fork River.

In Lolo, the Missoula County Department of Public Works operates and maintains the sanitary sewer system and wastewater treatment plant located in the northeast end of Lolo, adjacent to the Bitterroot River. In 2004, the Lolo sewer and wastewater treatment plant was upgraded to accept 250,000 gallons per day. No improvements in treatment performance resulted from the upgrade. In 2005, the facility was licensed to accept 340,000 gallons per day. In 2004, the daily average was 207,855 gallons per day with approximately

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76 Missoula County Health Department, 2004.
1,030 connections. Proposed subdivisions will increase load to the plant by approximately 25-30% with over 250 new connections.

The Seeley Lake Sewer District is moving forward with Phase 1 of a wastewater project that will provide sewer treatment to a portion of Seeley Lake encompassing dense residential and commercial areas. The County applied for and received planning grant funds for the planning phase of the project and will apply for additional funding to move forward with Phase 1. Future phases will provide sewer service to adjacent areas of the town.

Areas without community sewer systems are served by community or individual septic systems. City, State and County Health Code Regulations require one acre of land per conventional residential septic system, unless a public water supply is provided, in which case lot size may be as small as 20,000 square feet. One acre ensures adequate space for a septic system, wells, and improvements on each parcel. It also limits the density of septic systems and the amount of sewage discharged to groundwater.

In order to meet water quality protection goals, there has been an effort to increase the number of connections to sewer. In Missoula County, between 1997 and 2004, 4,025 new residential units on 2,209 parcels were connected to sewer. The net reduction of septic use is summarized in Table 11.

<table>
<thead>
<tr>
<th>Table 11</th>
<th>Change in Residential Sewer Status Within The Missoula Wastewater Treatment Plant Service Area, 1997-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Units</strong></td>
<td><strong>Parcels</strong></td>
</tr>
<tr>
<td>Existing Septic Systems Connected to Sewer</td>
<td>1,828</td>
</tr>
<tr>
<td>New Development on Septic</td>
<td>396</td>
</tr>
<tr>
<td>Net Reduction of Residential Units on Septic</td>
<td>1,432</td>
</tr>
</tbody>
</table>

Source: Missoula County Health Department, 2005.

**TRANSPORTATION**

Missoula County’s transportation network includes street, bicycle, pedestrian, other non-motorized, and public transportation systems. Federal law requires all urbanized areas in the United States with a population of 50,000 or more to have a Long Range Transportation Plan in order to qualify for federal funding for transportation improvements. The most recent Transportation Plan Update was adopted in May of 2004. The Study Area for the 2004 Missoula Urban Transportation Plan Update is bounded by Bonner to the east, Lolo to the south, Mullan Road and the Clark Fork River to the west, and just south of Evaro to the north. The Plan considers the social, engineering, environmental, energy and economic factors that determine regional transportation goals. It also includes strategies and actions that lead to short term and long range planning for the development of an integrated and intermodal transportation system. The Plan includes a detailed list of Committed Projects that have been discussed publicly through long range planning or annual budget discussions, Recommended Plan Projects that address an identified need within a 20-year planning period (through 2025), and Unfunded or Illustrative Projects to address improvement needs that are in excess of the projected budget. Projected project funds

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77 Figures were not available for 2005.
78 Missoula County Health Department, 2005.
79 Missoula County Health Department, 2005.
80 23 USC 134(b)(1).
available for regional improvements include $180 million during the 20-year planning period.  

The Salish and Kootenai Tribes also adopted a ten-year Transportation Plan in 1997 that describes the entire transportation network on the Flathead Reservation and plans for improvement. They also have worked with the Montana Department of Transportation and the Federal Highway Administration through a Memorandum of Agreement (MOA) to improve Highway 93 from Evaro to Polson. In implementing this MOA, the Tribes helped develop the U.S. Highway 93 Access Classification Plan Evaro to Polson, 1999. Construction work is in progress.

**ROADS**

Roads in Missoula County are maintained by the County, the City, Montana Department of Transportation, and private landowners. There are also roads on state or federal lands maintained by the managing agency.

Missoula County maintains approximately 800 miles of paved and unpaved roads, and approximately 150 public bridges, including those within the city limits. The City of Missoula maintains 291 miles of streets, 54 miles of alleys, and 2.9 miles of Interstate. The Montana Department of Transportation maintains 55 miles of Interstate, 53 miles of primary highways, 36 miles of secondary highways, and 47 miles of urban road. The Tribes maintain Tribal and Bureau of Indian Affairs roads located on a portion of the Flathead Reservation in Missoula County.

The Forest Highway Program provides access to and through National Forest System lands for visitors, recreationists, resource users, and others. Forest Highway routes are designated according to the Federal Forest Land Highways Act. Petty Creek Road is the only Forest Highway designated in Missoula County. The 29.5 mile road runs between Interstate 90 and Highway 12 and is not presently paved; paving is being considered through the Forest Highway Program. Paving would increase accessibility and could lead to increased residential development. Additional impacts could include an increase in wildlife-human conflicts and losses in wildlife, fisheries, and natural resources due to land development, traffic, and human activity.

**TRAFFIC VOLUME**

Traffic volumes are periodically monitored at 324 locations within the Transportation Plan Study Area. According to the 2004 Missoula Urban Transportation Plan Update, serious capacity deficiencies exist in eight locations, primarily on the west side of the city, and minor capacity deficiencies exist in nine locations.

Vehicles miles traveled (VMT) have increased 1.5 to 2 times faster than the population. In 2000, estimated VMT in the urban area exceeded 1.38 million miles per day. Projected VMT in 2025 will exceed 2.1 million miles per day, an increase of about 52%. This increase means that forecasted daily traffic volumes in Missoula will approach or exceed the acceptable corridor capacities by 2025. In turn, costs for maintenance, construction, and environmental impacts associated with traffic growth will increase faster than available revenue.

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Traffic increases are being mitigated through increased use of alternative transportation, such as public transportation, ride-share, or non-motorized travel. However, without additional revenue for traffic mitigation efforts, Missoula will exceed the acceptable corridor capacities by 2025.

Transportation Demand Management (TDM) is a general term for strategies that provide more efficient transportation. It includes transportation actions that reduce motorized travel and the number of people driving alone by increasing non-motorized travel, the use of transit, and ridesharing. Missoula in Motion, an interagency consortium, oversees TDM in Missoula and coordinates an employers-implemented program that offers incentives to employees for using alternative forms of transportation to commute to work.

PUBLIC TRANSPORTATION
The Missoula Urban Transportation District (MUTD) was established in 1976. Mountain Line, MUTD’s transit system, began operation in December 1977. Mountain Line operates 12 fixed routes, including a Farmers’ Market Trolley on Saturdays during spring, summer and fall. From 1993 to 2002, the number of passenger trips has increased from 2 to 10 percent each year.\(^8^4\) Fixed route ridership in 2001 was 700,135 or 10.6 rides per capita per year.\(^8^5\) Currently, Mountain Line operates within a 36 square mile area, serving Missoula, East Missoula, Bonner, Target Range, the Rattlesnake, and Mullan Road. Five paratransit buses carry an average of 1500 passengers each month. The University of Montana offers a Park n’ Ride program from South Higgins to the University area and uses bio-diesel buses for some of its fleet.

Vanpools are coordinated by Missoula Ravalli Transportation Management Association (MRTMA), with service into Missoula from Hamilton, Stevensville, Alberton, Arlee, and Ronan, each with several stops along the way into Missoula. The vanpool program operates eight vanpools with 100 riders on a regular basis. Vanpools reduced VMT by 15,602,556 miles between August 1997 and December 2004, which in turn reduced emissions by 475.09 tons. MRTMA also coordinates 61 registered carpools.\(^8^6\)

NON-MOTORIZED TRANSPORTATION
The community benefits in several ways when alternatives to motorized vehicles are strengthened.\(^8^7\) Non-motorized transportation includes a reduction in fuel consumption, pollution, traffic congestion, and wear on roadways.\(^8^8\) Non-motorized transportation planning in Missoula County is guided by the City and County’s 2001 Non-Motorized Transportation Plan and various project planning programs.

Of the 280 miles of city streets, 44% have sidewalks. Each year the city replaces 3 to 5 percent of the sidewalks and installs an additional 240,000 square feet through new developments or city projects. More than 23 miles of bicycle lanes and routes exist in the city’s arterial and collector road system. Several miles of off-street trails were built as part of the Bicycle Commuter Network. The California Street Bridge and Northside Crossing over the railroad tracks were constructed for non-motorized use and a new Madison Street Pedestrian Bridge is being developed. In 2004, Missoula County renovated the foot bridge to the University of Montana. Many smaller improvements, including the creation of bike

\(^{85}\) MUTD Comprehensive Operations Analysis (Final Report), 2003.
\(^{86}\) Missoula Ravalli Transport Management Association, 2005.
\(^{87}\) City Engineering, 2005.
lanes, improvements to the Bitterroot Branch Trail System, and the extension of the Milwaukee Trail from Russell to Reserve Street are in the works as committed projects.

Major walkway installations are planned for South Avenue between Grant and Clark Streets; Cooley, Scott, and Waverly Streets; Cedar, California/Hillsdale, and along Hickory, Cottonwood, and River Streets. A separated multi-use path was constructed between Lolo and Florence along Highway 93 South and another is planned in Lolo from Highway 12 to Ridgeway. A two-mile separated path has been partially completed for Frenchtown along the I-90 frontage road. The remaining sections will be built by developers.

According to the Transportation Plan Update, the urban area has seen increased use of alternative transportation in work trips with a corresponding decrease in the percentage of people driving alone to work. See Table 12 for the 2000 Mode Split for Missoula County.

Table 12
2000 Mode Split for Missoula County
(Home to Work Trips Only)

<table>
<thead>
<tr>
<th>Mode</th>
<th>Daily Trips</th>
<th>Percent of Total</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto (Drive Alone)</td>
<td>27,520</td>
<td>75.6%</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Carpool</td>
<td>3,740</td>
<td>10.3%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Transit</td>
<td>390</td>
<td>1.1%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Walk/Bicycle</td>
<td>3,010</td>
<td>8.3%</td>
<td>9.9%</td>
</tr>
<tr>
<td>Motorcycle/Other</td>
<td>360</td>
<td>1.0%</td>
<td>-26.3%</td>
</tr>
<tr>
<td>Worked at Home</td>
<td>1,400</td>
<td>3.8%</td>
<td>17.8%</td>
</tr>
<tr>
<td>Total</td>
<td>36,420</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Work trips reflect approximately 25% of the county trip table. Source: Census Transportation Planning Package Information

AIRPORT
Air service is provided at Missoula International Airport (Johnson-Bell Field), four miles northwest of downtown Missoula and operated by the Missoula County Airport Authority. Approximately 39% of air traffic is for local general aviation purposes; 32% is transient general aviation; 18% is air taxi; 11% is commercial; and 1% is military. The Federal Aviation Administration (FAA) categorizes the Airport as a Primary Non-Hub under the FAA’s National Plan of Integrated Airport Systems (NPIAS). The Airport is currently served by five air carrier and commuter airlines, as well as by several all-cargo airlines. Three fire fighting branches of the U.S. Forest Service also use the Airport: Aerial Fire Depot, Intermountain Fire Sciences Laboratory, and the Missoula Technology Development Center. The airport averages 155 landings and takeoffs per day.

In 1978, the Board of County Commissioners adopted the Airport Influence Area Resolution concerning land use regulations in the vicinity of the airport. Within the Airport Influence Area, illustrated in Map 3, avigation easements are required and building height is restricted. Other concerns, such as wildlife, are also addressed. In 1986, a Noise Compatibility Study projected noise levels around the airport based on assumptions about growth of the

89 City Engineering, 2005.
population, economy, air traffic, and the type of aircraft using the airport. The study modeled this information into noise contours for current and projected conditions.

In 2001, the Airport Authority initiated a master planning process that included an *Airport Layout Plan*. The *Missoula Airport Layout Plan Update* was completed in early 2004 and recommended future expansion of the airport and of runway capacity, with the addition of a second runway to serve general aviation needs. In June of 2004, the Airport completed an *Environmental Assessment* (EA), which assessed the expansion of the passenger terminal, addition of the second runway, and other recommendations from the Airport Plan. The EA supported the *Layout Plan’s* findings and requested federal action and funding to expand the airport as recommended. A *Supplemental Report to the FAR Part 150 Noise Exposure and Land Use Compatibility Study* was completed in November of 2004 to update land use compatibilities, forecasts of operations, noise contours, and recommendations.

The Airport currently encompasses about 1,800 acres of land, and may acquire up to 1,300 additional acres for future growth and to prevent incompatible land uses. The Airport plans to add a new runway approximately 2,800 feet south of the present main runway. Timelines for construction of the runway are based upon need, which has not been established at this time.

The *FAR Part 150 Study and Land Use Compatibility Study*, approved by the FAA and the Airport Authority, recommends land uses compatible with airport land uses on the land around the airport. The Airport Authority specifically recommends no new residential units built within extended approach and departure zones at the ends of both the existing and proposed runways. The Airport has no authority to control land use outside its ownership boundary. Several of the recommendations require local government action for implementation.

The authority and responsibility for noise abatement and mitigation measures lie with a variety of federal and local agencies. The federal government has the authority and responsibility to control aircraft noise sources, to implement and enforce flight operational procedures and to manage the air traffic control system in ways that minimize noise impacts on people.

Another small airport in Missoula County is the Seeley Lake Airport, located two miles east of Seeley Lake. The airport is publicly owned and serves small aircraft. The facility averages four operations a day and 1300 each year.

**RAIL**

No passenger rail service is available in Missoula. Amtrak discontinued service to Missoula in 1979. According to Montana Rail Link, an average of 18 freight trains pass through Missoula daily. The Bitterroot Railroad Line is operated by Montana Rail Link on an infrequent basis, consisting of one to three trips per week. The tracks are located on the east side of the Bitterroot River, crossing the river 5 ½ miles south of the Missoula County line.

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91 Missoula Airport Authority, 2005.
92 *Missoula International Airport FAR Part 150 Noise Exposure and Land Use Compatibility Study Program Draft Report*, with modified recommendations #3 and #8, 2002.
93 Ibid
PARKS AND RECREATIONAL LANDS
The City of Missoula and Missoula County manage many parks throughout the County, some of which are developed and others that remain undeveloped. In addition, privately owned common areas provide park land in many subdivisions. State and federal agencies also own and manage lands that serve as recreational areas in Missoula County.

CITY PARKS
Currently, the City of Missoula Parks Department maintains 52 developed park sites on 500 acres of parkland as well as 48 undeveloped park sites on 251 acres of land. In addition, the department maintains 22 miles of trails.\(^{96}\) The City Parks and Recreation budget is approximately $2.8 million to support recreation programs, maintenance of parks and trails, and the open space program. Open space land is described in Natural Resources.

COUNTY PARKS
The 1997 Missoula County Parks and Conservation Lands Plan describes existing County parks and future park needs. As population in Missoula County increases, the need for park facilities will also increase. Missoula County owns approximately 70 parcels that are either dedicated as parks or used for that purpose. Approximately 80 parcels owned by homeowner associations, schools, communities, or other organizations serve as parklands.\(^{97}\) The County Park Office is funded through a 1-mill levy, which provides approximately $160,000 for operations. No funding is currently available for ongoing maintenance of County Parks. The Parks Office provides a matching grant program for capital improvements made to County Parks by neighborhood associations. One half-time person is employed by the County Parks Office. The majority of park land within the County has been acquired through the subdivision process.

STATE PARKS AND RECREATIONAL LANDS
Montana Fish, Wildlife & Parks (FWP) has recreational parks (State Parks) including Salmon Lake, Placid Lake, Beavertail Hill, Frenchtown Pond, and Council Grove Cultural State Park encompassing 226 acres in Missoula County. The agency has 23 Fishing Access Sites (FAS), totaling over 1,750 acres in the County that provide access to rivers and lakes for activities such as fishing, boating, swimming, and wildlife viewing. FWP has Fishing Access Sites within a 10-mile radius of Missoula, including Kelly Island, Sha-Ron, Marco Flats, Turah, Chief Looking Glass, Old Weigh Station, Angevine, and sites along the Bitterroot River. Travelers’ Rest State Park is also within the County but through a unique management agreement is managed by the Traveler’s Rest Preservation and Heritage Association.

FEDERAL PARKS AND RECREATIONAL LANDS
The United States Forest Service (USFS) manages the Lolo National Forest. USFS recreational lands near Missoula include Pattee Canyon, Blue Mountain, the Rattlesnake, and Maclay Flats recreational areas. Other USFS recreational lands within the County include portions of the Bitterroot National Forest, Flathead National Forest and Seeley, Alva, Inez, Lindbergh, and Holland Lakes.

TRIBAL LANDS
The Confederated Salish and Kootenai Tribes maintain thousands of acres for recreation in the Missoula County portion of the Flathead Reservation. Whenever engaged in recreation activities on Tribally owned lands of the Reservation, all non-Tribal members must have a valid Flathead Reservation Use Permit. Other Tribal and/or State recreation permits and

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\(^{96}\) Master Parks Plan, 2004.
\(^{97}\) Missoula County Parks and Conservation Lands Plan, 1997.
appropriate bird hunting or fishing stamps are also required for non-Tribal members depending on the form of recreation.  

G. NATURAL RESOURCES

Missoula County is extremely rich in natural resources, which have influenced the character and economy of the region. Resource health is a barometer for the overall health of the area. This section generally describes the County’s soils, biology, water, and air resources, as well as hazardous waste sites and some land conservation measures.

GEOLOGY

Missoula County encompasses about 1,700,000 acres. The topography is mountainous and separated by numerous valleys. Elevations range from 9,075 feet on Lolo Peak to about 3,000 feet where the Clark Fork River leaves the County.

Soil characteristics throughout the County affect the types of land uses that are suitable for particular locations. The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) has produced a survey of soil types for Missoula County, with mapped units that correspond to specific soil types and characteristics (accurate to within ten acres). The soil survey provides specific recommendations for agricultural viability, soil limitations for building sites, roads, septic tank drainfields, and general erosion potential. For instance, there are areas that present percolation hazards for septic systems due to low or high soil permeability or infiltration rates. Slope, depth to bedrock, depth to groundwater, and low soil permeability are typical septic system limiting factors.

HILLSIDES

Much of the land above valley floors in the County is characterized by steep hillsides. Disturbance of hillside areas for development can result in damage to public and private property or natural systems through erosion, altered or increased drainage patterns, access problems, increased fire hazard, or additional air pollution from increased winter sanding.

Slopes greater than 25% are generally considered too steep for building purposes. Special requirements apply for the siting of septic systems on slopes greater than 15%. Missoula City and County Subdivision Regulations require that roads and driveways be constructed at a grade of 8% or less. Missoula City and County Subdivision and Zoning Regulations include Hillside Design Standards that apply to new development on land with slopes in excess of 10%.

Over half of the land in the county is characterized by slopes of 25% or greater (see Table 13). As development exceeds land with slopes of less than 15%, there may be increased pressure to develop on slopes greater than 15%. Map 8 shows lands in the County on slopes of 25% or greater.

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98 Confederated Salish and Kootenai Tribes, 2002.
99 Slope percentages calculated in ArcGIS Spatial Analyst from 30 meter (900 square meters) USGS Digital Elevation Models (DEM).
Table 13
Land in Missoula County by Category of Slope

<table>
<thead>
<tr>
<th>Slope</th>
<th>Percentage of Land Within County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than or equal to 25%</td>
<td>55%</td>
</tr>
<tr>
<td>15-25%</td>
<td>17%</td>
</tr>
<tr>
<td>Less than 15%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Agricultural Soils
Soils are often associated with their capability to support agricultural production. The Missoula County Conservation District, in collaboration with NRCS, has evaluated the soil productivity of the County and divided it into three categories: Prime Farmland (if irrigated), Farmland of Statewide Importance, and Farmland of Local Importance. Prime farmland (if irrigated) soil has the highest potential for crop yield, when managed properly. Factors that are taken into account include soil quality, growing season, and moisture supply.

Table 14 shows the classification of soils of agricultural importance within the County. Approximately 8% of the land within Missoula County contains important agricultural soils. These lands are generally located on the valley floors (see Map 9).

Table 14
Missoula County Soils of Agricultural Importance

<table>
<thead>
<tr>
<th>Soils</th>
<th>Acres</th>
<th>Percent of County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Farmland</td>
<td>30,462</td>
<td>2%</td>
</tr>
<tr>
<td>Statewide Importance</td>
<td>19,446</td>
<td>1%</td>
</tr>
<tr>
<td>Local Importance</td>
<td>83,847</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>133,755</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: NRCS, 2005.

Biology
Missoula County’s landscape is filled with an array of ecological resources that shape the region and are of significant value to the community. Wildlife (some of which are threatened and endangered species), high quality mountain and plains ecosystems, and unique riparian ecosystems are distributed throughout the County’s mountains and valleys. Although public land harbors substantial quantities of natural resources, many species and ecological communities are found on private land. The conversion of open space and agricultural lands to intensive development, recreational activities, timber harvest, and agricultural practices such as over-grazing and de-watering of streams often conflict with long-term maintenance of the County’s ecological inheritance.¹⁰⁰

¹⁰⁰ Inventory of Conservation Resources for Missoula County, 1992.
VEGETATION ZONES

Well-defined vegetation zones characterize Missoula County. The uppermost zone in elevation is the alpine zone, characterized by alpine meadows, scree, and the absence of trees. Below the alpine is the subalpine zone, dominated in most areas by whitebark pine, subalpine fir, Englemann spruce and alpine larch. The next lower zone is the montane zone characterized by the prevalence of Douglas fir and ponderosa pine. In portions of the County stands of cedar, hemlock and western larch can also be observed. Within the montane zone, the occurrence of fire favors the development of seral aspen, lodgepole pine and western larch forests. Below the montane is the foothill zone, a dry area of basin-fill and rocky slopes dominated by shrubs and grasses with areas of open ponderosa pine parklands and pockets of Douglas fir/ponderosa pine forests in moist areas and on north slopes. In drier portions of the region, high altitude grasslands may be bordered directly by the montane zone with forests absent of ponderosa pine. These bunchgrass prairies stand out in a forested landscape. River and creek wetlands, which support deciduous cottonwood forests, moisture loving shrubs and herbaceous vegetation, comprise the floodplain zone.101

Much of the County above the valley floors is forested. Almost 70% of the County is owned and managed by either the United States Forest Service (43%) or Plum Creek (approximately 26%) for timber and other uses. The majority of the Tribal land within the Flathead Reservation portion of Missoula County is timbered. Private land is also located in or near timbered areas. As noted previously, residential construction is occurring in Wildland/Urban Interface (WUI) areas. Forest fires originating at rural residences can threaten adjacent resource lands, as well as other residences. In 2005, Missoula County initiated a Missoula County Community Wildfire Protection Plan, which maps and assesses fuels, population density, egress areas, slope and insect and disease mortality.102

Quantitative measures of changes in vegetation type are not available. However, some estimates indicate that western Montana has lost 80-90% of its low elevation, high productivity, old-growth forests, and 80-90% of its low elevation grasslands.103

WETLAND AND RIPARIAN AREAS

Wetlands can be located along rivers and streams, in low spots along the landscape, along lakes, at groundwater discharge areas, or along artificially created areas such as irrigation ditches. Wetland types include springs, seeps, marshes, wet meadows, and riparian areas (along creek or river margins). Wetlands serve many important ecological functions, including providing surface water storage during floods, serving as ground water recharge areas, filtering surface runoff, and providing significant wildlife habitat. These functions should be preserved to maintain overall ecological health.

