$21.