More specifically, riparian areas along creeks and rivers are important habitats for migrating and nesting birds, as hiding and feeding areas for big game species, and for many smaller mammals, reptiles, and amphibians. An estimated 90% of all bird species utilize riparian areas for some stage in their life cycles. Riparian areas function as critical wildlife corridors, providing cover and links between wildlife habitats. Riparian areas also provide bank stability, stream productivity, overhead cover for fish habitat, and shading to maintain cool water temperatures.

101 Inventory of Conservation Resources for Missoula County, 1992
102 From a presentation on the Missoula County Community Wildfire Protection Plan, given in 2005.
Each wetland type depends on a particular hydrologic regime (volume, timing, duration, and flow of water on a site), which is changed by draining or other alterations. When marshes are converted to ponds, plant and aquatic life diversity is decreased. Wetland and riparian vegetation are integral to wetland systems and must be maintained. For instance, lawns built down to the water’s edge are very poor substitutes for deeply rooted native vegetation that maintains the stream bank and provides habitat. In addition to protection of wetland habitat itself, additional buffers from these areas are sometimes needed to ensure wetland health. Buffers provide additional protection of water quality and habitat.

No quantitative data on wetland or riparian loss in Missoula County exist. However, national estimates of wetland loss are over 50%, with estimates in Montana of 27% between the 1780s and 1980s. Some estimates place riparian habitat loss at greater than 95% in most western states. According to the Natural Resource Conservation Service, riparian and in-stream fish habitat represent the most degraded habitats in the state. An estimated 70% of privately owned riparian habitats grazed by livestock need better grazing management.

By 1994 over 90% of Missoula County’s riparian areas were either already divided into separate parcels or were within a half mile of such land divisions. In addition, 99% of such riparian areas were either already roaded or within a half mile of a road. Since most of Missoula County’s land is not governed by zoning regulations that might direct growth, the riparian lands of the County are very vulnerable to incompatible subdivision and development. Missoula City and County Subdivision Regulations require that riparian areas be mapped and a management plan be developed for land proposed for subdivision. The City also has a riparian resource zoning district, which addresses construction and road building in riparian areas. The district standards do not address removal of riparian vegetation not associated with building or road construction. The County does not have comparable zoning protections.

The subdivision and zoning riparian regulations do not require a specific minimum setback from riparian areas, but instead define an area of riparian resource to include a buffer of varying width where development may have a negative impact on wildlife habitat, water quality and quantity, fish, or other aquatic resources. Projects are generally evaluated on a case-by-case basis. Some regional land use plans do include specific setback recommendations for streams or rivers. Typically riparian resource management plans developed during subdivision review are included in covenants. However, since the City or County is generally not a party to the covenants, enforcement of riparian resource management plans has been problematic. Other legal means for riparian enforcement have been used occasionally for particularly sensitive resources, (such as granting enforcement authority to the governing body or resource agencies).

Streams and wetlands are protected under various State, federal, and Tribal laws. Work within these areas, including road construction, vegetation clearing, dredging, filling, or water diversion may require a permit. A number of programs are available to assist landowners with wetlands protection including conservation easements, leases to conservation organizations, restoration, management agreements, limited development strategies, and sale or donation of land.

108 ibid.
PLANT SPECIES OF SPECIAL CONCERN
The Montana Natural Heritage Program (MNHP) lists species of special concern or with a
special designation by organizations or land management agencies in Montana. There are
43 vascular and non-vascular plant species of special concern with recorded occurrences in
Missoula County, including the federally endangered water howellia (see Appendix C).

Abundant wildflower populations occur on hillsides and other areas in the County. While
some native wildflowers such as bitterroot are not listed as species of special concern,
protection of native plant populations is increasingly urgent as development and noxious
weed invasion continues. Native plants can be transplanted from areas proposed for
development into existing parks or other areas in need of native plant revegetation. Some
of this work is being carried out by volunteer groups.

NOXIOUS WEEDS
Western Montana’s native landscape is being threatened by the invasion of numerous
noxious weeds including spotted and Russian knapweed, leafy spurge, dalmation toadflax,
Canada thistle, field bindweed, houndstongue, and sulfur cinquefoil. Noxious weeds limit
agricultural productivity, alter wildlife habitat, and threaten native grasslands. Weed seeds
are generally transported with ease and are highly adaptable. Ground disturbances such as
road building, off-road vehicles, logging, and construction damage native vegetation and can
increase noxious weed invasions. Table 15 summarizes noxious weed infestation in
Missoula County.109

109 Missoula County Weed District, 2005.
### Table 15
Noxious Weed Infestation
Missoula County, 2005

<table>
<thead>
<tr>
<th>Noxious Weed</th>
<th>Estimated Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common crupina</td>
<td>0</td>
</tr>
<tr>
<td>Rush skeletonweed</td>
<td>0</td>
</tr>
<tr>
<td>Yellow starthistle</td>
<td>0</td>
</tr>
<tr>
<td>Tansy ragwort</td>
<td>0</td>
</tr>
<tr>
<td>Eurasian watermilfoil</td>
<td>0</td>
</tr>
<tr>
<td>Salt Cedar (Tamarisk)</td>
<td>Ornamental plantings only</td>
</tr>
<tr>
<td>Purple Loosestrife</td>
<td>Ornamental plantings only</td>
</tr>
<tr>
<td>Meadow hawkweed</td>
<td>&lt;10 acres</td>
</tr>
<tr>
<td>Yellowflag iris</td>
<td>&lt; 75 acres</td>
</tr>
<tr>
<td>Orange hawkweed</td>
<td>&lt;100 acres</td>
</tr>
<tr>
<td>Dyer’s woad</td>
<td>40 acres</td>
</tr>
<tr>
<td>Diffuse knapweed</td>
<td>&lt;1 acre</td>
</tr>
<tr>
<td>Russian knapweed</td>
<td>200 acres</td>
</tr>
<tr>
<td>Whitetop</td>
<td>&lt;60 acres</td>
</tr>
<tr>
<td>Yellow toadflax</td>
<td>&lt;1,000 acres</td>
</tr>
<tr>
<td>Field bindweed</td>
<td>&lt;2,500 acres</td>
</tr>
<tr>
<td>St. Johnswort</td>
<td>&lt;3,000 acres</td>
</tr>
<tr>
<td>Dalmation Toadflax</td>
<td>&lt;4,500 acres</td>
</tr>
<tr>
<td>Common Tansy</td>
<td>&lt;5,000 acres</td>
</tr>
<tr>
<td>Houndstongue</td>
<td>&lt;5,000 acres</td>
</tr>
<tr>
<td>Tall Buttercup</td>
<td>&lt;7,500 acres</td>
</tr>
<tr>
<td>Leafy Spurge</td>
<td>&lt;9,000 acres</td>
</tr>
<tr>
<td>Canada Thistle</td>
<td>&lt;10,000 acres</td>
</tr>
<tr>
<td>Oxeye Daisy</td>
<td>&lt;10,000 acres</td>
</tr>
<tr>
<td>Silver Cinquefoil</td>
<td>&lt;100,000 acres</td>
</tr>
<tr>
<td>Spotted knapweed</td>
<td>&lt;500,000 acres</td>
</tr>
</tbody>
</table>

*Source: Missoula County Weed District, 2005.*

Existing State and County regulations mandate control of noxious weeds. Coordinated weed control efforts must take place between ownerships in order to be effective. If noxious weeds are allowed to grow on one property, a seed source is maintained that further threatens the landscape and all other efforts to control weeds and restore native grasses and wildflowers. Prevention of weed spread is best accomplished by altering land management practices through educational efforts and implementing weed control measures. When noxious weeds are eradicated from a site, native species, crops, or appropriate landscaping must be planted to prevent weed re-introduction.

**FISH AND WILDLIFE**
Missoula County possesses both diverse and high-quality wildlife habitats. Large deer and elk herds are sustained by critical winter range habitats. Bighorn sheep and mountain goats find favorable habitats in mountainous terrain. Black bear are found throughout the County. The threatened grizzly bear and endangered gray wolf are found in mountains and along rivers and streams potentially throughout the county. Small mammals include beaver, muskrat, otter, mink, skunk, porcupine, weasel, and raccoon among others. Other predators include mountain lion, bobcat, lynx, coyote, red fox, wolf, and badger.

In order for wildlife populations to survive, wildlife habitats and migration corridors must be protected. Big game species need vast areas for seasonal range or migration routes.
Quantity and quality of winter range are the most limiting factors in the lifecycle of most big game.\textsuperscript{110} Table 16 summarizes the winter range of several species within the County. Montana Fish, Wildlife & Parks (FWP) has provided information about the general location of big game winter range in the County (see Map 10). Approximately 70-80\% of winter range and critical winter range is located on private land.\textsuperscript{111}

**Table 16**

<table>
<thead>
<tr>
<th>Winter Range</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White-tailed Deer</td>
<td>318,680</td>
<td>19%</td>
</tr>
<tr>
<td>Mule Deer</td>
<td>231,577</td>
<td>14%</td>
</tr>
<tr>
<td>Elk</td>
<td>461,601</td>
<td>28%</td>
</tr>
<tr>
<td>Moose</td>
<td>125,231</td>
<td>7%</td>
</tr>
<tr>
<td>Big Horn Sheep</td>
<td>18,713</td>
<td>1%</td>
</tr>
<tr>
<td>Mountain Goat</td>
<td>5,343</td>
<td>.3%</td>
</tr>
</tbody>
</table>

*Source: Montana Fish, Wildlife & Parks.*

Montana Fish, Wildlife & Parks has identified some areas of *critical habitat* as priorities for protection. These include: bighorn sheep habitat along Petty Creek, lower Rock Creek, and the lower Blackfoot River; big game winter range from Miller Creek south to Eight Mile Creek; elk winter range in the Butler and Rattlesnake Creeks area, Mormon/McClain Creeks area, at the mouth of Ninemile Creek, and in the North Hills; deer and elk winter range in Gold/Twin Creeks, Albert Creek south through Martin Gulch, Blanchard Creek, and the Blackfoot-Clearwater Wildlife Management Area (“Game Range”); and wetlands in the Frenchtown/Huson area.\textsuperscript{112}

In addition to direct loss of habitat, wildlife populations are threatened by habitat fragmentation due to roads and highways and by increased conflicts with humans. Human-wildlife conflicts are on the rise, with significant increases occurring since 1999. These conflicts predominantly occur for three reasons:

1. Environmental change such as drought, which has forced animals down into the more populated riparian areas and valley floors;
2. Human population growth and development in animal habitat; and,
3. Rising populations of black bears, grizzly bears, and their prey.

Human-wildlife conflicts are expected to continue to increase with rising human-wildlife contact, including more road-kill and agricultural kills.\textsuperscript{113}

Subdivisions located within wildlife habitat not only physically reduce the amount of habitat but also create disturbances (dogs, vehicles, etc.) that result in animals avoiding what could be usable habitat. In addition, as housing densities increase, the ability to manage certain big game populations through regulated hunting diminishes due to less access, safety concerns, subdivision sanitation, and bear attraction problems.

Montana Fish, Wildlife & Parks recommends specific measures to minimize conflicts with wildlife. These measures include proper storage of garbage, pet food, and horse food; discouraging the use of bird feeders and compost piles; confining pets to the house or yard;

\textsuperscript{110} *Inventory of Conservation Resources for Missoula County*, 1992.
\textsuperscript{111} USFS, Missoula County Land Managers Meeting, May 9, 2005.
\textsuperscript{112} Montana Fish, Wildlife & Parks, Region 2, 2005.
\textsuperscript{113} Montana Fish, Wildlife & Parks, Region 2, 2005.
and leashing pets. Montana law prohibits supplemental feeding of game animals. These types of measures are often included in covenants for new subdivisions located in or near wildlife habitat. Additionally, FWP and other groups are working to educate landowners about sharing habitat with wildlife. For instance, community volunteers in Seeley Lake have started a “Bear Aware” program and Missoula residents have formed the Middle Rattlesnake Bear Task Force.

Wildlife crossings on major highways and arterials can help reduce road-kill, and allow connectivity between habitats. Construction along Highway 93 will include a variety of wildlife crossing types. A 2004 study of wildlife and fish habitat linkages along Highway 93 identifies additional key linkage areas.\textsuperscript{114} Besides providing wildlife crossings over the highway, it will be important to ensure that land uses allow continued animal access to such crossings. A study of wildlife crossings along Highway 83 through the Seeley and Swan Valleys is also underway.

The Tribal Wildlife Management Program also works to manage wildlife resources in the region, lending extensive assistance at the local level to reduce wildlife conflicts and protect and acquire additional habitat. In addition to garbage and pet containment measures, the program also recommends limiting fruit trees and apiaries in areas known to have bear activity.

**BIRDS**
Missoula County supports habitat for a wide range of bird species, particularly birds of prey. Raptors include bald and golden eagles, red-tailed hawk, osprey, prairie falcon, turkey vulture, kestrel, several species of owl, and others. Birds of prey have diverse habitat requirements including rock outcrops, cliffs, remote nesting and roosting trees, grassland and forest hunting grounds, old forest stands, and riparian ecosystems. Ground squirrels, voles, gophers, mice, rabbits, fish, and small birds form a substantial prey base for these birds.

Franklin’s, blue, and ruffed grouse occupy forested terrain and grassland edges. Wild turkey, ring-necked pheasants, and Hungarian partridge have been introduced in the valley and are doing well in some places.

Missoula County lies in the Pacific Flyway, a major waterfowl migration route. The County’s lakes, rivers, creeks, and marshes provide resting, feeding, and breeding habitat for many species of waterfowl.\textsuperscript{115} Sandhill cranes and great blue heron utilize wetlands throughout the county. Waterfowl include Canada geese, mallard, pintail, gadwall, teal, widgeon, merganser, and golden-eye.

**FISH**
Thirty fish species are found in the County, including rainbow trout, brown trout, westslope cutthroat trout (a statewide species of special concern), bull trout (a federally listed threatened species), perch, whitefish, sculpins, and suckers.

\textsuperscript{114} An Assessment of Wildlife and Fish Habitat Linkages on Highway 93 – Western Montana, 2004.
\textsuperscript{115} Inventory of Conservation Resources for Missoula County, 1992.
Nationally significant fisheries include the Blackfoot River, Jocko River, middle Clark Fork River, Bitterroot River, and Rock Creek. The Blackfoot River and Rock Creek are considered blue ribbon trout fisheries. The Bitterroot and Clark Fork Rivers are also extremely important fisheries, annually supporting more than 100,000 angler days.\textsuperscript{116} Other tributaries in the County are important for conservation of genetically pure native fish populations and for spawning and rearing of river fish populations. River and creek fish populations are not supplemented by stocking, and therefore are dependent on connectivity and quality habitat in tributaries.

Riparian protection also helps protect fisheries resources. The Montana Fish, Wildlife & Parks fishery management program emphasizes establishing in-stream flow reservations, enforcing laws relating to habitat alteration, encouraging floodplain management in harmony with stream environment, responding to conflicting water development projects, and monitoring fish populations and habitats in selected areas.\textsuperscript{117}

The Tribal Fisheries Program works to protect and enhance local fisheries on the Flathead Reservation. A key component of its program is habitat acquisition within the Jocko River drainage to protect the endangered bull trout.

There are many indirect, but significant, impacts to streams and fisheries that typically accompany subdivision and development. These include riparian degradation, livestock overgrazing, channel modification, etc. (as discussed above). However, other activities such as construction of artificial ponds, excessive stream channel crossings, road construction in floodplains, and gravel mining also degrade aquatic systems. It is rare for stream habitats and fisheries to remain intact when people inhabit areas that include or are directly adjacent to streams and other surface waters.

The only reasonably effective long-term measure that would protect streams amidst growth and development is to provide adequate buffers where significant human disturbance is prohibited.

THREATENED AND ENDANGERED ANIMAL SPECIES AND SPECIES OF SPECIAL CONCERN

Animal species of special concern that may occur in the County are listed in Appendix C. Federally listed species that may occur in the County include gray wolf, lynx, grizzly bear, bald eagle, harlequin duck, and bull trout. Public policy regarding any adverse effects to these species is coordinated through review efforts from Montana Fish, Wildlife & Parks and the U.S. Department of the Interior’s Fish and Wildlife Service.

Grizzly bear habitat and recovery zones include the Seeley, Swan, and Jocko Valleys, lower Mission Valley, and portions of the upper Rattlesnake watershed. The Selway-Bitterroot Wilderness is also being considered for reintroduction of grizzly bears. Maintenance of a travel corridor between the Swan and Mission Mountains is considered vital to allow for breeding between populations. The main corridor used by grizzlies is north of the Swan River/Clearwater Divide (see Map 11).\textsuperscript{118}

Bald eagles, a threatened species under the Federal Endangered Species Act, nest and overwinter in the County. There were about 300 active bald eagle nests in Montana in 2004, with 21 in Missoula County.\textsuperscript{119} The federally endangered gray wolf, once eradicated 

\textsuperscript{116} Montana Fish, Wildlife & Parks, 2002.
\textsuperscript{117} Inventory of Conservation Resources for Missoula County, 1992.
\textsuperscript{118} Ibid.
\textsuperscript{119} Montana Fish, Wildlife & Parks, 2005.
from the western United States, is re-establishing in the Clark Fork, Blackfoot, and Bitterroot Valleys.

**WATER**

**SURFACE WATER**
The Swan, Clearwater, Blackfoot, Clark Fork, Bitterroot, and Jocko Rivers run through the County. Major tributaries include Rock, Rattlesnake, Ninemile, Petty, and Lolo Creeks. These watercourses provide groundwater recharge, water for drinking and for irrigation, habitat for fish and other aquatic life, optimal conditions for riparian vegetation that supports almost all terrestrial wildlife populations, and recreational opportunities for the human residents. The surface water and groundwater components of the watersheds as they relate to natural stream function, flood hazard, high groundwater, and water quality are generally described below.

**NATURAL STREAM FUNCTION**
Streams and their floodplains are active and dynamic, constantly adapting to changes within their watersheds. A natural or human-induced disturbance to a watershed can have effects on streams dozens of miles away. Some of these changes can be beneficial, but the larger disturbances can have drastic negative effects, such as increasing flooding downstream, increasing bank erosion, and destroying fish habitat. Altering one component of a watershed affects other components of the streams within it. Natural stream stability can be affected by stream bank armoring, channel straightening, channel constrictions, loss of flood storage, loss of riparian vegetation, increased sediment, and changes in vegetation type.

A 1999 inventory of bank stabilization projects on portions of five watercourses in Missoula County showed that 12% of the surveyed reaches had been stabilized through 215 projects.\(^{120}\) The results of this 1999 study are summarized below in Table 17. Missoula County Floodplain Regulations were amended in 2000 to limit riprap installation. The City Floodplain Regulations have not been similarly amended.

**Table 17**

<table>
<thead>
<tr>
<th>Watercourse</th>
<th>Number of Projects</th>
<th>Projects miles</th>
<th>River Miles Surveyed</th>
<th>Percent Stabilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lolo Creek</td>
<td>41</td>
<td>2.4</td>
<td>10</td>
<td>12%</td>
</tr>
<tr>
<td>Nine Mile Creek</td>
<td>29</td>
<td>1.4</td>
<td>8.2</td>
<td>9%</td>
</tr>
<tr>
<td>Blackfoot River</td>
<td>20</td>
<td>3.7</td>
<td>12.6</td>
<td>14%</td>
</tr>
<tr>
<td>Bitterroot River</td>
<td>28</td>
<td>4.8</td>
<td>20.6</td>
<td>12%</td>
</tr>
<tr>
<td>Clark Fork River</td>
<td>97</td>
<td>16.8</td>
<td>69.3</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>215</strong></td>
<td><strong>29</strong></td>
<td><strong>121</strong></td>
<td><strong>12%</strong></td>
</tr>
</tbody>
</table>

*Source: Inventory and Assessment of Bank Stabilization Projects on Reaches of the Clark Fork, Bitterroot, Blackfoot, Lolo Creek and Ninemile Creek in Missoula County, Montana, 1999.*

**FLOOD HAZARDS**
Hazards from flooding can occur in many forms. The most commonly recognized flood hazard occurs when streams spill over the banks onto the floodplain during high spring runoff. However, flood hazards also exist when excessive ground water fills an aquifer and then surfaces, or when stream channels erode their banks and threaten development that is otherwise well above the height of overbank flooding. Ice jam floods can occur either when

\(^{120}\) Inventory and Assessment of Bank Stabilization Projects on Reaches of the Clark Fork, Bitterroot, Blackfoot, Lolo Creek and Ninemile Creek in Missoula County, Montana, The Watershed Education Network, 1999.
a stream freezes so completely that water upstream is blocked and spilled into the floodplain, or when an ice jam breaks up and releases a surge of water, causing flooding downstream.

In Missoula County, the Federal Emergency Management Agency (FEMA) has mapped 29,600 acres within the 100-year floodplain. Most of these mapped floodplains are along rivers and larger tributaries; the floodplain boundaries of most streams in the County have not been mapped. Mapped floodplain boundaries are not always accurate, especially when used at the scale of subdivision review. Even detailed flood studies only provide approximations of floodplain boundaries because the age of the data used, natural changes to the river, man-made changes to the floodplain, approximate methods used to estimate land elevations, and the inherent complexities of trying to reduce a complex stream system to a statistical calculation contribute to inaccuracies. In short, it is not uncommon to find flooding outside of mapped 100-year floodplain boundaries. In addition, even the best and most recent floodplain studies do not assess flood hazards from ice jams, stream bank erosion, or surfacing groundwater.

It is not possible to control floods over the long term. Instead of trying to control floods, Missoula County follows measures that control flood damages. By recognizing that floods are inevitable, homes, businesses, and public infrastructure can be built in locations and with designs meant to ensure that neither property nor human health is damaged, and that alterations to floodplains do not endanger nearby properties or harm natural stream functions. Missoula County Floodplain Regulations, originally adopted in 1975, are meant to achieve these goals, although they have a limited jurisdictional area. The City has also adopted floodplain regulations. Other measures to address natural stream functioning and floodplain hazards include development setbacks, land use designations, limits on development, transfer of density, design requirements, and stream restoration.

The County adopted a Pre-Disaster Mitigation Plan in 2004, to address a variety of natural hazards including flood, earthquake, volcano, landslide, wildfire and others. Flood hazards in Missoula have received particular attention since flooding along Grant Creek in 1997 and the resulting 3.3 million dollar litigation settlement. The Montana Department of Natural Resources and Conservation (DNRC) released a floodplain study in September 2001 identifying areas of flood risk along the current Grant Creek channel, including 70 homes in the 100-year floodway. The Grant Creek Restoration and Flood Control Project has been initiated to balance hydraulic capacity, flood hazard mitigation, sediment management, maintenance, new development, airport expansion, aesthetics, and habitat to protect environmental infrastructure. The project goals are to reduce surface and groundwater problems in the area, improve fish passage in lower Grant Creek, improve fish habitat in lower Grant Creek, and improve recreational and aesthetic opportunities. The Grant Creek Environmental Restoration is managed by the County Public Works Department and supported by various State and Federal agencies.

Floodplain regulations permit gravel mining in the floodway, provided that a sufficient buffer is maintained to prevent channel capture. State law allows the prohibition of gravel mining in areas zoned residential. In areas zoned other than residential, gravel mining may be conditioned but not prohibited. In May 2005 Missoula County adopted an interim zoning regulation that prohibits sand and gravel mining in residential zones.

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121 Missoula Office of Planning and Grants, Floodplain Administrator, 2002.
122 Floodplain maps, available at the Missoula Office of Planning Grants, FEMA designated floodplain areas.
123 Pre-Disaster Mitigation Plan, 2004.
124 Grant Creek Environmental Restoration and Flood Control Project Management Plan, 2002.
IRRIGATION DITCHES
Irrigation ditches convey water from nearly all rivers and their tributaries to agricultural and other users. State law requires that subdividers provide easements for use and maintenance of irrigation facilities that convey water through a subdivision to other land. Subdividers are also required to provide easements for irrigation water to new lots, unless water rights are removed or average lot size is one acre or less and notification requirements are met. Water rights are administered by the Montana Department of Natural Resources.

The Confederated Salish and Kootenai Tribes, the State of Montana, and the United States government have initiated negotiations for the settlement of the reserved Indian water rights of the Confederated Salish and Kootenai Tribes and federal reserved water rights. As part of those negotiations, the parties are discussing options for the interim administration of water rights on the Flathead Reservation. An agreement on interim water rights administration will address how water use development on the Flathead Reservation may proceed until the settlement is final.

GROUNDWATER
Much of the valley bottom land within floodplains or near watercourses is subject to high groundwater, especially during spring runoff. Additional areas, which were once part of the floodplain and are now protected from overland flooding by levees, roads and railroad berms, can still become inundated through groundwater seepage.

High groundwater can result in damage to building foundations and basements and contamination from septic systems. Although the Health Department requires applicants demonstrate that groundwater is six feet below ground surface for conventional septic systems, engineered septic systems can be permitted in locations with only four feet to groundwater.

The Missoula Valley Water Quality District samples a network of 40 wells twice a year to monitor groundwater quality. Groundwater quality is generally good in the Missoula Valley. There are several sites around Missoula, however, where groundwater has been contaminated by historic mining, industrial wastes, improper chemical disposal or petroleum product spills and leaks. In addition, elevated nitrate levels occur in isolated areas, due primarily to septic system discharges.

Increasing concentrations of nitrates have been observed in samples taken from public drinking water wells near the Wye. The highway commercial/light industrial area does not have public sewer available and on-site wastewater disposal from large capacity septic systems is affecting wells in the area.

Positive trends have been observed in private and public wells in the Linda Vista area where nitrates from septic systems had resulted in nitrate-N concentrations in private wells exceeding the drinking water standard of 10.0 mg/l. Public sewer was extended to this area in 1994. Subsequent monitoring has demonstrated improvement in groundwater quality.

These two examples demonstrate the need for consideration of groundwater resources in development decisions. Local and state regulations have changed since these two areas were developed and the effects of new subdivisions on water resources are now evaluated more closely in sanitation review. However, high density residential development and commercial areas are best served by public water and sewer systems.
WATER QUALITY
Surface water and groundwater provide drinking water, support habitat, and provide fisheries resources. Water quality can be degraded from both point sources and non-point sources, such as runoff from urban or agricultural areas. Contaminants from septic systems can move through groundwater into surface water.

Threats to water quality include residential and commercial septic systems and the potential for an accidental release from hazardous materials transportation, fixed facility storing of toxic materials, or an underground fuel storage tank. Accidental releases are typically localized in effect. Degradation resulting from septic systems can be more long-term and widespread since nitrate, a primary contaminant of concern, is very soluble and can ultimately move with ground water to surface water. Phosphorous is also of concern to river water quality, especially during the summer months.

Impacts on ground water from subsurface sewage disposal (septic systems) were evaluated and quantified in the 1996 Missoula County Carrying Capacity Study. Septic systems discharging to ground water have resulted in elevated levels (higher than background levels) of nitrate in ground water and subsequent loading of this nutrient to the Bitterroot and Clark Fork Rivers. In areas of coarse soils and shallow ground water, subsurface sewage disposal also presents the risk of contamination of water supplies with pathogens that may be present in sewage and that may cause waterborne outbreaks of intestinal disease.

On the Flathead Reservation, the Tribes are the government with responsibility for establishing surface water quality standards throughout the Reservation. The Tribal Water Quality Program monitors Reservation water quality and has staff available to assist with non-point source issues, such as stormwater treatment, as well as National Point Discharge Elimination System permits.

WATER QUALITY DISTRICT
The Missoula Water Quality District was formed by joint resolution of the Board of County Commissioners and City Council in 1993 (see Map 12). The Water Quality District allows local government to assume more direct control for the protection of drinking water and streams through monitoring, inspection, enforcement, and education programs.

VOLUNTARY NUTRIENT REDUCTION PROGRAM
The Clark Fork River has been listed as impaired due to nutrients (nitrogen and phosphorous) by the Montana Department of Environmental Quality under Section 303(d) of the Clean Water Act.

In order to comply with Federal and State regulation for surface water quality, the City and County of Missoula have entered into a Voluntary Nutrient Reduction Program (VNRP). The program is designed to reduce nitrate and phosphorus contaminants in the Clark Fork River Watershed in order to restore beneficial uses of the stream and to eliminate nuisance algae growth.

The Voluntary Nutrient Reduction Program calls for site-specific measures to be taken by the major point-source dischargers and for significant reductions in key non-point sources to meet specific in-stream targets for algal density and nutrient (phosphorous and nitrogen) concentrations. The VNRP directs the signatories to develop a strategy to control septic systems and other nutrient sources outside the areas serviced by wastewater treatment facilities. Missoula County’s commitments include connecting 50% of the existing septic systems in the Missoula urban area to sewer, connecting existing septic systems in the Missoula area to sewer at a rate equivalent to new septic systems permitted within the
Water Quality District, and limiting nutrient loading from septic systems outside the Missoula Wastewater Treatment Plant service area.

AIR
AIR QUALITY BACKGROUND
The Missoula urban area has a history of exceeding State and federal air quality standards for particulates, including PM10 and carbon monoxide (CO). Winter temperature inversions that trap pollution are common because of the mountain-valley topography. Impacts to air quality can occur from road dust, vehicle emissions, wood burning, outdoor burning, and industrial sources. Some factors that contribute to decreased air quality include:

- VMT: The amount of vehicle emissions is directly related to the number of vehicle miles traveled (VMT). VMT increases as the distance between residential development and services or jobs increases.

- Hillside development: Development on hillsides creates more air pollution than comparable development on flat land. Roads on slopes need considerably more sanding materials applied during the winter to maintain safe driving conditions. Car emissions and particulates from increased tire wear are also greater on hillsides.

- Road dust: Use of unpaved roads creates far more particulate pollution than the use of paved roads.

- Burning: Residential wood burning and outdoor burning contribute to particulate pollution. Residential wood burning can be especially problematic in the valleys during the winter.

AIR QUALITY PROTECTION MEASURES
The Missoula City-County Health Department developed a local air pollution control program in 1969 and assumed responsibility for most sources of air pollution in Missoula County. The Health Department administers specific regulations within an adopted Air Stagnation Zone (ASZ), roughly defined as the 4 1/2 mile area around the Missoula city limits (see Map 13). The regulations cover residential wood combustion, street maintenance, paving, and outdoor burning.

The following measures apply within the ASZ:

- All new roads and parking lots must be paved;
- New residential driveways must be paved 20 feet back from a paved road surface;
- Fireplaces and wood stoves cannot be installed. Only pellet stoves are approved for installation; and,
- Many existing woodstoves have to be removed at the time of sale of a property, unless they meet certain emission requirements.

Throughout the County, landowners are required to implement practical measures to prevent fugitive dust. Outdoor burning is only allowed during certain time periods and requires a permit.

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125 PM 10 is particulate matter with a diameter less than or equal to 10 microns. This size of particulate can reach into the small airways of the lungs and is the measure most relevant to people’s health.
The Flathead Reservation is listed as a Class 1 airshed. The Tribal Air Quality Program monitors particulate levels on the Flathead Reservation and is formulating a plan to reduce particulate levels in areas where levels exceed established standards.

AIR QUALITY TRENDS
A 1979 health study showed that particulate similar to that found in Missoula during the winter cause measurable health effects on the human pulmonary system. The study also evaluated the relative carcinogenicity of particulate in ten Montana cities. Missoula ranked highest on the list.

As a result of community wide efforts, Missoula Valley’s air quality has been steadily improving in the last decade. Missoula has not violated a federal particulate standard since 1989. Because of inversions, the highest concentrations of particulate were in the winter, with residential wood burning shown to be the primary source. However, the most recent study showed that motor vehicles are the primary source of particulate in the County. Annual average PM10 levels for Missoula (particles measuring ten microns or less) are graphed in Figure 11.

![Missoula Annual Average PM 10 Levels, 1986-2003](Figure 11)

In the summer, fugitive emissions caused by outdoor burning, forest fires, road dust, and construction impact air quality. Since 1994, many of the worst air pollution days have been caused by controlled burns and forest fires. Days of poor air quality (greater than 60 micrograms per cubic meter PM10) have decreased since 1994, although air quality alerts were issued during the forest fires of 2000 and 2003.

Since 2001 there have been no days of poor air quality, aside from those caused by forest fires.
A 1996 emission inventory showed that motor vehicles were responsible for most winter carbon monoxide (CO) pollution. The federal standard for an eight-hour average is nine parts per million, not to be exceeded more than once per calendar year. Since an oxygenated fuels program was started in 1992, Missoula has not violated CO standards.

**HAZARDOUS WASTE SITES**

Cleanup of hazardous waste sites is authorized under state and federal “Superfund” laws.\(^{126}\)

There is one federal Superfund site and 12 State Superfund sites in Missoula County.

**FEDERAL SITE – MILLTOWN DAM**

The Milltown Dam and reservoir are located in Milltown, Montana, about one mile upstream of Missoula. The United States Environmental Protection Agency (EPA) listed the area on the federal Superfund site list in 1983 based on high levels of arsenic detected in area drinking water wells. The reservoir holds about 6.6 million cubic yards of sediments, about two million yards of which are heavily contaminated with metals, including 2,100 tons of arsenic, 13,100 tons of copper, 19,000 tons of zinc, 143,900 tons of iron, and 9,200 tons of manganese. The depth of contaminated sediments ranges from one foot to more than 20 feet. Water depth in the reservoir averages about eight feet.

Most contaminated wells in Milltown have been replaced with clean sources of drinking water, but nothing has been done to clean up the groundwater. Concerns have also been raised regarding fisheries impacts and dam safety.

In December 2004, EPA issued a final Record of Decision for the removal of Milltown Dam and for cleanup of contaminated sediments. The cleanup will consist of a constructed by-pass channel in the Clark Fork River, removal of the dam, and excavation of approximately 2.6 million cubic yards of the most highly contaminated sediments in the Milltown reservoir. The dam could be removed as early as January 2007.\(^{127}\)

A restoration plan, prepared by the State of Montana, US Fish and Wildlife Service, and the Confederated Salish and Kootenai Tribes, will further provide for natural stream functions, improved fish and wildlife habitat, aesthetic values, and recreational opportunities. The remediation and restoration efforts will result in the recovery of the Milltown drinking water supply in as little as a decade, allow unrestricted fish passage, and return the Clark Fork and Blackfoot Rivers to their natural, free-flowing state.

The Milltown Redevelopment Working Group, consisting of area residents and stakeholders, has identified economic redevelopment and community revitalization possibilities for the area. Ideas include an interpretive center, foot trails, multi-use trails, and a new footbridge across the Clark Fork River.

**STATE SITES**

The Montana Superfund priority list includes 12 sites in Missoula County.\(^{128}\) The sites are ranked maximum, high, medium, and low priority based on the severity of the contamination and actual and potential impacts to public health, safety, welfare, and the environment. Three sites require no further action and one is low priority. The nine remaining high and medium priority sites are:

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\(^{126}\) Federal Comprehensive Environmental Response, Compensation, and Liability (CERCLA) and Montana Comprehensive and Environmental Cleanup Act (CERCA).

\(^{127}\) Environmental Protection Agency (EPA), December 2004.

\(^{128}\) Montana Department of Environmental Quality (DEQ), December 2004.

[http://www.deq.state.mt.us/StateSuperfund](http://www.deq.state.mt.us/StateSuperfund)
Two of these sites, Missoula Sawmill and Missoula White Pine Sash, are “Brownfield” sites. Environmental Protection Agency’s Brownfields program supports assessment, cleanup, and redevelopment at certain contaminated sites. The sites can be returned to productive use and promote economic development. Missoula has received its first Brownfield pilot grant for these sites.

**LAND CONSERVATION**

In addition to the other resources listed in this chapter, scenic views are also highly valued. Federal law considers scenic open spaces to be areas which contribute to scenic panoramas that can be enjoyed from a park, nature preserve, public road, water body, trail, historic structure or land area. Scenic views may also provide a visual buffer around important open space features and visual rather than physical access may be sufficient for the public to appreciate such values.\(^{129}\) The 1992 Inventory of Conservation Resources identifies critical scenic open space resources along roads and water bodies in Missoula County.

Protection of ecological, agricultural, scenic, and cultural resources can be achieved through land conservation measures on both public and private land. Open space acquisition by the City of Missoula and conservation easements are summarized below. Additional conservation lands exist under the management of state and federal agencies.

**CITY OF MISSOULA OPEN SPACE LAND**

In November 1995, City of Missoula voters passed a $5 million open space bond to acquire open space land in or near the City, as guided by the *Missoula Urban Area Open Space Plan*. Money was used to purchase 3,250 acres of private land for open space. Table 18 summarizes the lands acquired through 1995 open space bond.

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\(^{129}\) *Inventory of Conservation Resources*, 1992, page 44.
### Table 18

#### 1995 Open Space Bond Acquisitions

<table>
<thead>
<tr>
<th>Property</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount Jumbo</td>
<td>1,465 acres</td>
</tr>
<tr>
<td>Randolph Property</td>
<td>467 acres</td>
</tr>
<tr>
<td>Shilling Property</td>
<td>120 acres</td>
</tr>
<tr>
<td>Fort Missoula</td>
<td>97 acres</td>
</tr>
<tr>
<td>Mt. Sentinel Cox Property</td>
<td>475 acres</td>
</tr>
<tr>
<td>Wilbert Waterfront property</td>
<td>79 acres</td>
</tr>
<tr>
<td>Mount Jumbo Cromwell property</td>
<td>33 acres</td>
</tr>
<tr>
<td>North Hills Qwest property</td>
<td>0.23 acres</td>
</tr>
<tr>
<td>Mt. Sentinel Backside</td>
<td>474 acres</td>
</tr>
<tr>
<td>Simon CF Riverfront Property</td>
<td>40 acres</td>
</tr>
</tbody>
</table>

Land was also purchased for the Bicycle Commuter Network.

*Source: Missoula Department of Parks and Recreation, 2005.*

## Conservation Easements

Conservation easements are a valuable tool for protecting natural resources on private property. A landowner continues to own and manage the land but voluntarily gives up the right to conduct certain activities. These activities may include subdivision, commercial timber harvest, grazing in riparian areas, mining, or other uses that would degrade the resource. The landowner can receive a tax benefit. The amount of land in conservation easements has been increasing. By 2005, there were 29,883 acres of land in conservation easements in Missoula County, representing 10% of the private land (excluding Plum Creek land) in the County.¹³⁰

Conservation easements are also used on public lands. In 2004, the Montana Department of Natural Resources and Conservation granted a conservation easement to Montana Fish, Wildlife & Parks in the Blackfoot-Clearwater Wildlife Management Area.

Other conservation tools such as land donation and land purchase are also used throughout the County by local land trusts such as Five Valleys Land Trust, Trust for Public Land, Nature Conservancy, and Rocky Mountain Elk Foundation. For instance, the Trust for Public Land and the Swan Ecosystem Center have worked to secure funding to purchase land in the Swan Valley. Congress has appropriated $3.3 million of Forest Legacy Program dollars for the Swan Valley for 2005, which will help purchase easements and acquisitions of Plum Creek land checker-boarded within the Swan River State Forest. Another appropriation of $3 million of Land and Water Conservation Funds will help purchase additional Plum Creek Land within Grizzly Bear linkage zones for the Forest Service.

To further explore possible tools for private land protection, Missoula County has contracted with Five Valleys Land Trust to convene, facilitate, and staff the Missoula County Open Lands Working Group. Formed in 2005, this citizen-driven group consists of 18 landowners and key citizens from nine regions in the County. By 2006, the group will have compiled a report detailing options for Missoula County to increase land protection tools for private landowners.

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¹³⁰ Montana Natural Heritage Program and Office of Planning and Grants, 2005.
H. CULTURAL RESOURCES

Diverse historic and archeological resources are found in Missoula County. These include paleo-Indian and Native American artifacts, occupation sites and trails, sites of current cultural importance, and historic structures and land areas associated with white settlement.

Missoula now has eight Historic Districts listed on the National Register of Historic Places as well as scores of individually listed buildings within the City and the County. As development rapidly spreads through the County, preservation of historic resources has become recognized as increasingly important. Historic Preservation has become an ongoing commitment to community heritage and recognition of the County’s unique "Sense of Place."

HISTORICAL BACKGROUND

NATIVE PEOPLES

The oldest Indian artifacts found in Missoula County date from 12,000 years ago and the first known semi-permanent sites developed 5,500 years ago. During the following centuries Missoula County was occupied by a succession of Native American tribes. The introduction of the horse and European settlement in the east resulted in tribal relocations throughout Montana. By 1700 the Salish, Pend D’Oreille, and Kootenai had been pushed into western Montana by the Blackfeet and other tribes. The Lolo Trail was used by Nez Perce, Salish and other tribes as a major travel route. Flathead Lake was a cultural center and a meeting place for nearly all western Montana tribes. At the time of white settlement, the Missoula County area was used by the Salish, Kootenai, Pend d’Oreille, Blackfeet, and Shoshone tribes.131

For centuries the Missoula Valley offered natural passageways between the mountain ranges, where Native Americans, such as the Salish and Nez Perce, traveled to and from buffalo hunting grounds on the plains east of the Continental Divide. However, at one location, just west of the confluence of the Big Blackfoot and the Clark Fork Rivers, the narrowing canyon also provided a convenient ambush site, where Blackfeet raiders would attack returning buffalo hunters. As a result of the bloody confrontations there, the site became known as Hell's Gate, now known as Hellgate Canyon.

LEWIS AND CLARK EXPEDITION

The first documented entry of Euro-Americans into western Montana was the Lewis and Clark Expedition. The Expedition left St. Louis in 1803 to explore and confirm the claim of the Louisiana Purchase from France. Under orders from President Thomas Jefferson, the group explored the Missouri River headwaters in search of a western path to the Pacific Ocean. In 1805 on their western trek to the Pacific, they camped very near present-day Lolo, at what was called Travelers’ Rest. They followed the Lolo Trail up and over Lolo Pass, through the Bitterroot Mountains to Idaho. In 1806, the Expedition returned to the Bitterroot and Travelers’ Rest, where Lewis and Clark divided their party. Lewis led one group into the Missoula Valley, camping near Grant Creek on July 3, 1806. Following advice from Nez Perce guides, they left the Valley through the Hellgate Narrows by means of the old Salish Trail on July 4, and proceeded east up the Blackfoot River Valley.

EUROPEAN EXPLORATION AND SETTLEMENT

From the time of the Lewis and Clark Expedition to the mid-century point, few other white men visited the Missoula Valley. The notable exceptions were explorers such as David

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131 Inventory of Conservation Resources for Missoula County, 1992.
Thompson and the Jesuit missionaries who came to the Bitterroot Valley in 1841 to establish St. Mary's Mission, near present day Stevensville.

In 1855, Isaac Stevens, Governor of Washington Territory, met with the Chiefs of the Salish, Pend d’Oreille, and Kootenai Tribes at Council Grove along the Clark Fork River near Missoula to negotiate a treaty. Under the terms of the Hellgate Treaty, the Kootenai and Pend d’Oreilles would move to the Flathead Reservation in the Jocko Valley, while the Bitterroot Salish would remain in the Bitterroot Valley. The treaty stated that no portion of the Bitterroot Valley south of Lolo Creek would be opened to settlement until the area had been surveyed. Although the government did not conduct surveys, white settlers moved into the valley. In 1871, Salish subchiefs Arlee and Joseph agreed to move to the Flathead Reservation, but Chief Charlo refused. He and several hundred followers remained in the Bitterroot Valley until 1891 when, facing starvation, they were removed under military escort.

GROWTH OF MISSOULA

Missoula has been a major commercial center in western Montana since it was founded in 1860 at a historically strategic point near the head of five valley systems: the Hellgate and Blackfoot Valleys to the east, the Missoula Valley to the west, the Flathead-Jocko Valley to the north, and the Bitterroot Valley to the south. Between 1859 and 1863, Captain John Mullan supervised construction of a military road between Fort Walla Walla, Washington, and Fort Benton, Montana. Mullan's road reached the Missoula Valley in 1860. The road became a thoroughfare for thousands of travelers to gold rush sites, as well as for settlers heading to the Missoula Valley and other locations throughout the West. Prospectors following Mullan Road into Missoula County discovered gold at Garnet-Coloma, Elk Creek, Ninemile, Lolo Creek, and other areas. The Missoula Valley was also a rendezvous site and plant gathering area for the Salish, Pend d’Oreille, Nez Perce, and Kootenai Tribes.

Captain C.P. Higgins and Francis L. Worden, a Walla Walla merchant, established the first settlement in the Missoula area in 1860 at the Hellgate Trading Post located about four miles west of the existing townsite. It and Missoula Mills, established in 1864 at the present townsite, were built on the Mullan Road to trade with the Indians, with those traveling to the region's mines, and with the ranchers and farmers who began to settle in the adjoining valleys. Trading posts were often constructed where tribes came together to meet.

In the summer of 1877, the U.S. Army constructed Fort Missoula, which became a source of economic stability for the town between the end of the placer mining era and the coming of the railroad. The Bonner, Hammond, and Eddy Company (later the Missoula Mercantile) established in 1866, dominated the wholesale and retail trade in the region by the 1880’s and made Missoula the largest trade center within a 75-mile radius.

The construction of the Northern Pacific Railroad through Missoula in 1883, converted it from a town of 300 in 1880 to a city of 12,000 in 1920, with an economy based on trade, timber, and agriculture. In 1886, A.B. Hammond built what was reputed to have been the world's largest lumber mill at Bonner, seven miles east of Missoula. The mill produced timbers for railroad structures and the Butte-area mines, and lumber for building construction. Agriculture attracted thousands to the area in the early 1900’s with the opening of the Flathead Indian Reservation, the promotion of homesteading, and the construction of the Chicago, Milwaukee, St. Paul and Pacific Railroad through Missoula. Large irrigation projects were constructed in the Bitterroot and Flathead Valleys, which became famous for their orchards.
Missoula also became the center of local, state, and federal government as the county seat in 1860, the site of the state university in 1895, and the USDA Forest Service Region Headquarters in 1908. New Deal projects such as the construction of university buildings and several city improvements helped stabilize the city's economy during the 1930s.\textsuperscript{132}

**NATIVE AMERICAN ARCHEOLOGICAL & CULTURAL SITES**

Evidence of early inhabitation comes from a variety of sites and artifacts such as tools, pictographs, stone cairns, scarred trees, tipi rings, hearths, rock quarries, and chipping sites. Approximately 95\% of archeological and cultural artifacts in Missoula County have been found along creeks, rivers, and lakes. Sites of current cultural importance to Native Americans also exist, including undisturbed spiritual sites, prehistoric and historic campsites, burial grounds, and other cultural sites.\textsuperscript{133}

Projects that disturb the ground can damage or destroy cultural sites. Based on a Memorandum of Understanding with the Confederated Salish and Kootenai Tribes, Missoula County has a policy to include the Tribes as a reviewer on all subdivision projects. One tool for determining the presence of known cultural resources is a file search by the State Historic Preservation Office or Tribal Historic Preservation Office. State and Federally funded projects, or those subject to permit approval from the State or Federal government, must complete a file search before disturbing an area. File searches may lead to recommendations for further cultural resource identification or treatment efforts. If cultural resources are uncovered during any earth moving, the Confederated Salish and Kootenai Tribe’s Tribal Preservation Office in Pablo and the State Historic Preservation Office (SHPO) in Helena should be contacted before further disturbance of the site occurs.

**HISTORIC PLACES**

The National Register of Historic Places is the official list of the nation’s historic buildings and sites considered worthy of preservation. Seventy five historic sites, districts, landmarks, and trails in Missoula County are listed on the National Register. These include Travelers' Rest, Fort Fizzle, Lolo Trail, Camp Paxson in Seeley Lake, and the Ninemile Ranger Station, as well as numerous buildings and historic districts in the Missoula urban area. More than 3,000 properties have been surveyed. Map 14 shows the location of several of these sites.

The Missoula Historic Preservation Program was begun in 1986 and serves the County and the City of Missoula. One role of this program is to assist in getting historic sites within the County listed on the National Register. A recent trend in historic preservation is the practice of conserving historic landscapes, such as lumber camps and mining districts. Mining districts like the Wallace-Coloma and Potomac Districts in eastern Missoula County and the Ninemile District in the western part of the County had brief but colorful histories in the late 19\textsuperscript{th} and early 20\textsuperscript{th} centuries.

\textsuperscript{132} Missoula County Historic Preservation Office, 2002.
\textsuperscript{133} Flathead Reservation Comprehensive Resources Plan, Confederated Salish and Kootenai Tribes, January 1996.
**HISTORIC BUILDINGS AND STRUCTURES**

An historic building is one that displays architectural characteristics that reflect the history of the time in which it was built, is associated with significant people or events in the past, or may provide important historical information. Examples in Missoula include the Courthouse, Milwaukee Depot, Wilma Theater, and Missoula Mercantile (Macy’s). While there are currently many buildings in Missoula County on the National Register of Historic Places, buildings not on the list may also be considered historic or eligible to be listed. Historic Districts in Missoula include the East Pine Street, McCormick Neighborhood, Fort Missoula, Southside, University of Montana, the University Neighborhood, and Lower Rattlesnake. The Downtown area, home to nearly 20 sites listed on the National Register, is currently being surveyed for inclusion as an Historic District.

**TRAVELERS’ REST**

The Travelers’ Rest Campsite was designated a National Historic Landmark in 1960. Recent investigations have indicated that the current landmark location east of Highway 93 is not the actual Lewis and Clark campsite. Archeological investigations have been conducted west of Highway 93 along Lolo Creek to verify the historic campsite location. Since 2001 the Montana Department of Fish, Wildlife, and Parks has acquired portions of the Travelers’ Rest site west of US Highway 93 for Travelers’ Rest State Park. The Park is managed by the Travelers’ Rest Preservation and Heritage Association, a non-profit organization.

**HISTORIC TRAILS**

Historic Trails in the County include the Lolo Trail, Lewis and Clark route, and Nez Perce Trail (Map 14). The Lolo Trail was an historic Indian trade and hunting route across the Bitterroot Mountains to the Clearwater River. Congress designated the Lolo Trail route as a National Historic Trail in 1978. It has also been given National Historic Landmark status. The Lewis and Clark route was designated a National Historic Trail in 1978.

The traditional homeland of the Nez Perce (Nee-Me-Poo, translated to mean “The People”) was southeastern Washington, northeastern Oregon, and north central Idaho. The Tribe traditionally traveled over the Lolo Trail, which they called “Khoo-say-na-is-kit,” as a route to buffalo hunting grounds and eventually as a trade route. In 1877, the Nez Perce were ordered to leave their ancestral homelands and move to a reservation in Idaho. Resisting bands followed the trail south and east across the Rocky Mountains in an attempt to find refuge in Canada. The route that the Nez Perce followed from Oregon to Montana, including along Lolo Creek, and south along the Bitterroot River was designated as the Nez Perce National Historic Trail in 1986.

The Lolo Trail, portions of the Nez Perce National Historic Trail, and portions of the Lewis and Clark National Historic Trail all generally follow Lolo Creek from Lolo Pass to Travelers’ Rest. Other early trails noted on the first surveys include the Jocko Trail and the Trail to the Buffalo, east over the Mount Jumbo Saddle to the Blackfoot River Valley.
CHAPTER THREE: COMMUNITY GOALS AND OBJECTIVES

INTRODUCTION

This chapter includes guiding principles, goals, and objectives for the Growth Policy.¹ Guiding Principles are broad assumptions that provide the framework for the development of planning goals and objectives. Goals, as used in this document, are value based general statements that articulate Missoula County’s vision of how it will grow. Objectives are more specific, usually measurable, statements of desired ends expressed for one or more of the Growth Policy goals.

The implementation chapters of the Growth Policy describe tools and strategies to implement the goals and objectives. Desired positive effects of well managed growth can only be achieved if effective tools are in place to implement plans and strategies.

The principles, goals, and objectives stated in this Growth Policy are primarily derived from three existing adopted documents.

- Missoula Urban Comprehensive Plan 1998 Update
- Planning for Growth in Missoula County, 1996 Policy Document
- 1975 Missoula County Comprehensive Plan

These documents express countywide goals and objectives. They were adopted by the governing bodies after extensive public involvement and comment. Other countywide goals expressed for particular issues or regions are not included here, but can be referenced in issue or regional plans (see Appendix B). These other plans adopted for particular geographic areas or issues also describe in greater detail how the countywide goals may be reached. New plans will also include goals and objectives specific to geographic areas or issues.

GUIDING PRINCIPLES

Guiding Principles express broad values or assumptions and provide the context in which planning policy is developed and implemented. The following statements reflect guiding principles adopted by the City and County in planning documents listed above.

1. Tools used by the City, County, and other governing bodies should reflect the values of the citizens they serve and effectively accomplish the goal to a) protect critical lands and natural resources, and b) enhance cultural and social resources and the valued characteristics of our communities.

2. The right to a clean and healthy environment is fundamentally important.

3. Economic and social well being is tied to the quality of the natural environment. Long term economic stability and a high quality living environment should not be sacrificed for short-term economic gain.

4. There may be social as well as physical limitations on the ability of an area to accommodate growth.

¹ MCA 76-1-601 (3)(a).
5. Social structure and physical character are distinctive at the neighborhood level, the small community level, the larger urban area, and in the rural reaches of Missoula County. The diversity, integrity, and unique values of neighborhoods, communities, and rural areas are important and should be protected.

6. Communities should be involved in the planning and decision making processes that affect them.

7. Respect for private property rights is fundamentally important.

8. Efforts by citizen groups to achieve community goals are as vital to effective growth management as government actions.

9. Planning and development of infrastructure are among the most important tools for well managed growth. Decisions about infrastructure may affect, deter or promote integration of development and environmental values.

10. Infrastructure includes more than sewers, transportation systems, water, and telecommunications. Included in a cultural infrastructure are libraries, museums, historical landmarks, government buildings, parks and other open spaces, and schools. Social infrastructure provides for the “public welfare” and includes health, safety, educational, and social services.

GENERAL GOALS

1. Manage growth in a proactive rather than reactive way, considering both immediate and cumulative impacts. Create a truly healthy community by: 1) protecting critical lands and natural resources, such as wildlife habitat; riparian resources; hillsides; air and water quality; and open spaces; and 2) enhancing the community’s resources in the areas of health and safety; social, educational, recreational, and cultural services; employment; housing and the valued characteristics of communities.

NATURAL ENVIRONMENT GOALS AND OBJECTIVES

NATURAL ENVIRONMENT GOALS

1. Create sustainable relationships between human activities and natural systems.

2. Protect the natural environment and improve it where degradation has occurred.

NATURAL ENVIRONMENT OBJECTIVES

1. Integrate development patterns with preservation or enhancement of the environment.

2. Maintain and improve air quality in the urban area.

3. Minimize the impact of land development on surface and subsurface water.

4. Preserve the floodplain for flood attenuation, aquifer recharge, fish and wildlife habitat, buffer for pollutants and protection of public health and safety.

5. Promote natural stream function and stability.
6. Protect riparian corridors to provide wildlife habitat and movement areas and to buffer water bodies.

7. Preserve existing wetlands and restore historic wetlands wherever possible.

8. Promote best management practices for development and construction projects along wetlands and water bodies to reduce impacts to surface water quality and recharge zones.

9. Protect areas critical for wildlife survival and minimize impacts on less critical wildlife habitat.

10. Preserve critical plant communities such as species of limited distribution and riparian vegetation.

11. Preserve and enhance the urban forest.

12. Minimize the spread of noxious weeds.

13. Preserve areas with scenic open space value (river corridors, vistas). Increase opportunities for preservation of and appropriate use of natural areas and green spaces within and around Missoula.

**CULTURAL AND HISTORIC RESOURCES GOALS AND OBJECTIVES**

**CULTURAL AND HISTORIC RESOURCES GOALS**
1. Identify, evaluate, and develop ways to protect historic and cultural sites, structures, and trails.

**CULTURAL AND HISTORIC RESOURCES OBJECTIVES**
1. Encourage the preservation of historic buildings, historic landscapes, and cultural sites.

2. Protect and preserve archeological resources affected by or adjacent to development.

3. Provide education on area history, culture, and environment.

**DEVELOPMENT PATTERNS AND LAND USE GOALS AND OBJECTIVES**

**DEVELOPMENT PATTERN AND LAND USE GOALS**
1. Identify where in Missoula County certain types of growth should or should not occur and how the integration of developed lands and open spaces can best be accomplished.

2. Provide for logical expansion of communities while maintaining environmental quality and keeping the expenditures for public services and facilities at a reasonable level.

3. Preserve the diversity, integrity, and unique values of neighborhoods, communities, and rural areas.

4. Respect the different elements of neighborhood patterns and integrate them so as to form a functional, aesthetically pleasing, and livable whole.
DEVELOPMENT PATTERNS AND LAND USE OBJECTIVES

GENERAL
1. Accommodate growth, retain historical resources, and provide appropriate open spaces in the design of development so that areas of greater density remain healthy, safe, and livable.

2. Encourage and support new land development within or immediately adjacent to areas where public services are currently available both to maximize local government efficiency and to promote a logical growth pattern.

3. Encourage low density development in areas distant from sewer or other public facilities and services, in part to maintain rural character and environmental quality.

4. Encourage the continuation of agricultural and forestry operations and protect them from adverse impacts of urban development. Distinguish between urban and rural land use patterns in land use decisions related to agriculture. Support local sustainable agriculture.

5. Preserve and enhance natural vegetation and encourage landscaping that will protect soils, air and water quality, visual amenities, other environmental features, and reduce conflicts between land use activities.

6. Encourage a development pattern along major streets within and leading to the community that is visually pleasing.

7. Encourage the preservation and adaptive re-use of historic structures.

8. Encourage upgrading and maintenance of private property and structures.

9. Balance the consideration of efficient public services, preservation of natural resources, continuation of agricultural opportunities, and availability of existing lands within the Missoula Urban Service Area by referring to the Residential Development Allocation Map (Map 18) for identification of where residential development should occur within the Missoula Urban Service Area.

RESIDENTIAL
10. Encourage development at appropriate densities within the urban growth area.

11. Encourage a residential land use pattern that provides a high quality living environment in a variety of residential settings, protects public health and safety, minimizes local government service costs, and preserves natural resources.

12. Encourage the design of low density development within or adjacent to the urban growth area in such a way as to accommodate potential re-subdivision and infill.

13. Refer to the Residential Development Allocation Map (Map 18) when determining the appropriateness of discretionary requests for rezoning within the Missoula Urban Service Area. (Please note: in addition to the allocation numbers, the map indicates the zoned capacity of each area. While the capacity exists, it may not necessarily be in the right locations within the area and/or at the appropriate density. The zoned capacity figure is not intended to preclude applications for changes in zoning. Zoning requests will
continue to be reviewed in accordance with the criteria described in MCA Title 76 and adopted local ordinances.)

14. Enhance opportunities for developing a variety of housing and other types of development to meet community needs.

COMMERCIAL/INDUSTRIAL
15. Conserve resources and minimize transportation demand in rural areas by structuring commercial centers around existing facilities.

16. Support development of neighborhood commercial centers, which satisfy community wide goals and are designed to mitigate negative impacts on residential neighborhoods.

17. Allocate land for commercial and industrial land uses that meets their specific needs and adheres to adopted land use policy. Efficiently and economically provide public services to those areas.

18. Improve the appearance and functioning of existing commercial strips within and leading to the community.

19. Create smooth transitions from commercial to noncommercial uses.

20. Encourage new industrial projects to locate within existing industrial parks and areas already developed for industrial use.

21. Encourage interesting and innovative design of structures.

ECONOMY GOALS AND OBJECTIVES

ECONOMY GOALS
1. Protect and further develop the County's economic base and assure the economic health of the Missoula urban core, smaller communities, and rural areas.

2. Encourage economic development to occur in ways that conserve and enhance natural and human resources.

3. Manage growth to maintain and enhance the economy of Missoula County to support a diverse population, strong community, and healthy environment.

ECONOMY OBJECTIVES
1. Allow for diverse business and employment opportunities and a competitive business climate.

2. Support a stable economy by encouraging “clean” industries that utilize raw materials and diversify demand dependence; concentrating economic expansion on stable industries with long term prospects; encouraging a broad economic base; and encouraging economic expansion that meets residents’ needs first.
HOUSING GOALS AND OBJECTIVES

HOUSING GOALS
1. Achieve the overall mix and placement of housing needed to support a community rich in social, cultural, and economic diversity and an environment rich with natural resources.

HOUSING OBJECTIVES
1. Encourage a viable mix and concentration of residential housing types that serve a diverse population, including the aging and those with special needs.
2. Support affordable housing options.
3. Support programs that encourage home ownership.
4. Design and locate homes to minimize impacts on natural resources and the physical environment and to maximize social resources while meeting emerging needs. Locate housing in proximity to physical, technological, social, and economic infrastructure.
5. Maximize constructive neighborhood involvement in housing development and design.

LOCAL SERVICES AND FACILITIES GOALS AND OBJECTIVES

GENERAL LOCAL SERVICES AND FACILITIES GOALS
1. Provide cost effective urban services such as sewer, police and fire protection, libraries, cultural activities, active recreation, and schools.
2. Encourage development to locate in areas where facilities are available and where the public costs of providing needed facilities and public services are lowest.
3. Ensure that the impacts associated with development are fully addressed and that the costs of mitigating those impacts are fairly distributed.
4. Encourage a land use pattern that facilitates use of all modes of transportation and provides for safe, healthy, affordable, efficient and convenient access to transportation connections for residential, commercial, industrial, and emergency traffic.

GENERAL LOCAL SERVICES AND FACILITIES OBJECTIVES
1. Provide adequate infrastructure to ensure a healthy natural, economic, and social environment in Missoula County. Ensure the availability and affordability of infrastructure such as sewer, water, transportation, public safety, health and social services, public lands, parks and other open spaces, cultural resources, and education.
2. Maximize use of present facilities and encourage joint use rather than expansion.
3. Develop infrastructure to accommodate present development and plan infrastructure to meet the needs of anticipated growth in accordance with public values and goals.
4. Coordinate infrastructure planning among government agencies, private sector groups, and the general public.
5. Refer to the Residential Development Allocation Map (Map 18) as a tool to inform infrastructure planning and investment within the Missoula Urban Service Area.
TRANSPORTATION OBJECTIVES
1. Improve, rather than extend, the present transportation system network for the conservation of natural resources, energy and public funds.

2. Concentrate commercial and residential development in activity centers where the transportation system can support it.

3. Provide accommodations for and promote the use of more sustainable modes of transportation, including public transit, bicycle, and pedestrian facilities. Expand the service of the transportation network by providing families, commuters, and senior citizens access to community and neighborhood centers. Promote the use of renewable energy and less reliance on fossil fuels.

4. Address noise, air quality, and safety impacts of major transportation facilities on adjacent land uses.

EMERGENCY SERVICES OBJECTIVES
1. Encourage a land use pattern that facilitates provision of emergency services.

2. Encourage an urban level of development in those areas that are or can be adequately served by emergency services as determined by the emergency service agencies and local governing bodies.

3. Continue interjurisdictional cooperation between public safety agencies.

4. Encourage unification of public safety agencies where practical.

5. Establish an effective rural fire protection program for all areas with rural residential development.

RECREATIONAL RESOURCES OBJECTIVES
1. Provide community recreation opportunities that meet the needs of all citizens of the County.

2. Locate recreational open spaces (parks, ball fields, golf courses, etc.) near areas where development already exists or where it is desired, and where the need for recreational space is established.

3. Develop opportunities for public recreational use of rivers and lakes while protecting environmental quality and private property.

4. Provide neighborhood open space and public and semi-public spaces for recreation.

5. Provide access to adequate community centers for local activities, co-located where possible, to minimize costs and maximize joint usage.

COMMUNITY ATTITUDES
The 2005 Growth Policy survey examined public support of the general goals and objectives. Survey results indicate that many of the goals and objectives articulated in the 1990’s and before remain high priorities today. Some of the results are summarized by general content area below.
Natural Environment: A large majority of both City and County residents (91.2%) say that protecting the environment is a somewhat or very high priority. City and County residents also rate their support for actions to protect the environment as high or very high in these areas: maintaining and improving water quality (96.7%), maintaining and improving air quality (93.2%), protecting river and stream corridors for habitat and public safety (92.6%), protecting areas important for wildlife survival (89.2%), and preserving scenic views (81.9%).

Development Pattern and Land Use: A majority of residents support these development pattern objectives:
- Protect and enhance neighborhood character (81.5%);
- Encourage preservation and re-use of historic structures (80.2%);
- Protect agriculture and forest operations from encroaching residential development (79.0%);
- Concentrate development in or near existing communities (69.2%);
- Improve appearance and function of existing commercial strips (69.1%);
- Support development of smaller town or neighborhood commercial centers (69.0%); and
- Concentrate development at or near major crossroads (57.6%).

Survey results are somewhat unclear regarding the desirability of locating residential and commercial development near each other. Residents do not support the objective to encourage housing in or near commercial areas (34.9%); however, in later questions about tools, residents support encouraging development that combines commercial and residential uses (67.1%).

Additional questions were asked about development pattern preferences. While these questions are not explicitly based on Growth Policy objectives, the responses provide some background information for future discussion on land use designations. A slim majority of Missoula City and County residents opposed adding more housing inside a city or town as a way to decrease development in rural areas. The survey also examined views on three development pattern scenarios. In the first scenario, almost six in ten respondents preferred one acre lots and driving to stores and restaurants over 1/4 acre lots in walking distance to stores and restaurants. Another scenario focused on differences between urban and suburban patterns and was more detailed, adding in a 30 minute commute time. In that case, almost 66% of people preferred the smaller lot option. Another scenario asked people to choose between 20 houses built on one acre lots surrounded by 80 acres of open space or 20 houses on 5 acre lots spread evenly across 100 acres. Almost six in ten chose the five acre lot scenario.

Economy: Attracting businesses and jobs remains a high priority (82.6%).

Housing: Housing for low and moderate income people is a high priority (83.9%). There is also support for requiring new developments to provide housing for low and moderate incomes (78.9%).

Local Services: Improving street and road systems (83.3%) and making sure the public is able to get to and use open space (82.5%) are priorities.
CHAPTER FOUR: IMPLEMENTATION

INTRODUCTION

This chapter has two sections. The first provides an overview of various types of planning tools that can be utilized to implement the Growth Policy. This list is not exhaustive. It is also not the intent of this document to imply that all of the implementation tools presented here have been or will be used in Missoula.

The second part of this chapter contains a list of strategies designed to implement the Growth Policy. These strategies were previously adopted by Missoula City and County in the 1975 Missoula County Comprehensive Plan, 1998 Missoula Urban Area Comprehensive Plan and 1996 Planning for Growth in Missoula County. A timetable for implementation of the Growth Policy is also included at the end of this chapter. Additional information pertaining to implementation of the Growth Policy is found in subsequent chapters on regional, vicinity and issue plans (Chapter 5); subdivision review (Chapter 6), governing body coordination (Chapter 7), and public infrastructure development and maintenance strategies (Chapter 8).

IMPLEMENTATION TOOLS

The implementation tools are organized in the following descriptive categories: regulatory, policy development, fiscal, and educational. There are a couple of tools that do not fall into these categories, which can be found in the “other” category. Regulatory tools are adopted by governing bodies as rules or requirements. Governing bodies use policy tools to show commitment to a particular direction or course of action. Fiscal tools are financial programs used to implement policy. Educational tools include a broad range of methods used to inform governing bodies, policy makers and the public about key planning and community development issues. They often serve as the basis for creating, reviewing, and revising policy and regulations.

REGULATORY TOOLS

SUBDIVISION REGULATIONS

Subdivision regulations control the creation of new lots by imposing design and infrastructure standards and by establishing procedures for local government and public review. Regulating the division of land ensures that development has appropriate services and that it does not adversely affect resources. As with all regulatory tools, subdivision regulations are most effective with consistent application.

Both the City of Missoula and Missoula County have adopted subdivision regulations. Chapter 6 provides more detailed information on the relationship between subdivision regulations and the Growth Policy.

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1 MCA 76-1-601(3)(f).
ZONING

Zoning is another commonly used tool for implementing land use policy. The historical rationale for zoning was to separate incompatible land uses. Typically, zoning is structured to be either cumulative or non-cumulative. Non-cumulative zoning separates uses into exclusive zones. Cumulative zoning, or pyramidal zoning, is based on a hierarchy of land uses with single family residential zoning at the top of the pyramid, and higher density or more intense uses below. Each zone with more intense uses incorporates the less intense uses permitted higher up in the pyramid. Pyramidal zoning allows for a potentially greater mix of uses than non-cumulative zoning. Zoning ordinances generally address type of use, intensity of use, and space and bulk requirements. Development and design standards for such things as signage, parking, landscaping, noise, lighting, buildings, and site layout can also be addressed through zoning regulations. A zoning map and the descriptive text of districts are the two critical components of zoning regulations.

The Missoula County Zoning Resolution No. 76-113, as amended, governs zoning throughout Missoula County under a non-cumulative framework. Most of the County is not zoned and the majority of the zoned property within the County is located in and around the Missoula urban area. There are a number of citizen-initiated zoning districts in the County as well. The Missoula City Zoning Ordinance, originally adopted in 1932, governs zoning within the municipal limits of the City of Missoula. The zoning districts in the City of Missoula are generally cumulative.

In addition to the more traditional form of zoning, jurisdictions have explored other zoning approaches that can be used to regulate development of property. Some of these alternatives are described below.

FLEXIBLE ZONING REGULATIONS

Flexible zoning regulations "apply general standards to property with final decisions made shortly before development occurs [...] The intent of such devices is to widen the range of options available to developers and thereby lead to more desirable and better designs. They recognize that the appropriate use for every parcel of land cannot be predetermined; as a result, policies and criteria for decision making are established, often through performance standards, rather than specified uses and standards. Among flexible zoning devices are floating zones, overlay zones, planned unit developments (PUDs), bonus and incentive zoning, and conditional rezoning. The zoning devices are usually administered through special use permits, site plan review and rezoning requests."²

Both City and County zoning regulations allow for creation of PUDs and special districts. The City and County incorporated incentives (density bonuses) and cluster development standards into their zoning regulations. (City Council later rescinded density bonuses and placed a moratorium on planned neighborhood cluster provisions.) The City of Missoula’s Riparian Resource District is an example of a zoning overlay.

DEVeLOPMENT DESIGN STANDARDS

Development design standards include site and building design standards adopted in zoning regulations to encourage high quality and aesthetically pleasing development. These standards are generally adopted with the intent of preserving and enhancing community character. The law supports the use of design standards if they are objective, reasonable, and applied uniformly throughout a community.

Considerations for the implementation of design standards should include the level of administrative review required and the potential for increased development costs. The process of creating development design standards should acknowledge the delicate balance between encouraging quality development and the potential for adversely affecting the costs of housing and business development. Both Missoula County and the City of Missoula have sign regulations, which include some design standards. The City’s Enterprise Commercial (EC) district also includes building and site design standards.

PERFORMANCE ZONING
Performance zoning is another alternative to more traditional zoning approaches that focuses on using standards to address intensity of uses instead of separating uses by zoning districts. Performance zoning for residential uses often has, “a primary objective of protecting natural resources and a secondary objective of providing flexibility in the design of residential developments… In addition to the natural resource protection standards, the zoning technique contains three primary performance criteria: minimum open space, maximum density, and maximum impervious surface.”

Site evaluations are an integral part of performance zoning for residential uses and critical for determining a suitable intensity of development for a site. Natural resource protection is generally accomplished by applying open space standards to preserve the natural features of a site. Flexibility in development design can be achieved by allowing a full range of options; however, some communities have chosen to limit the list of permitted housing types in certain areas. Performance zoning is generally easier to implement in areas that are unzoned.

Performance zoning can also be used to address commercial and industrial uses by requiring more intense uses to meet higher standards for site and building design. For example, the City and County have adopted Special District #2 (SD#2), which allows for a variety of residential and commercial uses along the Reserve Street corridor between South Avenue and the Clark Fork River. In SD#2, a proposal is evaluated for compliance with absolute standards and a point system is used to determine compliance against a set of relative standards. All projects have to meet the absolute standards; then, the more intense the use, the greater the number of relative standards that must be met.

AGRICULTURAL AND FOREST PROTECTION ZONING
Agricultural and/or forest protection zoning is commonly used to restrict land uses to resource extraction and production activities. Resource protection zoning can be implemented through both nonexclusive and exclusive use zoning. Non-exclusive use zones usually require large minimum lot sizes, but do not address types of uses permitted. Exclusive use zoning limits the types of uses allowed, such as limiting residential development to what is necessary to support the agricultural use on the property, and prohibiting all uses deemed incompatible with farming. Other agricultural protection zoning mechanisms include voluntary agricultural districts, agricultural area buffers, area-based zoning or density zoning, fixed area-based allowance zoning and sliding scale area-based allowance zoning.

INTERIM ZONING
Interim zoning is specifically authorized in State law. It is a temporary land use control that expires unless replaced with permanent regulations. Interim zoning was used in Missoula County to limit proliferation of billboards until permanent regulations were adopted.

3 Center of Excellence for Sustainable Development, 2002.
5 A Compendium of Land Use Management Techniques for Hwy. 93, University of Montana School of Law Land Use Clinic, 2001.
**HISTORIC PRESERVATION ORDINANCES**
Historic preservation ordinances typically prescribe boundaries, design standards, and procedures for the development and demolition of structures within historic districts. The intent of historic preservation ordinances is to preserve the historic integrity of a particular area by ensuring that new or remodeled structures are compatible with the character of the district and strongly encouraging preservation of historic structures and cultural resources.

**FLOODPLAIN REGULATIONS**
Floodplain regulations restrict development in areas within the 100-year floodplain of a watercourse. The purpose of these regulations is to protect the watercourses and their flood storage areas, as well as the public health, safety, and welfare. Title 76, Chapter 5 of the *Montana Code Annotated* mandates that local governments adopt floodplain management regulations. Both the County and City have complied with this requirement.

**SHORELINE REGULATIONS**
Shoreline regulations are required by State law for all jurisdictions containing a lake. Such regulations provide that development of shorelines respects “their high scenic and resource values; the value of lakeshore property; the water quality of these lakes; and the scenic and recreational value of these lakes for the state’s residents and visitors.” Missoula County has adopted shoreline regulations.

**REGULATORY ENFORCEMENT**
Regulatory or code enforcement programs ensure that property owners comply with a jurisdiction’s land use regulations. Enforcement of zoning includes criminal prosecution and civil action to enjoin prohibited uses. Enforcement of subdivision regulations is part of the approval process with proof of compliance established prior to final plat approval.

Enforcement programs can be institutionalized in different ways. Enforcement of building, health, and land use regulations can be conducted within the same or different programs. Additionally, enforcement programs can be proactive or complaint-driven. The approach to regulatory enforcement is a policy choice that influences the effectiveness of a jurisdiction’s regulations. Both Missoula County and the City of Missoula have zoning and subdivision regulation enforcement programs that are complaint-driven. Although technically separate from other enforcement programs, they rely on informal collaboration between departments.

**POLICY TOOLS**

**LONG RANGE PLANNING**
A critical implementation tool for the Growth Policy is more detailed policy development completed through either a regional or vicinity planning process, or a planning process to address a particular issue such as transportation, parks and recreation, economic development, infrastructure or housing. The Growth Policy establishes the framework in which issue planning and regional and vicinity planning can take place. See Chapter 5 for more details on regional, vicinity, and issue planning and how these plans relate to the Growth Policy.

**ANNEXATION POLICY**
Annexation is the process by which “a municipality expands its territorial limits and jurisdictional powers.” Annexation agreements and policies are generally used to help municipalities plan for expansion and provision of municipal services. In order to help plan

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6 *Missoula County Shoreline Regulations*, Section 1.3.  
for growth, municipalities often set annexation policy that states the conditions under which
annexation will occur.

EMINENT DOMAIN POLICY
Eminent domain is the right of government, or its designee, to take private property for a
public use upon payment of the fair market value for the parcel. Eminent domain has
typically been exercised to address public health, safety, and welfare issues and is used for
purposes such as extension or improvement of transportation, drainage and flood control
systems.

URBAN GROWTH AREAS
Urban Growth Areas (UGAs), also known as urban growth boundaries, distinguish the
physical area surrounding a community where growth is encouraged and beyond which
growth is limited or discouraged. Typically UGAs are created by considering the following
factors: population trends, buildable lands inventories, efficiency of public infrastructure
development, and protection of rural lands outside of a community. UGAs are usually
delineated based on where development is anticipated and preferred within a certain period
of time, usually 20 years. UGAs can be complemented by establishing zoning within and
outside the UGA that controls the development pattern.

Missoula County and the City of Missoula have adopted an UGA that is based primarily on
the location of sewer.

INTERJURISDICTIONAL COORDINATION AND COOPERATION
Interactions between City and County government, between governmental entities within a
jurisdiction, and between local government and other governmental units, such as the
Confederated Salish and Kootenai Tribes, are part of the daily operations in Missoula
County. Local, State, federal and Tribal governmental entities have many issues and
concerns in common, such as efficiency of the transportation system, conservation of
resources, development of affordable housing, and support for economic development.
Informal and formal coordination and cooperation between governmental entities is
necessary to address, in a comprehensive manner, public goals and objectives such as
those outlined in the Growth Policy. Chapter 7 provides more details on interjurisdictional
coordination and cooperation in Missoula County.

URBAN RENEWAL DISTRICTS
The State of Montana’s Urban Renewal Law provides the opportunity for municipalities to
redevelop and rehabilitate “blighted” areas.8 State law also provides an opportunity to use
tax increment financing (TIF) to assist with redevelopment activities. The City of Missoula
established the downtown area as a redevelopment district in 1978 (Urban Renewal District
I). Since then, the City has created two more urban renewal districts (URD). URD II is
located west of the central business district and south of the Clark Fork River. URD III is
generally located along the Brooks Street corridor between Mount Avenue and Reserve
Street.

FISCAL TOOLS
CAPITAL IMPROVEMENTS PROGRAM
A Capital Improvements Program (CIP) is “administered by a city or county government,
which schedules permanent improvements, usually for a minimum of 5 years in the future, to
fit the projected fiscal capability of the local jurisdiction. The program is generally reviewed

8 MCA 7-15-42/43.
Typically the first year of the CIP is a budgeting process and the remaining years are considered the actual program. The importance of a CIP for land use planning is the critical connection between where and when infrastructure is provided and what the desired land use pattern is for a community or neighborhood. The City of Missoula has a five-year CIP. Proposals included in the CIP are reviewed for compliance with adopted land use and transportation planning policies. Missoula County has a CIP for administrative projects, such as County buildings, that does not cover public works projects. See Chapter 8 for more information on the City and County strategies for development, maintenance, and replacement of public infrastructure.

**IMPACT FEES**

Impact fees are charged to a developer by local government at the time of development or building permit review to pay for the impacts of new development on off-site capital facilities such as public sewer, roads, fire, or emergency services. State and local laws determine which types of facilities impact fees can cover and the requirements an impact fee program must meet. Impact fees should be based on a proposed development’s proportionate share of public infrastructure development cost and cannot be used to support operating or maintenance costs. The process for developing a fair and equitable impact fee program can be complex and often requires local governments to obtain outside assistance. Missoula City, County, and 2 rural fire districts conducted an impact fee study to determine how this tool might be used locally. Impact fees were enacted in the City and proposed in the County for capital facilities associated with parks, public safety, fire response, and general government. A subsequent study will be conducted to establish the possibility of enacting an impact fee program for transportation demands.

**WORKPLAN DEVELOPMENT/BUDGETING**

There are a number of budget and workplan models. They generally differ by the level of review (program by program versus overall budget of a department) and how budget and workplan priorities are set (for example focusing on outputs, community goals, or program objectives). Annual budget processes allocate limited government resources to daily operations. The development and approval of departmental workplans and corresponding budgets effectively prioritize community development services, such as planning, by allocating resources to staffing, operations and capital purchases that support direct services to the public. The political process of crafting an annual budget and workplan, coupled with fluctuations in funding for local government services can make it difficult for jurisdictions to stay focused on long-term community development goals and objectives.

**GRANTS ADMINISTRATION**

Grants administration includes applying for and administering private, state and federal grants or contracts; providing grants and administering contracts for local non-profit service organizations; providing technical assistance and direct service program administration; conducting needs assessments and program evaluations; coordinating community responses to identified needs; and seeking additional resources for the purpose of addressing a variety of community development issues. Grant programs are a key means of implementing public policy regarding affordable and accessible housing, infrastructure extension, economic development, historic preservation, health and human services, crime victim assistance, environmental remediation, and provision of support to low- and moderate-income households and special needs populations.

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10 MCA 7-6-16.
PURCHASE OF DEVELOPMENT RIGHTS
A Purchase of Development Rights (PDR) program involves the outright purchase by local or state government of development rights from a private property owner to preserve resource land. Funding for PDRs can come from such sources as bond initiatives, grants, and public matching funds programs. The difference between PDRs and land acquisition is that a property owner in a PDR program can continue to use his or her land in ways that are consistent with the objectives of the PDR program.

LAND ACQUISITION
Land acquisition programs involve a jurisdiction or organization purchasing land usually for some public benefit. Some communities have used this tool to purchase land to be used for affordable housing development; others have used it to purchase property for its open space value. The City of Missoula passed an Open Space Bond in 1995 that allowed for the purchase of land to preserve open space and provide trails and recreation playing fields.

TAX INCREMENT FINANCING
Tax increment financing (TIF) is an important fiscal tool that allows jurisdictions to finance certain kinds of development costs. Bonds are sold by a jurisdiction to finance (re)development efforts in a particular area based on anticipated increases in property taxes collected from that locale. The actual increment of increased tax revenue from the area is then used to pay off the bonds. Urban Renewal Districts are TIF supported. There are three Urban Renewal Districts in the City and one in the County at the Missoula Development Park near the airport.

EDUCATIONAL TOOLS
STUDIES, INVENTORIES AND INFORMATION MANAGEMENT
Studies and inventories identify critical social, environmental, historic and cultural resources, which are used to guide a broad range of planning efforts. Buildable lands and other kinds of resource inventories often provide critical baseline information for land use policy development. Geographic Information System (GIS) is an important tool used for organizing and displaying data in studies and inventories. Information management within and between City and County Departments can be used to organize and maintain the wide range of information collected on a variety of topics.

PUBLIC PARTICIPATION TOOLS
Public participation tools such as surveys, focus groups, town meetings, and design workshops, can be used to provide information used in a variety of planning processes. They can be used to collect information on community attitudes, opinions, and preferences for a particular project or a long range planning effort.

EVALUATION AND MONITORING
Monitoring and evaluation methods can help track the implementation of goals and objectives of the Growth Policy. These tracking methods often involve identifying key indicators or objective measures, determining the baseline situation, then setting benchmarks and monitoring progress. Continuous assessment and evaluation can help track progress and guide policies, programs and planning initiatives. Missoula Measures is a local monitoring tool, which was developed after a 1998-1999 study to track environment, health, and economy indicators for Missoula County.

OTHER TOOLS
CONSERVATION EASEMENTS
“Conservation easements involve the transfer of development rights from a property owner to a third party…(they) enable the land owner to retain title to a … tract and use it for
resource purposes.” 11 The transfer of development rights can be done through purchase or donation and can often result in a tax benefit to the property owner. Conservation easements may preserve critical resources such as wildlife habitat, wetlands or riparian areas, agricultural lands, forested lands or land with other scenic or natural resources. Conservation easements are often used in protecting land in TDR and PDR programs.12

RESTRICTIVE COVENANTS
Restrictive covenants are private agreements between property owners that restrict land uses. Restrictive covenants can include such provisions as permitted and prohibited uses, space and bulk requirements, and landowners’ responsibilities for property maintenance. Historically, covenants have only been used to address one or two issues. Missoula County and the City of Missoula commonly require developers, as appropriate for the development and permitted by the subdivision regulations, to include certain provisions such as property owners’ responsibilities for living with wildlife, protection of riparian areas, weed control, wildlife residential interface development guidelines, and road maintenance agreements. A key consideration for using restrictive covenants as an implementation tool is that they are private agreements between property owners, and the County is usually not a party to those agreements. Development agreements, agreements between property owners and a governing body, can be used to similar effect.

GROWTH POLICY IMPLEMENTATION STRATEGIES
This section provides a list of specific implementation strategies and tasks that further the goals and objectives of the Missoula County Growth Policy. This section is distinguished from the preceding section by the fact that these strategies have been reviewed through public processes and have been adopted by Missoula County and the City of Missoula in the 1975 Missoula County Comprehensive Plan, the 1996 Planning for Growth in Missoula County, and the 1998 Missoula Urban Area Comprehensive Plan Update. The bold numbered items are the strategies and the subsequent lettered items are specific tasks associated with those strategies.

Strategies and tasks listed below have been combined and summarized. More detailed descriptions of them can be found in the source documents. It should be noted that many of the strategies and tasks overlap; for example, an inventory is often part of the background research that serves as the basis for developing a regional, vicinity, or issue plan. Also, tasks may not always be initiated or performed by a City or County agency. Strategies and tasks may be completed through collaborative processes or by other entities with support of the City and/or County.

Through the adoption of the Growth Policy, the City and County express their commitment to this list of tasks and strategies. The City and County will act on this list through the annual budgeting and workplan development process. Furthermore, a regular review of this entire list will occur in conjunction with the review of the Growth Policy (see Chapter 9).

1. CONTINUE TO STUDY AND UTILIZE FISCAL TOOLS TO IMPLEMENT PRIORITIES OF ADOPTED POLICY
   a. Capital budget and improvement program
   b. Public financing

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12 A Compendium of Land Use Management Techniques for Hwy. 93, University of Montana School of Law Land Use Clinic, 2001: p 10.
c. Tax incentives to encourage housing rehabilitation
d. Fiscal tools such as impact fees and exactions
e. Funding mechanism for a recycling program
f. Cost reduction strategies, including affordable financing programs to encourage new
development to locate near existing service systems
g. Grants, tax increments, and other financing for urban renewal districts and
redevelopment of brownfield sites

2. **CONTINUE TO GATHER DATA AND COMPLETE STUDIES TO INFORM DEVELOPMENT OF POLICY AND REGULATION**
   a. Analysis of the Missoula County economy
   b. Study to set standards for subsurface disposal for groundwater quality and
      expansion of the ambient water quality database
   c. Performance standards and location studies for pollution producing facilities
   d. Level of Service (LOS) study to establish the LOS for rural and urban development
      for police/fire, sewer/storm drainage/sanitation, solid waste disposal, parks and open
      space, energy/utilities, government services, schools and libraries, transportation,
      water supply, air quality
   e. Study of transportation system subsidies and public benefits
   f. Examination of environmental and health standards to determine their effectiveness
      in managing growth
   g. Housing needs assessment

3. **CONTINUE TO COMPLETE AND MAINTAIN INVENTORIES**
   a. Infrastructure
   b. Land inventories that examine developed, undeveloped, underdeveloped,
      agricultural lands, and conservation lands; also specific land use inventories for
      commercial, industrial and residential uses
   c. Socio-cultural resources and places
   d. Natural resources such as wildlife habitat, critical lands, scenic land
   e. Urban forest tree inventory
   f. Historic structures and historic landscapes

4. **CONTINUE TO CONDUCT MONITORING AND EVALUATION**
   a. Critical natural and cultural resources
   b. Water quality
   c. Housing preservation, renovation, development, and housing costs
   d. Economic development standards to measure sustainability of economic sectors and
      forces
   e. Environmental and public health indicators

5. **CONTINUE TO CONDUCT LONG RANGE PLANNING**
   a. Growth Policy review
   b. Regional and vicinity plans and updates
   c. Issue plans and updates
   d. Natural resource conservation plan
   e. Comprehensive housing plan
   f. Water quality management plan
   g. Urban forest reforestation and maintenance plan
   h. Non-motorized transportation plan update
   i. Transportation plan update
   j. Historic preservation plan
   k. Economic development plan
l. Regional economic strategy  
m. Urban area infrastructure plan  
n. Update of the wastewater treatment facility service area  
o. Fire master plan update  
p. Airport master plan update  
q. Solid waste and recycling plan  
r. Recreation plan and development program  
s. Riverfront plan  
t. Redevelopment plans  
u. Update existing plans as needed  

6. **COMPLETE REGULATORY REFORMS IN ACCORDANCE WITH ADOPTED POLICY**  

**GENERAL**  
a. Revise the subdivision regulations in accordance with the Growth Policy.  
b. Amend and adopt zoning regulations to implement the Growth Policy. Adopt  
countywide zoning in accordance with publicly generated land use planning.  
c. Revise regulatory and policy documents in accordance with state law.  
d. Review subdivision law for areas of conflict with locally adopted land use  
designations (e.g. M.C.A. 76-1-105) and propose legislation of remedies as  
appropriate.  

**REVIEW AND REVISE ZONING DISTRICTS WITH SPECIAL ATTENTION PAID TO THE FOLLOWING:**  
a. Commercial and industrial zoning districts  
b. Public and quasi-public districts  
c. Creation of a research and development district  
d. Zoning designations in the vicinity of the airport  

**ADOPT DEVELOPMENT STANDARDS AND GROWTH MANAGEMENT TOOLS**  
a. Design standards, performance standards and regulatory incentives to enhance  
natural and built environments and to allow diversity and creative flexibility in  
arable architecture, and site development  
b. Landscaping standards in site development standards and for public places  
c. Regulations that encourage residential development to include different types of  
housing for a mixture of households and that minimize impacts on natural resources  
and maximize neighborhood involvement  
d. Design standards that promote non-motorized and public transportation networks,  
such as bicycle parking requirements  
e. Off-street parking requirements  
f. Boulevard standards  
g. Regulatory tools and incentives such as density bonuses, cluster development  
standards, impact fees, hillside standards, and other growth management tools that  
are affordable, consistent, contain growth-related costs, and are complementary  
between City and County  
h. Regulatory incentives for historic preservation  

**ESTABLISH TOOLS AND STANDARDS FOR DEVELOPMENT OF INFRASTRUCTURE AND PROVISION  
OF SERVICES**  
a. Road standards  
b. Requirements for adequate public facilities concurrent with development  
c. Level of service standards  
d. Structural fire protection and use of fire protection equipment in areas not adequately  
serviced or considered to be at high risk  
e. Street lighting
f. Standards for acquisition and development of parks and playgrounds

g. Cell towers

IMPLEMENT REGULATORY REFORMS TO PROTECT THE NATURAL ENVIRONMENT AND PUBLIC HEALTH & SAFETY

a. Sensitive lands overlays, floodplain regulations, riparian regulations and hillside development standards to protect natural resources and enhance the natural environment

b. Regulations to protect groundwater quality

c. Regulations that improve air quality through street sweeping, reducing vehicle miles traveled (VMT), implementing design standards to reduce incidence of idling vehicles, limiting particulate emissions, reviewing performance standards and location criteria for pollution producing facilities, reducing the number of solid fuel burning devices

d. Noxious weed control

e. Design standards for storm water drainage, limitations on non-point source pollution, and sediment traps to protect water resources in subdivision regulations

f. Measures to reduce vibration and noise associated with the transportation system

7. IMPLEMENT PUBLIC EDUCATION PROGRAMS

a. Land use regulations and other factors affecting development

b. Water resources contamination prevention

c. Reduction in use of herbicides

d. Reduction in use of solid fuel burning devices

e. Responsibility for living with wildlife

f. Natural and cultural resources

g. Historic preservation

h. Individual actions that can improve air quality

8. INVOLVE THE COMMUNITY IN PLANNING ACTIVITIES

a. Opportunities for citizen input in government processes and program formation

b. Opportunities for public input on street improvements

c. Community building activities

d. Improvement of pre-application process for projects to allow for early neighborhood and public review

e. Review of neighborhood commercial proposals

f. Development of commercial and industrial land use policy

g. Use of neighborhood associations and councils to encourage participation and promote property maintenance

h. Maintenance of ongoing discussion with business community regarding land use issues and concerns

i. Refer to the Residential Development Allocation Map (Map 18) when establishing parameters for neighborhood planning within the Missoula Urban Service Area (URSA)

9. FACILITATE INTERJURISDICTIOANAL AND INTERAGENCY COORDINATION

a. Maintenance and adherence to interjurisdictional memoranda of understanding

b. Coordination among all involved with water resource and quality management

c. Coordination among all involved with housing programs including establishing a central clearing house for housing programs

d. Coordination and communication with all parties interested in economic development

e. Coordination and cooperation among public safety agencies
f. Coordination between governing bodies and school districts regarding selection of future school sites and increasing availability of indoor recreational facilities

g. Establishment of interlocal agreement between the City and County to require joint approval of wastewater facility plans

h. Improvement of coordination of transportation engineering and planning through Transportation Technical Advisory Committee (TTAC) and Transportation Policy Coordinating Committee (TPCC)

10. DEVELOP PROGRAMS AND FACILITIES

a. Land conservation program to encourage use of such tools as voluntary conservation techniques, clustered development, development design to reduce conflicts between uses, transfer of development rights, acquisition of land or development rights

b. Program to encourage different types of residential development that maximize community resources and provision of services and meet the diversity of needs, including medium to high-density housing

c. Central information service for government services

d. Housing assistance office

e. Transit facilities and services

f. Facilities such as libraries, sewer, and water systems as needed

g. Parks improvement and maintenance program

h. Countywide solid waste disposal system that will provide reasonable service to rural communities

i. Public road improvement program

IMPLEMENTATION TIMELINE

The timeline for implementation of the Growth Policy can be addressed at two levels, the strategy level and the task level. Each of the major implementation strategies (bolded above) has been initiated and is ongoing. Individual tasks listed above for each major strategy are undertaken by the City and County as they are prioritized in workplans and funded by governing bodies. The workplan for the Office of Planning and Grants is reviewed and set annually by the governing bodies in conjunction with annual budgets adopted by City Council and the Board of County Commissioners.

The two-tiered approach to the implementation timeline can be explained with the following example. At the strategy level, long range planning is underway. At the task level, transportation planning is one item listed under long range planning. Previous efforts resulted in the 1996 and 1999 Transportation Plan Updates. The 2004 Transportation Plan Update was recently completed. Transportation planning is generally guided by funding source requirements, which then influence the local jurisdiction’s workplan and this project’s timeline.

The overall set of implementation strategies and timeline for the Growth Policy will be evaluated, and revised if necessary, during the periodic review and amendment process described in Chapter 9.
COMMUNITY ATTITUDES

The 2005 Growth Policy survey provides information about the level of community concern about growth and the types of tools that the public might be willing to support to address those concerns. According to the Growth Policy survey, nearly 2/3 of City and County residents say that the pace of growth is too fast. (However, when asked about the pace of growth around where they live, only 35.4% say that is was too fast. A majority of residents feel that there was enough room between them and their neighbors.) The survey indicates that high housing costs, traffic congestion, increased crime, declining quality of our natural environment, loss of open space, and street and road maintenance inside the City of Missoula rank as moderate or serious problems caused by growth.

According to the survey, Missoula City and County residents believe that issues raised by growth can be managed by local government and believe that local government should exercise about the same or more control over the development and use of private property. Residents also support a range of implementation tools including:

- Protect sensitive lands by regulation (86.9%);
- Adopt detailed infrastructure plans prior to development (83.5%);
- Require new developments to be linked to roads, trails, and buses (78.2%);
- Use voter approved money to purchase open space (71.3%);
- Use voter approved money to purchase land for affordable housing (70.2%);
- Charge a development fee (68.8%);
- Encourage development that combines commercial and residential uses (67.1%);
- Adopt countywide zoning standards (61.0%); and,
- Limit the number of building permits each year (55.6%).
CHAPTER FIVE: REGIONAL, VICINITY, AND ISSUE PLANS

INTRODUCTION

According to State law, a Growth Policy may include one or more neighborhood plans. A neighborhood plan must be consistent with the Growth Policy. The Missoula Growth Policy includes the following types of neighborhood plans – regional, vicinity, and issue plans.

Regional plans articulate regional goals and objectives, include more specific land use guidance and provide detailed information for geographic regions within the County and City. These plans address one or more elements of the Growth Policy in more detail and provide supplemental guidance for land use decisions in particular geographic areas.

There are nine planning regions within the County, as shown on Map 15. The boundaries shown on this map are generally drawn along watershed or census tract lines. When a regional planning process is initiated, the boundaries are evaluated and may be changed or defined more precisely. Regional plans have been completed for four of the nine County planning regions—Lolo (2002), Missoula Urban Area (1998), Swan Valley (1996), and Seeley Lake (1989).

Vicinity plans refer to sub-regional, area, or neighborhood plans within a smaller geographic area than a regional plan. As listed in Appendix B, numerous vicinity plans have also been developed over the years in both the City and the County. The Northside-Westside Neighborhood Plan was adopted by the City in 2000. The Wye Mullan West Plan was adopted by the governing bodies in 2005.

Issue plans provide detailed analyses and policy guidance on specific development or conservation issues identified in the Growth Policy. Examples include the Missoula Urban Area Transportation Plan (2004), City Master Parks Plan (2004), and Emma Dickenson/River Road Infrastructure Plan (2003). The Franklin to the Fort Infrastructure Plan is in process.

During the past 30 years, Missoula City and County governments have adopted regional, vicinity, and issue plans that are consistent with the Growth Policy. These plans, listed in Appendix B and shown on Maps 16 and 17, were adopted as amendments to the Growth Policy concurrent with its adoption in 2002, and thus continue to have full force and effect. Plans adopted after 2002 have been added as amendments to the Growth Policy.

In areas of the County without regional plans in place, as shown in Map 16, the relevant objectives and land use designations of the 1975 County Plan provide guidance for land use decisions in particular geographic areas. Language and land use designations specific to these areas were incorporated into a document called the Missoula County Regional Land Use Guide, adopted as an amendment to the Growth Policy in 2002.

ADDITIONAL PLANS

As noted in Chapter 4, one of the primary implementation tools of the Missoula County Growth Policy is the long range planning process, which includes the development of

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1 MCA 76-1-601 (4a).
regional, vicinity, and issue plans. Development of new regional, vicinity, and issue plans will be consistent with the Growth Policy and those plans will be adopted as amendments to it.

**TIMELINE**
The determination of which regional or vicinity planning effort is undertaken is determined by the governing body based on an assessment of growth or development pressure, severity and urgency of need, and community interest and readiness. Planning priorities for regional plans are considered by the governing bodies during workplan and budget development for Office of Planning and Grants (OPG). Ultimately, it is the governing body that has the authority to authorize planning processes and to allocate resources sufficient to complete them. City and County governing bodies have prioritized the completion of regional plans for the Wye-Mullan, Seeley Lake, and Frenchtown areas.

Priorities for completion or revision of issue plans will be determined based on state and federal requirements, on public need as assessed by the governing bodies, and as incorporated into the workplan.

**CONTENT**
New regional, vicinity, and issue plans should further the goals of the Growth Policy and should not conflict with it. Each new regional or vicinity plan should include pertinent data analysis, goals and objectives, design guidelines, action strategies, and land use recommendations. The plan should address Growth Policy goals to both protect critical lands and natural resources and to enhance human resources. It should describe how the following three key forms of development can be guided without exceeding the County’s carrying capacity: housing projects that will produce an adequate supply and variety; business activity that will provide good jobs and a reliable tax base and infrastructure including public works, human and educational services, and public uses of land such as parks and recreation. Land use designations should reflect development patterns that contribute to plan goals and objectives and should take into account the primary subdivision review criteria.

**PROCESS**
Planning is successful when it involves members of the public. In the 1996 Growth Management Themes document, Missoula City and County governing bodies pledged to “always work in full cooperation with our fellow Missoula City and County citizens.” Opportunities for public involvement should be provided throughout the planning process through means appropriate to the community, to the issues at hand and to the scale of the plan. Open houses, design charrettes, presentations to civic groups, neighborhood and landowner association meetings, surveys, and solicitation of written public comment are among the tools that are typically utilized.

Noticed public hearings are required by the state law authorizing adoption of the Growth Policy and will also be required for adoption of regional, vicinity, and issue plans. A hearing before the Planning Board provides an opportunity for public comment. After public hearing, the Planning Board may make changes to a proposed plan. The Planning Board may then forward the plan to the governing body for adoption. The plan forwarded by the Planning Board is heard by the governing body in a noticed public hearing. It may be adopted as recommended by the Planning Board, the governing body may make its own amendments, or the governing body may decide not to adopt the plan.
REGIONAL, VICINITY, AND ISSUE PLAN AMENDMENT

Amendment procedures are established to provide for an orderly, objective, and consistent method of making changes to text and maps in adopted regional, vicinity, or issue plans. (Note: Chapter 9 describes review and revision of the Growth Policy.) There are a variety of reasons why plan amendments may be proposed:

- The plan lacks sufficient guidance or relevant policy statements to meet emerging public needs.
- Factual errors or contradictions necessitate correction or reconciliation.
- The goals and objectives or land use recommendations do not support or accommodate development proposals.
- Changing conditions or new information result in the need to establish more relevant policies and implementation tools.

Plan amendments may be initiated by request to the governing body. Requests may be made by citizen groups, an individual, the Planning Board, or the OPG. The governing body may determine that it is in the public interest to pursue a plan amendment. Depending upon its size and scope, an amendment request may result in modifications to the OPG workplan or budget, or require payment of a fee by the requester. Amendments to regional, vicinity, and issue plans should further the goals of the Growth Policy and should not conflict with it.

PUBLIC PROCESS

The type or degree of public involvement necessary for a plan amendment depends on the extent and scale of the amendment. The more expansive the scope of an amendment is, the more public involvement opportunities should be available. A plan amendment process for a large area, for major policy changes, or for major changes to land use designations should include collecting opinions, assessing community needs, taking an inventory of resources, and effectively engaging citizens in each stage of the process. A less extensive amendment, such as for a small land area, text changes, or minor map amendments, might require a more specific site analysis and meetings with local residents or other affected landowners. The plan amendment process must follow the same notice and hearing requirements as does plan adoption.

REVIEW CRITERIA

Plan amendments will be reviewed to ensure consistency with goals and policies of the Growth Policy, State law, and any other applicable policies and standards adopted by the governing body. Amendments may be approved by the governing bodies when the following findings are made:

- There is a public need for the change.
- The change proposed is the best means of meeting that need.
- There is public benefit that will result from the change.
CHAPTER SIX: SUBDIVISION REVIEW

INTRODUCTION

This chapter performs two functions. The first function is to meet State law requirements for defining certain subdivision review criteria including the evaluation of subdivisions with respect to these criteria and for the subdivision public hearing process. The second function is to describe the relationship between the regional, issue, and vicinity plans and subdivision review.

The chapter is divided into four sections:

- The first section of this chapter provides background on subdivision review by discussing State law with respect to goals and objectives of subdivision regulation, subdivision review requirements, and Growth Policy requirements related to subdivision review.

- The second section of this chapter defines certain subdivision review criteria and explains how subdivisions will be evaluated against these criteria. It allows for regional, issue, and vicinity plans to include more specific information on these subjects.

- The third section provides additional guidance on the use of regional, vicinity, and issue plans in subdivision review.

- Finally, the fourth section describes the subdivision public hearing process.

STATE LAW BACKGROUND

GOALS OF SUBDIVISION REGULATION

The Montana Subdivision and Platting Act has as its purpose to:

- promote the public health, safety, and general welfare by regulating the subdivision of land;
- prevent overcrowding of land;
- lessen congestion in the streets and highways;
- provide for adequate light, air, water supply, sewage disposal, parks and recreation areas, ingress and egress, and other public requirements;
- require development in harmony with the natural environment;
- promote preservation of open space;
- promote cluster development approaches that minimize costs to local citizens and that promote effective and efficient provision of public services;
- protect the rights of property owners; and
- require uniform monumentation of land subdivisions and transferring interests in real property by reference to a plat or certificate of survey.1

To accomplish these goals, State law requires that local governments adopt and provide for the enforcement and administration of subdivision regulations.2 State law establishes minimum requirements for subdivision regulations,3 including local review procedures and review criteria.4 Missoula County and the City of Missoula have adopted subdivision regulations in accordance with State law.

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1 MCA 76-3-102.
2 MCA 76-3-501.
3 MCA 76-3-504.
4 MCA 76-3-601.
The 2001 Legislature passed a bill that removed the provision for conformance with the Growth Policy (formerly Comprehensive Plan) as a basis for the governing body’s decision on a subdivision. The 2003 Legislature passed a bill stating that a governing body may not withhold, deny, or impose conditions on any land use approval based solely on compliance with a Growth Policy.5

**OBJECTIVES OF SUBDIVISION REGULATIONS**

State law requires that subdivision regulations reasonably provide for:

- orderly development of the jurisdictional area;
- coordination of roads within subdivided land with other roads, both existing and planned;
- the dedication of land for roadways and for public utility easements;
- the improvement of roads;
- adequate open spaces for travel, light, air, and recreation;
- adequate transportation, water, and drainage;
- avoidance or minimization of congestion;
- avoidance of unnecessary environmental degradation; and
- avoidance of danger of injury to health, safety, or welfare by reason of lack of public services or necessitation of excessive expenditure of public funds for the supply of such services.6

**SUBDIVISION REVIEW REQUIREMENTS**

The objectives of subdivision regulation are met through the subdivision review process. The governing body reviews a preliminary plat to determine whether it conforms to the provisions of state law and to local rules prescribed or adopted pursuant to State law.7 The basis for the governing body’s decision to approve, conditionally approve, or disapprove a subdivision is whether the preliminary plat, applicable environmental assessment, public hearing, planning board recommendations, or additional information demonstrate that development of the subdivision meets the requirements of State law and local regulation.8

State law requires a subdivision proposal to undergo review for the following primary criteria:

1. The impact on agriculture, agricultural water user facilities, local services, the natural environment, wildlife and wildlife habitat, and public health and safety;
2. Compliance with:
   - survey requirements;
   - the local subdivision regulations;
   - the local subdivision review procedure provided for in this part;
   - the provision of easements for the location and installation of any planned utilities; and
3. Provision of legal and physical access to each parcel within the subdivision.9

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5 MCA 76-1-605 (2)(b).
6 MCA 76-3-501 (1).
7 MCA 76-3-604.
8 MCA 76-3-608.
9 MCA 76-3-608 (3).
GROWTH POLICY REQUIREMENTS
A growth policy must include a statement explaining how the governing bodies will define agriculture, agricultural water user facilities, local services, the natural environment, wildlife and wildlife habitat, and public health and safety. These are referred to as “resource, health, and safety criteria” in this document (see #1 above). A description of how proposed subdivisions will be evaluated against resource, health, safety criteria, and a statement explaining the public hearing process for proposed subdivisions are also required in a Growth Policy. These requirements are met in the following sections of this chapter.

RESOURCE, HEALTH, AND SAFETY CRITERIA
DEFINITIONS OF RESOURCE, HEALTH, AND SAFETY CRITERIA
The resource, health, and safety criteria are defined below. Regional plans may supplement these definitions.

1. AGRICULTURE
Agriculture is defined as the use of the land for growing, raising, or marketing of plants or animals to produce food, feed, and fiber commodities. Examples of agricultural activities include, but are not limited to, cultivation and tillage of the soil; dairying; growing and harvesting of agricultural or horticultural commodities; and the raising of livestock, bees, fur-bearing animals, or poultry. Agriculture does not include gardening for personal use, keeping of house pets, kenneling, or landscaping for aesthetic purposes. Agricultural land includes land used for agriculture or having a soil type defined by the Natural Resources Conservation Service as having agricultural importance.

2. AGRICULTURAL WATER USER FACILITIES
Agricultural water user facilities are defined as those facilities that provide water for agricultural land or provide water for the production of agricultural products. These facilities include, but are not limited to ditches, canals, pipes, and head gates.

3. LOCAL SERVICES
Local services are defined as any and all services that local government entities or public utilities may provide, both currently and in the future, such as transportation systems, including non-motorized facilities, parking, law enforcement, fire protection, drainage structures, water supply, sanitary sewage disposal, solid waste disposal, recreation, parks, libraries, or schools.

4. NATURAL ENVIRONMENT
The natural environment is defined as the complex of physical, chemical, and biotic factors that exist within or influence a geographic area or community. These factors include, but are not limited to, geology, soils, topography, climate, surface water, groundwater, floodplain, habitat, flora and fauna, and objects or places of cultural, historic, or aesthetic significance.

5. WILDLIFE AND WILDLIFE HABITAT
Wildlife is defined as animals existing in their natural environment. Humans and domesticated animals are not considered wildlife for purposes of this definition.

10 MCA 76-1-601(3)(h).
Wildlife habitat is defined as geographic areas containing physical or biological features essential to wildlife for feeding and forage, cover, migration, breeding, rearing, nesting, or buffers from those areas. It also includes areas essential to the conservation of species protected by the Endangered Species Act or of special interest or concern to the State of Montana.

Some of the most important types of wildlife habitat in Missoula County include, but are not limited to big game winter range, grizzly bear habitat, bald eagle nesting sites, and riparian and wetland areas.

6. PUBLIC HEALTH AND SAFETY
Public health and safety is defined as a condition of optimal well being, free from danger, risk, or injury, for a community at large, or for all people, not merely for the welfare of a specific individual or a small class of persons. To be a truly healthy community, two equally important goals must be achieved: critical lands and resources must be protected and human resources must be enhanced. Human resources include public health and safety; social, educational, recreational, and social services; employment; and housing. Conditions that relate to public health and safety include, but are not limited to, flood hazards, geologic hazards, air quality, water quality, toxic or hazardous substance exposure, fire or wildfire hazards, proximity to high voltage power lines or high pressure gas lines, noise, air or vehicular traffic hazards, and other factors that effect quality of life.

EVALUATION OF SUBDIVISIONS AGAINST RESOURCE, HEALTH, AND SAFETY CRITERIA
The governing body may require the subdivider to design the subdivision to reasonably minimize potentially significant adverse impacts identified through the evaluation of a subdivision proposal against the resource, health, and safety review criteria. When requiring mitigation, a governing body may not unreasonably restrict a landowner's ability to develop land, but it is recognized that in some instances the unmitigated impacts of a proposed development may be unacceptable and will preclude approval of the plat.11

Impacts to agriculture, agricultural water user facilities, local services, the natural environment, wildlife and wildlife habitat, and public health and safety will be evaluated based on a consideration of the types of factors listed below. This list is illustrative and not inclusive. All of the factors may not apply to all subdivisions. Because the presence and value of resources varies across the County, regional or vicinity plans may include other or more specific evaluation factors.

Evaluation of subdivision proposals against these criteria requires an assessment of how the public interest is best served. The relative value of each criterion and the significance of potential impacts to it will be weighed in the context of goals and objectives as expressed in regional plans, vicinity plans, issue plans, or other similarly specific policy documents. Land use designations in these plans take into account the review criteria as well as other factors.

AGRICULTURE
- Agricultural soils defined as having prime, statewide or local importance by the Natural Resources Conservation Service
- Agricultural productivity
- Agricultural land use

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11 MCA 76-3-608 (5).
AGRICULTURAL WATER USER FACILITIES
- Access for maintenance, including physical access or easements
- Water movement such as bridges, culverts, or crossings
- Availability of water for agricultural water users

LOCAL SERVICES
- Levels of services
- Proximity of services
- Cost of services
- Timing of services in relation to development

NATURAL ENVIRONMENT
- Riparian or wetland areas
- Vegetation cover or type
- Infestation of noxious weeds
- Unique or significant habitats
- Surface water quality
- Stream bank stability
- Potential for bank erosion
- Open space/scenic resources
- Objects of historic or cultural significance
(See also Wildlife and Wildlife Habitat and Public Health and Safety)

WILDLIFE AND WILDLIFE HABITAT
- Wildlife habitat, including nesting sites, winter range, travel corridors, forage
- Species protected by the Endangered Species Act or of special interest or concern to the State of Montana (direct or indirect impacts)
- Potential for human/wildlife conflicts
- Water quantity or quality for fish

PUBLIC HEALTH AND SAFETY
- Flooding hazards for the subject or adjacent properties
- Potential for high groundwater
- Presence of geologic hazards, such as seismic, swelling soils, subsidence, improper drainage, steep slopes, adverse geological formations or topography, potential for snow avalanches, rock falls, or land slides
- Air quality
- Drinking water quality
- Potential for toxic or hazardous waste exposure
- Presence of high voltage power lines
- Presence of high pressure gas lines
- Air or vehicular traffic hazards or congestion
- Provision of emergency services, including access and response time
- Residential development in Wildland Urban Interface areas
- High potential for wildfire
- Other features which will be harmful to the health, safety, and/or welfare of the present or future inhabitants of the subdivision or its environs
- Open space and parks
- Orderliness of pattern and pace of development
- Compatibility of development with built and natural environment
- Contribution to goals for housing, infrastructure, economic development, and resource conservation
- Preservation of community character
USE OF REGIONAL, VICINITY, AND ISSUE PLANS IN SUBDIVISION REVIEW

As described above, regional, vicinity, and issue plans may include more specific information about definitions of resource, health, and safety criteria and how these criteria may be used in subdivision review. Subdivision review objectives are also accomplished through review of subdivisions against long range plans provided for in the Growth Policy and its amendments.

Many subdivision objectives require an understanding of public goals and values. For planning purposes, public values are expressed broadly in the Growth Policy and more specifically in regional, vicinity, or issue plans through stated goals, objectives, design guidelines, action strategies, and land use designations. Regional, vicinity, and issue plans are formally adopted following public process.

For example, orderly development is a statutory objective of subdivision regulation that may be evaluated in the context of land use recommendations in adopted long range plans. There is no empirical or scientific test for "orderly development" that can be applied equally well in every geographic area of the County. Rather, the governing body determines what patterns of development it considers to be orderly in various regions within the context of jurisdiction wide goals and objectives adopted in the Growth Policy. Similarly, the governing body can determine adequacy of open space and transportation by understanding public values. For example, in order to provide for the coordination of roads, the proposed subdivision would establish its compliance with the Transportation Plan, which is an amendment to the Growth Policy.

In subdivision review the governing bodies assess how a development meets public objectives. The assessment should include an evaluation of how well a proposed subdivision reflects elements of regional plans or issue plans such as land use maps, design guidelines, and implementation strategies. *Missoula City and County Subdivision Regulations* should provide the means to implement this level of review.

PUBLIC HEARINGS

Public hearings for subdivisions will be conducted in accordance with all applicable statutory requirements and procedures outlined in the *Missoula City and County Subdivision Regulations*. 
CHAPTER SEVEN: INTERJURISDICTIONAL COORDINATION

INTRODUCTION

This chapter provides a history of cooperative planning efforts by the City of Missoula and Missoula County, and a description of how they will coordinate and cooperate with one another in the future on matters related to the Growth Policy. Information on other intra- and intergovernmental collaboration efforts supporting the Growth Policy is also included in this section.

HISTORY OF COORDINATED PLANNING IN MISSOULA COUNTY

There is a long tradition of coordinated planning endeavors between the City and County, particularly in the Missoula urban area. In 1961, the Missoula City-County Planning Board completed a Master Plan for the Missoula urban area. In 1975, the City and County collaborated again to create the 1975 Missoula County Comprehensive Plan and a document entitled Missoula: A Policy Guide for Urban Growth.

Citizens of the City and County attempted to update the 1975 Plan for the County in 1983. The process was eventually divided into separate planning efforts. The urban area endeavor resulted in the 1990 Update to the Missoula Urban Area Comprehensive Plan, and rural area planning activities shifted from countywide comprehensive planning to regional planning. Subsequent planning efforts have followed the same pattern with coordinated City/County comprehensive planning for the urban area and regional planning outside of the urban area.

The City and County signed an Interlocal Agreement in 1987 that created the Missoula Consolidated Planning Board, the Missoula Planning Policy Committee, and the Office of Community Development (OCD), predecessor of the Office of Planning and Grants (OPG). The Missoula Planning Policy Committee provided administrative oversight for OCD, which provided regulatory planning functions such as permitting, subdivision review, and zoning for both the City and County and conducted long range planning activities for the City. The Rural Planning Office was housed separately from OCD and was administered under direct authority of Missoula County. The Rural Planning staff dealt with rural issues not being addressed by OCD including provision of long range planning services for rural areas throughout the County.

In 1994, the City and County began work on a growth management planning process to address development pressures in the City and County. The Growth Management Themes Document was a policy statement adopted by the City and County in 1994 and revised in 1996. As a result of the growth management planning process, a number of regulatory revisions were proposed to the governing bodies. The first phase of regulatory revisions focused on such amendments as density bonuses, cluster/open space developments, hillside regulations and standards for grading, drainage and erosion control in the zoning and subdivision regulations for both the City and County.

The City and County explored opportunities to co-locate the OCD and Rural Planning personnel in 1995 and 1996 and ultimately revised the 1987 Interlocal Agreement in 1996. The 1996 Interlocal Agreement had the following purpose statement:

1 MCA 76-1-601(3)(g).
It is the purpose of this agreement to enhance the ability of the City of Missoula and Missoula County to improve the present health, safety, convenience, and welfare of their citizens and to plan for the future development of the City and County to the end that the governments achieve a countywide pattern of community-building, land use, and conservation that reflects the environmental, economic, aesthetic, and social values of city and county residents.

This agreement will improve the collective ability of the City and County of Missoula to address pertinent issues in an integrated, coordinated and on-going manner, and to respond flexibly and intelligently to events that affect the welfare of county citizens. The agreement also will encourage the effective design and implementation of appropriate tools—both regulatory and non-regulatory—which can provide the means to manage and direct growth in a manner that will achieve community goals.²

The 1996 Interlocal Agreement created the Missoula Office of Planning and Grants to provide grants administration and regulatory and long range planning functions for the City and County. The functions of the Missoula Consolidated Planning Board and the Planning Policy Committee were described in this agreement. This Interlocal Agreement stipulated that the City Council and Board of County Commissioners retain control of legislative and decision-making authority for their jurisdictions, as well as control over projects they support with special funding allocations.

As part of the growth management process, in 1998, the City and County worked together to update the Missoula Urban Area Comprehensive Plan. An excerpt from this plan further exemplifies the philosophy of the County and the City regarding interjurisdictional cooperation and coordination of planning and community development activities in Missoula County.

The City and County of Missoula recognize the need to plan ahead in order to assure the health and well-being of our children and future generations. Currently Missoula is experiencing rapid growth and development, and we anticipate some measure of change in the foreseeable future… We pledge our commitment to address the challenges of growth and change with these goals always in mind. We pledge also to always work in full cooperation with our fellow Missoula City and County citizens.³

In addition to the 1998 Update to the Missoula Urban Area Comprehensive Plan, there are a number of other plans that have been adopted by both the City and County to address common issues for the Missoula urban area including the Missoula Urban Area Open Space Plan (1995), the Missoula Transportation Plan Update and Technical Memorandum (1996, 1999, 2004), and the Missoula Non-Motorized Transportation Plan (1994 and 2001). The Fabric of Missoula (1989-1990) and a pilot project that served as a precursor to the Open Space Plan (1993) are additional examples of coordinated policy work carried out by the City and County. Other interagency collaborative efforts have included the Blue Ribbon Commission on Human Services, the Counseling Task Force, the Missoula Housing Task Force and the Missoula County Fire Protection Association.

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² City and County Interlocal Agreement, 1996.
In September 2005, the City and County again revised the Interlocal Agreement for the administration of the Office of Planning and Grants. Significant revisions included elimination of the Planning Policy Committee putting OPG directly under the authority of the respective governing bodies. The new agreement also included reorganization of OPG’s structure to add a Transportation Division, a split of the Long-Range Planning Division into two distinct divisions with separate responsibilities to each unit of government, and modification of the funding formula for City and County financial participation.

ONGOING CITY AND COUNTY PLANNING COORDINATION

There are a number of other coordinated efforts to address common issues, primarily for the Missoula urban area. As a consolidated City-County office, the Missoula Office of Planning and Grants administers planning and community development programs for both jurisdictions. Additional City-County coordination on planning and community development issues includes the following:

- The Missoula Consolidated Planning Board is comprised of both City and County representatives and they are responsible for reviewing planning and community development proposals and policies for both jurisdictions.

- Subdivision and zoning proposals within three miles of the City limits are reviewed by both City and County agencies. Subdivision proposals are also reviewed by State and federal agencies when applicable for such issues as wildfire hazard, impacts on wildlife and wildlife habitat, transportation, etc.

- OPG staffs the Metropolitan Planning Organization (MPO) that provides transportation planning services for the Missoula urban area. This program is a collaborative effort and conducted in cooperation with the City and County of Missoula, Missoula Urban Transportation District (Mountain Line), Montana Department of Transportation (MDT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and other local, state, and federal agencies. Two committees, the Transportation Policy Coordinating Committee (TPCC) and Transportation Technical Advisory Committee (TTAC), were created through a Memorandum of Agreement signed by the previously mentioned agencies. The TPCC is responsible for directing transportation policy for the area included in the Transportation Plan, roughly from Bonner to the east, Lolo to the south, Frenchtown to the west, and just south of Evaro to the north. The TTAC provides technical advice to the TPCC.

- The City and County have a joint Health Department that is responsible for public and environmental health programs in both jurisdictions. The City-County Health Department’s air quality, water quality and sanitation programs have strong links to land use and transportation planning in Missoula County. The Health Promotion and Nursing Divisions have ties to the grants administration and human services aspects of community development.

- Subdivision, zoning, floodplain administration, permitting, and enforcement programs rely on strong collaborative efforts with other departments in the City and County, and with state and federal agencies.

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4 MCA 76-3-601(2)(b).
OTHER COORDINATION EFFORTS

There are a variety of other collaborative endeavors, both informal and formal, that contribute to planning and community development in Missoula County. The following list highlights key examples:

- A Memorandum of Agreement between the Confederated Salish and Kootenai Tribes (CSKT or "Tribes") and Missoula County coordinates planning activities. In this five year agreement, the Tribes agree to use the County’s planning staff to administer land use planning for non-Indian lands within the portions of the Flathead Reservation that also lie within Missoula County. Additionally, the County and the Tribes agree that the County will review zoning and subdivision proposals, family transfers and other certificate of survey requests within the non-Indian lands of the Flathead Reservation portion of the County, with the Tribes acting as an agency providing comments on proposals.

- A Memorandum of Understanding (MOU) exists between the County, Montana Fish, Wildlife & Parks Department, the Bureau of Land Management, Lolo National Forest, and others. The parties jointly share knowledge of conditions and issues to enhance the economic, social, cultural, and natural resource conditions of area lands. Agency representatives comprise an Interagency Coordinating Committee that meets quarterly. Pursuant to a “Missoula on the Move” forum, a group of Missoula County public land managers has also been meeting on an ad hoc basis to discuss common issues.

- The Transportation Improvement Program (TIP) is developed in cooperation with city, county, state, and federal agencies.

- Coordinated regional transportation planning efforts between Montana Department of Transportation, Missoula County, the Tribes and Lake County focused on the U.S. Highway 93 North corridor improvements.

- The University of Montana actively participates in planning activities sponsored by the local government, including transportation planning and Missoula In Motion projects. The Office of Planning and Grants also participates in the University of Montana Facility Master Plan Process.

- The Seeley Lake and Lolo Community Councils were created, in part, to give local residents in these communities an opportunity to provide input on local issues to the Missoula Board of County Commissioners. They are included in the development review process for local projects and have key roles in long range planning for their regions.

- Missoula County is part of a multi-county district established for services provided by Western Montana Community Mental Health Center, the Comprehensive Developmental Center, and District XI Human Resource Council.

- City and County governments participate actively in the Missoula Area Economic Development Center.
• The At-Risk Housing Coalition and the Missoula Forum for Children and Youth are two examples of collaborative efforts involving local government and private non-profit agencies. These groups have been in existence for several years and provide important opportunities for comprehensive needs assessment, creative problem-solving and a coordinated approach to service development and delivery.

• The City and County maintain Interlocal Agreements regarding law enforcement and emergency services such as 9-1-1 and fire response, park facilities, and museum services.

• The Missoula Ravalli Transportation Management Association (MR TMA) provides commuter transportation choices for citizens living outside the Missoula Urban Area in Missoula, Ravalli, and Lake Counties.

• Missoula County is a member of the Montana Association of Counties (MACo) and has representation on the Subcommittee for Urbanizing Counties along with Ravalli County. The Subcommittee shares information regarding growth issues.

• Missoula County works with certified regional development corporations and the Department of Commerce regarding development with Ravalli, Mineral, Sanders, and Flathead Counties. The County also participates in the efforts of the Bitterroot Resource Conservation and Development Organization and the Bitterroot Economic Development District to form an economic development strategy along with Mineral and Ravalli Counties.

FUTURE COOPERATIVE PLANNING EFFORTS

The City and County desire to maintain and enhance existing relationships, as well as to build new ones. Memoranda of Understanding will be reviewed and updated, as needed. Specific Growth Policy implementation strategies that address interjurisdictional coordination and cooperation are found in Chapter 4.
CHAPTER EIGHT: PUBLIC INFRASTRUCTURE STRATEGY

INTRODUCTION

This chapter presents an overview of strategies for development, maintenance, and replacement of public infrastructure, including drinking water systems, wastewater treatment facilities, sewer systems, solid waste facilities, fire protection facilities, roads, and bridges. Missoula County and the City of Missoula vary in their approaches to public infrastructure development and maintenance. The County structure is decentralized with a number of different public agencies, taxing districts, and private entities responsible for their own equipment procurement, infrastructure development, and maintenance. The City is more centralized, allowing it to address most infrastructure development and maintenance through its Capital Improvements Program (CIP).

MISSOULA COUNTY STRATEGY

The nature of County government’s limited powers and the existence of a variety of taxing entities, responsible for their own infrastructure development (fire districts, school districts, sewer and water districts), require a decentralization of infrastructure planning in the County. The County is responsible primarily for public works projects such as bridges, roads, and sewer and water facilities. It is also responsible for certain parks and recreation facilities, and public buildings and facilities. The County has a CIP for administrative projects such as buildings; however, it does not include public works projects at this time. Publishing a comprehensive County CIP that would address infrastructure development and maintenance is now under consideration. Currently, the County Public Works Director evaluates and prioritizes capital improvement projects.

The County Public Works Department is responsible for developing, improving, and maintaining County roads and bridges. State highways are improved and maintained by the Montana Department of Transportation. There are also a number of privately owned roads throughout the County, which are improved and maintained by private property owners. Roads on state and federal lands are maintained by the managing agency.

The County Parks Board manages the maintenance and development of public parks and recreation facilities throughout the County. The Board’s limited funding is generally used to provide matching grants to communities and community organizations to develop and improve park and recreation facilities. One half-time person is employed by the County Parks Office to provide staff support to the Park Board and implement County policies related to parks and open space.

The individual septic system is the most common method for sewage disposal in the County outside the Missoula urban area. Sewer service is available within portions of the Missoula urban area and in the community of Lolo. The City of Missoula manages the development, maintenance, and extension of sewer and wastewater systems within the Missoula Urban Area. The Missoula County Public Works Department operates the Lolo system.

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1 MCA 76-1-601(3)(e).
2 Missoula County Chief Financial Officer 2005.
Fire protection facilities and services are provided by a number of rural fire districts. The Missoula Rural Fire District and the Frenchtown Rural Fire District are the largest of these districts; other districts serving the County include East Missoula Rural Fire District, Potomac/Greenough Fire Service Agency, Florence Rural Fire District, Clinton Rural Fire District, Seeley Lake Fire District, and Swan Valley Fire District. Each of these districts is responsible for planning its infrastructure needs and must generate the funds necessary to develop facilities and obtain new equipment. In August 2005, the Missoula County Office of Disaster and Emergency Services published a *Missoula County Wildfire Protection Plan* for 2/3 of Missoula County. The Seeley Swan Fire Plan covers the remaining portions.

Private corporations provide drinking water systems and solid waste collection service and facilities for residents. Within the Missoula urban area, Mountain Water Company is the primary provider of drinking water. It plans for extension, replacement and maintenance of infrastructure, as needed. Outside the Missoula urban area, there are a few other private community water systems, but private individual wells provide most of the drinking water in the rest of the County.

Allied Waste Services of Missoula (formerly Browning-Ferris Industries-BFI) provides solid waste collection and disposal services to most of the County and its landfill is located in the Missoula Urban Area.

**CITY OF MISSOULA STRATEGY**

The primary strategy for development, replacement and maintenance of infrastructure for the City of Missoula is through its CIP. CIP projects are those costing more than $5,000 with a life expectancy of five or more years. Capital improvements covered by this plan include the sewer and stormwater drainage systems, fire protection facilities, parks and recreation facilities, roads and bridges, and other public facilities. The process for reviewing CIP requests allows for department heads, City Council members and citizens to submit requests. The CIP five year plan attempts to reflect actual expenditures for the first year and guides decisions on capital improvements spending for the following four years by outlining anticipated expenses. The CIP is reviewed annually. The stated goals for the CIP are as follows:

- Ease the review of annual capital budget through a uniform process;
- Broaden public participation in the budget process by providing documentation and scheduling public hearings early in the process;
- Link capital budgets with the strategic plans, adopted policies, and other plans;
- Link capital expenditures with operating budgets; and
- Increase coordination between departments, agencies, and other political jurisdictions.

CIP requests are preliminarily reviewed for feasibility and accuracy of cost estimates; potential for environmental impact; conformance with land use, wastewater and transportation plans; and correspondence with redevelopment plans for projects located within Urban Renewal Districts. Projects are then prioritized based on the following questions:

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3 August, 2005. [www.co.missoula.mt.us/des/fire_info.htm](http://www.co.missoula.mt.us/des/fire_info.htm)


5 City of Missoula CIP 2002-2006.
Is the project necessary to meet federal, State, or local requirements?
Is the project necessary to fulfill a contractual requirement?
Is the project urgently required?
Does the project provide for or improve public health or safety?
Does the project result in maximum benefits to the community from the investment dollar?
Does the project require speedy implementation in order to assure maximum effectiveness?
Does the project conserve energy, cultural, or natural resources, or reduce pollution?
Does the project improve, maintain or expand upon essential City services where such services are recognized and accepted as necessary and effective?
Does the project relate specifically to the City’s strategic planning priorities or other plans?

There are a number of public services not addressed by the CIP. For example, as with the County, drinking water and solid waste disposal are provided by private companies who plan and finance the development, replacement, and maintenance of these facilities and systems. Mountain Water Company and Valley West Water Company are the primary suppliers of drinking water within the urban area. Additionally, there are a number of other smaller community systems and some private wells. Allied Waste Services of Missoula (formerly BFI) operates and maintains the solid waste collection and landfill that serves the City of Missoula.

The City of Missoula provides sewer service within the urban area. The *Wastewater Facilities Plan Update* identifies a sewer service area where extension of sewer service is anticipated within the next 20 years. Extension is planned for areas of the Rattlesnake, Wye, McCauley Butte, and west of Reserve and south of the Clark Fork River. (Also see Chapter 2.)

City annexation has been a condition of receiving municipal wastewater treatment service. As the population of the urban area has grown, the City has constructed sewer mains in areas that have experienced or are anticipating increasing densities. Property owners seeking to connect to the sewer are required to waive their right to protest annexation.
CHAPTER NINE: GROWTH POLICY
AMENDMENT AND REVISION

INTRODUCTION
This chapter includes a timetable for review of the Growth Policy and a list of conditions that will lead to its revision. Regular evaluation of the Growth Policy will help the community and governing bodies determine whether it is still relevant, applicable, and reflective of community goals. (Note: Chapter 5 describes amendments to regional, vicinity, and issue plans.)

REVIEW CRITERIA
Issues to be considered in the evaluation include:

1. Changes in the legal framework regarding Growth Policy or its implementation;
2. Significant changes in existing conditions and projected trends;
3. Changes in the circumstances upon which the goals and objectives are based;
4. Changes in community goals;
5. Degree to which meeting goals and objectives have been met;
6. Completion of implementation strategies;
7. Deviation from implementation timetable;
8. Public input suggesting the need to make changes;
9. Knowledge of specific and identifiable amendments that would improve the Growth Policy’s usefulness, so that it better serves the public.

TIMETABLE AND REVIEW PROCESS
At least once every five years after adoption, the City and County will review the Growth Policy and determine whether revisions are necessary according to a process established by the governing bodies. In order to accomplish this, sometime within the first four years after adoption, the City and County, through its planning staff, will conduct an assessment of the factors listed above. The results of that assessment will be used to determine whether revisions to the Growth Policy are needed.

REVISION PROCESS
Based on the above review, the City and County may conclude that a Growth Policy revision is needed. As directed, staff will conduct research and prepare draft revisions. A report should include a description of proposed changes and rationales, impacts of changes, necessary revisions to Growth Policy implementation strategies and timelines, and resulting revisions to regulations, as necessary.

1 MCA 76-1-601.
Growth Policy review and revision will be conducted in accordance with provisions of State law, including a public hearing before the Planning Board. The degree of public involvement will depend on the scope of the proposed revisions or amendments. After a public hearing, Planning Board will make recommendations to the governing bodies regarding amendments to the Growth Policy. The governing bodies may then act on adoption of revisions or amendments.
Maps prepared by Casey Wilson/Office of Planning and Grants
APPENDICES

A. STATE GROWTH POLICY LAW
B. LIST OF REGIONAL, VICINITY, AND ISSUE PLANS
C. SPECIES OF CONCERN
D. GROWTH POLICY SURVEY SUMMARY
E. SAND AND GRAVEL RESOURCES
F. WILDLAND URBAN INTERFACE (WUI)
APPENDIX A: STATE GROWTH POLICY LAW

MCA 76-1
Part 6 Growth Policy
76-1-601. Growth policy -- contents.
(1) A growth policy may cover all or part of the jurisdictional area.
(2) A growth policy must include the elements listed in subsection (3) by October 1, 2006. The extent to which a growth policy addresses the elements of a growth policy that are listed in subsection (3) is at the full discretion of the governing body.
(3) A growth policy must include:
   (a) community goals and objectives;
   (b) maps and text describing an inventory of the existing characteristics and features of the jurisdictional area, including:
       (i) land uses;
       (ii) population;
       (iii) housing needs;
       (iv) economic conditions;
       (v) local services;
       (vi) public facilities;
       (vii) natural resources; and
       (viii) other characteristics and features proposed by the planning board and adopted by the governing bodies;
   (c) projected trends for the life of the growth policy for each of the following elements:
       (i) land use;
       (ii) population;
       (iii) housing needs;
       (iv) economic conditions;
       (v) local services;
       (vi) natural resources; and
       (vii) other elements proposed by the planning board and adopted by the governing bodies;
   (d) a description of policies, regulations, and other measures to be implemented in order to achieve the goals and objectives established pursuant to subsection (3)(a);
   (e) a strategy for development, maintenance, and replacement of public infrastructure, including drinking water systems, wastewater treatment facilities, sewer systems, solid waste facilities, fire protection facilities, roads, and bridges;
   (f) an implementation strategy that includes:
       (i) a timetable for implementing the growth policy;
       (ii) a list of conditions that will lead to a revision of the growth policy; and
       (iii) a timetable for reviewing the growth policy at least once every 5 years and revising the policy if necessary;
   (g) a statement of how the governing bodies will coordinate and cooperate with other jurisdictions that explains:
       (i) if a governing body is a city or town, how the governing body will coordinate and cooperate with the county in which the city or town is located on matters related to the growth policy;
       (ii) if a governing body is a county, how the governing body will coordinate and cooperate with cities and towns located within the county's boundaries on matters related to the growth policy;
   (h) a statement explaining how the governing bodies will:
       (i) define the criteria in 76-3-608(3)(a); and
       (ii) evaluate and make decisions regarding proposed subdivisions with respect to the criteria in 76-3-608(3)(a); and
   (i) a statement explaining how public hearings regarding proposed subdivisions will be conducted.
(4) A growth policy may:
(a) include one or more neighborhood plans. A neighborhood plan must be consistent with the growth policy.
(b) establish minimum criteria defining the jurisdictional area for a neighborhood plan;
(c) address the criteria in 76-3-608(3)(a);
(d) evaluate the effect of subdivision on the criteria in 76-3-608(3)(a);
(e) describe zoning regulations that will be implemented to address the criteria in 76-3-608(3)(a); and
(f) identify geographic areas where the governing body intends to authorize an exemption from review of the criteria in 76-3-608(3)(a) for proposed subdivisions pursuant to 76-3-608.

(5) The planning board may propose and the governing bodies may adopt additional elements of a growth policy in order to fulfill the purpose of this chapter.

76-1-602. Public hearing on proposed growth policy.

(1) Prior to the submission of the proposed growth policy to the governing bodies, the board shall give notice and hold a public hearing on the growth policy.
(2) At least 10 days prior to the date set for hearing, the board shall publish in a newspaper of general circulation in the jurisdictional area a notice of the time and place of the hearing.

76-1-603. Adoption of growth policy by planning board. After consideration of the recommendations and suggestions elicited at the public hearing, the planning board shall by resolution:

(1) recommend the proposed growth policy and any proposed ordinances and resolutions for its implementation to the governing bodies of the governmental units represented on the planning board;
(2) recommend that a growth policy not be adopted; or
(3) recommend that the governing body take some other action related to preparation of a growth policy.

76-1-604. Adoption, revision, or rejection of growth policy.

(1) The governing body shall adopt a resolution of intention to adopt, adopt with revisions, or reject the proposed growth policy.
(2) If the governing body adopts a resolution of intention to adopt a growth policy, the governing body may submit to the qualified electors of the area covered by the growth policy proposed by the governing body at the next primary or general election or at a special election the referendum question of whether or not the growth policy should be adopted. A special election must be held in conjunction with a regular or primary election.
(3) A governing body may:
   (a) revise an adopted growth policy following the procedures in this chapter for adoption of a proposed growth policy; or
   (b) repeal a growth policy by resolution.
(4) The qualified electors of the area covered by the growth policy may by initiative or referendum adopt, revise, or repeal a growth policy under this section. A petition for initiative or referendum must contain the signatures of 15% of the qualified electors of the area covered by the growth policy.
(5) A master plan adopted pursuant to this chapter before October 1, 1999, may be repealed following the procedures in this section for repeal of a growth policy.
(6) Until October 1, 2006, a master plan that was adopted pursuant to this chapter before October 1, 1999, may be revised following the procedures in this chapter for revision of a growth policy.
(7) Except as otherwise provided in this section, the provisions of Title 7, chapter 5, part 1, apply to an initiative or referendum under this section.
76-1-605. Use of adopted growth policy.

(1) Subject to subsection (2), after adoption of a growth policy, the governing body within the area covered by the growth policy pursuant to 76-1-601 must be guided by and give consideration to the general policy and pattern of development set out in the growth policy in the:

(a) authorization, construction, alteration, or abandonment of public ways, public places, public structures, or public utilities;
(b) authorization, acceptance, or construction of water mains, sewers, connections, facilities, or utilities; and
(c) adoption of zoning ordinances or resolutions.

(2) (a) A growth policy is not a regulatory document and does not confer any authority to regulate that is not otherwise specifically authorized by law or regulations adopted pursuant to the law.

(b) A governing body may not withhold, deny, or impose conditions on any land use approval or other authority to act based solely on compliance with a growth policy adopted pursuant to this chapter.

76-1-606. Effect of growth policy on subdivision regulations. When a growth policy has been approved, the subdivision regulations adopted pursuant to chapter 3 of this title must be made in accordance with the growth policy.
APPENDIX B: LIST OF REGIONAL, VICINITY, AND ISSUE PLANS
ADOPTED BY THE CITY OR COUNTY OF MISSOULA

REGIONAL PLANS

- Swan Valley-Condon Comprehensive Plan Updated in December, 1996.
- Lolo Regional Plan, adopted in 2002.

VICINITY PLANS, MISSOULA COUNTY:

- Fort Missoula Plan, adopted in 1973. (Fort Missoula Plan Update - presently tabled.)
- Grant Creek Area Plan, adopted in 1980.
- Reserve Street Area Plan, adopted in 1980.
- Rattlesnake Valley Update adopted in December 1995.
- Butler Creek Area Plan Amendment, adopted in 1996.
- Miller Creek Valley Plan, adopted in August 1997.
- Wye/Mullan Road Area Comprehensive Plan Amendment, adopted in 2005.

VICINITY PLANS, CITY OF MISSOULA:

- Reserve Street Area Plan, adopted in 1980.
- Urban Renewal District II, adopted in 1991. (This document covers the second MRA district.)
- Reserve Street Area Update, adopted in July 1995.

ISSUE PLANS

- Missoula County Parks, Recreation and Open Space Plan, adopted in 1976.
- Airport Master Plan and Noise Compatibility Program, latest County adopted revisions dated 1983. (A new Noise and Compatibility Study was completed in November 2004.)
- Missoula Fire and Emergency Services Master Plan, adopted by the County in 1986; portions adopted by the City.
- Missoula County Parks, Recreation and Open Space Plan, amended and adopted in January 1997.
- Wastewater Facilities Plan, updated in 1999.
- City Master Parks Plan, adopted in May 2004.
Appendix C: Species of Concern

**MTNHP SPECIES OF CONCERN**

The term "species of concern" includes taxa that are at-risk or potentially at-risk due to rarity, restricted distribution, habitat loss, and/or other factors. The term also encompasses species that have a special designation by organizations or land management agencies in Montana, including: Bureau of Land Management Special Status and Watch species; U.S. Forest Service Sensitive and Watch species; U.S. Fish and Wildlife Service Threatened, Endangered and Candidate species.

**HERITAGE PROGRAM RANKS (GLOBAL AND STATE)**

Taxa are evaluated and ranked by the Heritage Program on the basis of their global (range-wide) status, and their state-wide status according to a standardized procedure used by all Natural Heritage Programs. These ranks are used to determine protection and data collection priorities, and are revised as new information becomes available.

For each level of distribution—global and state—species are assigned a numeric rank ranging from 1 (greatest concern) to 5 (least concern). This reflects the species relative endangerment and is based primarily on the number of occurrences of that species globally or within the state. However, other information such as date of collection, degree of habitat threat, geographic distribution patterns and population size and trends is considered when assigning a rank, and the number of occurrences listed below are suggestions, not absolute criteria.

For example, Clustered lady's slipper (*Cypripedium fasciculatum*) is ranked G4 S2. Globally the species is apparently secure, while in Montana it is imperiled because of rarity, or because of other factors making it demonstrably vulnerable to extirpation.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction.</td>
</tr>
<tr>
<td>2</td>
<td>Imperiled because of rarity (6 to 20 occurrences) or because of other factors demonstrably making it vulnerable to extinction throughout its range.</td>
</tr>
<tr>
<td>3</td>
<td>Either very rare and local throughout its range, or found locally (even abundantly at some of its locations) in a restricted range, or vulnerable to extinction throughout its range because of other factors; in the range of 21 to 100 occurrences.</td>
</tr>
<tr>
<td>4</td>
<td>Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.</td>
</tr>
<tr>
<td>5</td>
<td>Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery.</td>
</tr>
<tr>
<td>U</td>
<td>Possibly imperiled, but status uncertain; more information needed.</td>
</tr>
<tr>
<td>H</td>
<td>Historically known; may be rediscovered.</td>
</tr>
<tr>
<td>X</td>
<td>Believed to be extinct; historical records only.</td>
</tr>
</tbody>
</table>

Other Heritage Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G#G#</td>
<td>Numeric range rank: A range between two of the numeric ranks. Denotes range of uncertainty about the exact rarity of the species.</td>
</tr>
<tr>
<td>S#S#</td>
<td></td>
</tr>
</tbody>
</table>

**Subrank**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Rank for subspecific taxon (subspecies, variety, or population); appended to the global rank for the full species, e.g. G4T3</td>
</tr>
</tbody>
</table>
### Qualifiers

<table>
<thead>
<tr>
<th>Letter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Accidental in the state; including species (usually birds or butterflies) recorded very infrequently, hundreds or thousands of miles outside their usual range.</td>
</tr>
<tr>
<td>B</td>
<td>Breeding status of a migratory species. Example: S1B, SZN - breeding occurrences for the species are ranked S1 (critically imperiled) in the state, nonbreeding occurrences are not ranked in the state.</td>
</tr>
<tr>
<td>E</td>
<td>An exotic established in the state; may be native in nearby regions.</td>
</tr>
<tr>
<td>HYB</td>
<td>Element represents a hybrid of species</td>
</tr>
<tr>
<td>N</td>
<td>Non-breeding status of a migratory species. Example: S1B, SZN - breeding occurrences for the species are ranked S1 (critically imperiled) in the state, nonbreeding occurrences are not ranked in the state.</td>
</tr>
<tr>
<td>P</td>
<td>Indicates the element may potentially occur in the state.</td>
</tr>
<tr>
<td>Q</td>
<td>Taxonomic questions or problems involved, more information needed; appended to the global rank.</td>
</tr>
<tr>
<td>R</td>
<td>Reported in the state; but lacking documentation which would provide a basis for either accepting or rejecting the report.</td>
</tr>
<tr>
<td>T</td>
<td>Rank for subspecific taxon (subspecies, variety, or population); appended to the global rank for the full species.</td>
</tr>
<tr>
<td>Z</td>
<td>Ranking not applicable.</td>
</tr>
<tr>
<td>#</td>
<td>A modifier to SX or SH; the species has been reintroduced but the population is not yet established.</td>
</tr>
<tr>
<td>?</td>
<td>Inexact or uncertain; for numeric ranks, denotes</td>
</tr>
</tbody>
</table>

**BLM = Bureau of Land Management**

**USFS= U.S. Forest Service**

**USFWS-ESA = U.S. Fish and Wildlife Service-Endangered Species Act**

<table>
<thead>
<tr>
<th><strong>BLM Status</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitive or Special Status</td>
<td>Special Status animals or Sensitive plant species: proven to be imperiled in at least part of its range and documented to occur on BLM lands.</td>
</tr>
<tr>
<td>Watch</td>
<td>Watch species: either known to be imperiled and suspected to occur on BLM lands; suspected to be imperiled and documented on BLM lands; or needing further study for other reasons.</td>
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</table>

<table>
<thead>
<tr>
<th><strong>USFS Status</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Threatened</td>
<td>Listed as Threatened (LT) or Endangered (LE) under the Endangered Species Act or proposed for listing (P); and known or suspected to occur on national forests.</td>
</tr>
<tr>
<td>Sensitive</td>
<td>Sensitive species, subspecies, or variety for which the Regional Forester has determined there is a concern for population viability rangewide or in the region.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>USFWS-ESA Status</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed endangered</td>
<td>Listed as Endangered under the Endangered Species Act.</td>
</tr>
<tr>
<td>Listed threatened</td>
<td>Listed as Threatened under the Endangered Species Act.</td>
</tr>
<tr>
<td>Proposed delisting</td>
<td>Proposed for delisting as Threatened under the Endangered Species Act.</td>
</tr>
<tr>
<td>Proposed endangered</td>
<td>Proposed for listing as Endangered under the Endangered Species Act.</td>
</tr>
<tr>
<td>Proposed threatened</td>
<td>Proposed for listing as Threatened under the Endangered Species Act.</td>
</tr>
<tr>
<td>Candidate</td>
<td>Candidate for listing under the Endangered Species Act.</td>
</tr>
<tr>
<td>Proposed Critical Habitat</td>
<td>Specific geographic areas, whether occupied by a listed species or not, that are essential for its conservation and that are proposed for formal designation.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td><strong>Animals</strong></td>
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<tr>
<td>Canis lupus</td>
<td>Gray Wolf</td>
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<tr>
<td>Lynx Canadensis</td>
<td>Lynx</td>
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<tr>
<td>Magnipelta mycophaga</td>
<td>Magnum Mantleslug</td>
</tr>
<tr>
<td>Myotis thysanodes</td>
<td>Fringed Myotis</td>
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<tr>
<td>Oreohelix alpina</td>
<td>Alpine Mountainsnail</td>
</tr>
<tr>
<td>Oreohelix amariradix</td>
<td>Bitterroot Mountainsnail</td>
</tr>
<tr>
<td>Prophysaon humile</td>
<td>Smoky Tailedrooper</td>
</tr>
<tr>
<td>Radiodiscus abietum</td>
<td>Fir Pinwheel</td>
</tr>
<tr>
<td>Sorex merriami</td>
<td>Merriam's Shrew</td>
</tr>
<tr>
<td>Sorex nanus</td>
<td>Dwarf Shrew</td>
</tr>
<tr>
<td>Stagnicola elrodi</td>
<td>Flathead Pondsnaile</td>
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<tr>
<td>Synaptomys borealis</td>
<td>Northern Bog Lemming</td>
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<tr>
<td>Stygobromus tritus</td>
<td>A Subterranean Amphipod</td>
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<td>Udosarx lyrata</td>
<td>Lyre Mantleslug</td>
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<tr>
<td>Ursus arctos horribilis</td>
<td>Grizzly Bear</td>
</tr>
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<td>Zapada cordillera</td>
<td>A Stonefly</td>
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<tr>
<td><strong>Birds</strong></td>
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<td>Accipiter gentilis</td>
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<td>Aegolius funereus</td>
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<td>Falco peregrinus</td>
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<td>Gavia immer</td>
<td>Common Loon</td>
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<td>Haliaeetus leucocephalus</td>
<td>Bald Eagle</td>
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<td>Histrionicus histrionicus</td>
<td>Harlequin Duck</td>
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<tr>
<td>Otus flammeolus</td>
<td>Flammulated Owl</td>
</tr>
<tr>
<td>Picoides arcticus</td>
<td>Black-backed Woodpecker</td>
</tr>
<tr>
<td>Strix nebulosa</td>
<td>Great Gray Owl</td>
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<tr>
<td>Bird Rookery(Animal Assemblage)</td>
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<td><strong>Fish</strong></td>
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</tr>
<tr>
<td>Oncorhynchus clarki lewisi</td>
<td>Westslope Cutthroat Trout</td>
</tr>
<tr>
<td>Salvelinus confluentus pop 2</td>
<td>Bull Trout - Columbia River</td>
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<tr>
<td><strong>Plants</strong></td>
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APPENDIX D: GROWTH POLICY SURVEY SUMMARY

The complete Growth Policy Survey report is available by clicking on this link.
APPENDIX E: Sand and Gravel Resources

1. For the purposes of promoting the public health, safety, and general welfare, Missoula County desires to provide for the extraction of sand and gravel resources in a manner that meets the needs of a growing population while concurrently protecting natural resources and the health and safety of area residents and visitors.

2. Gravel resources are generally, but not always, located along streams and rivers or areas where certain kinds of geologic activities have occurred. Map A shows areas where these resources are likely to occur in Missoula, either where currently permitted or where there are Quartenary surface deposits, which may help identify where additional gravel resources have a greater potential of being found. However, it must be noted that the existence of Quartenary surface deposits does not necessarily mean there are sand and gravel resources in a particular location. Also, it does not preclude the existence of sand and gravel resources in other locations. This information provides evidence of where there is a greater likelihood of such resources. Zoning may specifically preclude sand and gravel extraction in areas not so zoned. The governing body shall carefully consider the impacts of the proposed resource extraction on: 1) water quality issues; 2) impacts to agriculture and agricultural land; 3) impacts to existing residential development; and 4): the general health, safety and welfare criteria found in the Growth Policy. When zoning previously unzoned areas, the same criteria should be utilized in addition to statutory requirements.

3. Missoula County intends to revise its County Zoning Resolution to provide standards for gravel and sand extraction operations and the processing of those materials. Particular concern will be paid in that Resolution to issues such as the public's need for such resources and public health, including but not limited to: dust, noise, odor, lighting, traffic, water quality and air quantity, as well as to the criteria outlined in the Montana Code Annotated, 76-2-203 Criteria and Guidelines for Zoning Regulations. Conditional Use Permits should be considered as one possible tool for mitigating impacts from sand and gravel extraction.
Missoula County

Potential Gravel Resources

This map shows areas with potential gravel resources based on United States Geological Survey geologic mapping. Gravel resources may also be located outside of these areas. The resource illustrated is comprised of Quaternary alluvial deposits, a large resource. Data reflect a scale of 1:1,100,000. Map may change as digital layer is updated by the Montana Bureau of Mines and Geology.

The map in the way indicates the economic feasibility of the development of these resources.

- Permitted Gravel Pits

  - Highways
  - Rivers
  - Public Land Survey
  - County Boundary
  - Tribal and Reservation Boundary
  - Quaternary Alluvium

**Map A**

APPENDIX F: Wildland Urban Interface (WUI)

1. The County has determined that a high potential for fire hazard exists that may jeopardize life and property in Missoula County. Missoula County mapped and evaluated the WUI through several planning documents; that mapping is included herein. Neither the definition of the WUI nor the mapping of its extent shall inform future land-use decisions beyond the paragraphs that follow:

   In 2010, in order to protect human life, private property and natural resources, Missoula County is adopting a county-wide Emergency Operations Plan and Pre-Disaster Mitigation Plan. Those plans are currently under revision by the Missoula County Office of Emergency Services and will be completed in 2010. The plans, upon adoption, and the adoption of any future revision of those plans or the Community Wildfire Protection Plan (CWPP), will concurrently amend the Missoula County Growth Policy 2005 Update after going through the appropriate public review process.

2. Wildland fire hazard exists throughout the County. Further study of fire prone areas in both Missoula County and the City of Missoula should inform future land use action.

   a. Missoula County will begin a 2010 revision of its subdivision regulations to address fire inside and outside of the WUI, including consideration of, among other items: defensible space around structures, access for emergency services and fire planning, and the potential for delivery of adequate water for fire protection. Amendments are anticipated to be proposed for adoption in 2010 and 2011. Further regulations will be based on additional consideration of fire hazard and other health, safety and welfare concerns.

   b. Missoula County is in the process of reviewing its zoning regulations to determine if or how zoning could be used to protect life and property in the WUI. That review includes but is not limited to issues such as defensible space around structures, access for emergency services and fire planning, and the potential for delivery of adequate water for fire protection. Further regulations will be based on additional consideration of fire hazard and other health, safety and welfare concerns.

3. Existing maps of the WUI, noted as Map B (Wildland Urban Interface - Excluding Seeley and Swan), Map C (Wildland Urban Interface - Swan) and Map D (Wildland Urban Interface - Clearwater), are hereby amended to the Missoula County Growth Policy 2005 Update.
REFERENCES

PLANNING DOCUMENTS

- 1975, Missoula County Comprehensive Plan
- 1984, Wastewater Facilities Plan
- 1994, Forest Plan Five Year Review for the Bitterroot, USDA Forest Service, Northern Region
- 1994, Guidelines for Creating a Non-Motorized Travel Network in the Greater Missoula Area
- 1995, Missoula Urban Area Open Space Plan
- 1996, Missoula Urban Transportation Plan
- 1996, Planning for Growth in Missoula County
- 1997, Missoula County Parks and Conservation Lands Plan
- 1997, Missoula County Shoreline Regulations
- 1998, Missoula Urban Area Comprehensive Plan
- 1999, City of Missoula Subdivision Regulations
- 1999, Missoula Urban Transportation Plan Update
- 1999, Wastewater Facilities Plan Update
- 1999, Missoula Consolidated Plan, for Federal Years (FFY) 1999-2003
- 2000, Missoula County Floodplain Regulations, Missoula Office of Planning and Grants
- Amended 2000, Missoula County Subdivision Regulations
- 2001, Missoula County Zoning Ordinance Revised
- 2001, Missoula Urban Non-Motorized Plan Update
- Missoula County Floodplain Maps, Missoula Office of Planning and Grants
- 2001, Lolo Regional Plan.
- 2002, Grant Creek Environmental Restoration and Flood Control Project Management Plan.
- 2004, Master Parks Plan.
- 2004, Pre-Disaster Mitigation Plan. Missoula County and City of Missoula
- 2004, Missoula Urban Transportation Plan Update

LEGAL DOCUMENTS

- Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Montana Comprehensive and Environmental Cleanup Act (CERCA)
- Montana State Growth Policy Law, MCA 76-1
- Montana State Subdivision and Platting Act, MCA 76-3
- Montana State Urban Renewal Law, MCA 7-15

OTHER SOURCES

- 9-1-1 Center Statistics and Missoula County Sheriff’s Department, 2005.
- City of Missoula Capital Improvement Program, 2002-2006.
• City of Missoula Public Works Department.
• A Compendium of Land Use Management Techniques for Hwy. 93. Fitch, Craig and Thuesen, Ron, University of Montana School of Law, Land Use Clinic, 2001.
• Confederated Salish and Kootenai Tribes, 2002.
• Environmental Protection Agency (EPA), December 2004.
• Flathead Reservation Comprehensive Resources Plan. Confederated Salish and Kootenai Tribes, January 1996.
• Inventory and Assessment of Bank Stabilization Projects on Reaches of the Clark Fork, Bitterroot, Blackfoot, Lolo Creek, and Ninemile Creek in Missoula County. Watershed Education Network, 1999.
• Inventory of Conservation Resources for Missoula County. Missoula County, 1992 Update.
• Legislative Fiscal Division, 2005.
• Missoula Airport Authority, 2005.
• Missoula City-County Health Department, 2004.
• Missoula County Association of Realtors, 2005.
• Missoula County Community Wildfire Protection Plan. Missoula County/City Presentation. March 31, 2005.
• Missoula County Grants Division, 2004.
• Missoula County Historic Preservation Office, 2002.
• Missoula County Public Works, 2005.
• Missoula County Weed District, 2005.
• Missoula Ravalli Transport Management Association, 2005.
• Montana Department of Revenue; Computer Assisted Mass Appraisal (CAMA).
• Montana Fish, Wildlife & Parks, Region 2, 2005.
• Montana State Office of Public Instruction, School Enrollment Data, 2002.
• MUTD Comprehensive Operations Analysis (Final Report), 2003.
• Outlook, Bureau of Business and Research, The University of Montana, 2005.
• U.S. Department of Commerce, Bureau of Economic Analysis, 2005 Census Bureau.
PERSONAL COMMUNICATION

- 911, Katie Detman, 3/30/2005
- Browning Ferries Industries (BFI), Jim Leiter, 5/21/02, 2/28/2005
- County Road Maintenance, Clint Harris & Dick Kushner, 2/22/05
- Lolo Wastewater/Sewage Treatment Facility, Dave Haverfield, 2/22/2005
- Missoula Art Museum, Executive Director Laura Millin, 1/18/2005
- Missoula City-County Health Department, Benjamin Schmidt, 3/1/2005
- Missoula City Department of Parks, David Claman
- Missoula City Engineering Department, Doug Harby, 5/19/2005
- Missoula City Parks and Recreation, Jacquelyn Corday, Kathy Mehring, 2/14/2005
- Missoula City Public Works, Phil Smith, 3/2/2005; Acting Director Steve King, 4/1/2005
- Missoula County Chief Financial Officer, Dale Bickell,
- Missoula County Engineering Department, Clint Harris, 4/1/02
- Missoula County Environmental Health Division, John Harvala, 4/5/02, 3/1/2005, 5/12/2005
- Missoula County Health Department, Shannon Therriault
- Missoula County Information Services, Ginny Schuler, 3/21/02
- Missoula County Public Works, Director Greg Robertson, 4/27/2005
- Missoula Parks and Recreation Department, David Claman and Kate Supplee
- Missoula County Sheriff's Department, Captain Scott McDonald, 3/18/02; Captain Don Morman, 5/2/02; Captain Mike McMeekin, 5/1/02; Captain Carl Ibsen, 2/11/2005; Deborah Augden, 8/4/2005
- Missoula County Superintendent of Schools, Rachel Vielleux, School Enrollment Statistics, 3/5/02, 3/29/2005
- Missoula County Weed District, Bill Otten, 2/15/2005
- Missoula Fire Department, Jason Diehl and Fire Chief Tom Steenberg, 4/4/2005
- Missoula Housing Authority, Shannon Parker
- Missoula Office of Planning and Grants, Grants Department and Floodplain Administrator, 5/02, 3/3/2005
- Missoula Police Department, Jim Pontrelli; Terrie Price, Lt. Gregg Willoughby, 3/31/2005
- Missoula Public Library, Bette Ammon, 5/21/02, 3/1/2005
- Missoula Rural Fire District, Curt Belts, 4/26/02
- Montana Department of Transportation, Dennis Foy, 4/1/02; Jim Freyholtz 4/12/2005
- Montana Department of Revenue, land use data, Wes Redden, 4/24/02
- Montana Fish, Wildlife & Parks, Christy Dubois, 4/7/2005; Jamie Jonkel, 2/15/2005; Sharon Rose, 5/23/2005
- Montana Fish, Wildlife & Parks, Region 1, Alan Wood, 6/28/2005
- Montana Natural Heritage Program, Karen Walker, 6/3/2005
- Mountain Line, Ray Hoff, 2/11/2005; Laurie Belcher, 4/29/2005
- Mountain Water Company, Butch Hiller, 4/30/02
- Tony Tomus, 4/14/2005
- University of Montana, Office of Planning Budget and Analysis, Bill Muse, 7/19/02;
- U.S. Fish and Wildlife Service, Chris Servheen, 5/20/2005
- Fish and Wildlife Service, Carolyn Sime, 4/11/2005
WEB SITES

- City of Missoula, http://www.ci.missoula.mt.us/
- Community Medical Center, http://www.communitymed.org/
- Missoula Community Food Assessment: http://www.umt.edu/cfa/
- Missoula County, http://www.co.missoula.mt.us/
- Missoula Measures, Community, Environment, and Economy sections, http://www.co.missoula.mt.us/measures/
- Montana Department of Commerce, http://ceic.commerce.state.mt.us/
- Montana Department of Labor and Industry, Research Analysis Bureau, http://rad.dli.state.mt.us
- Montana Natural Resources Information System, Natural Heritage Program and Water Information System, http://www.nrnis.state.mt.us/
- St. Patrick Hospital, http://www.saintpatrick.org/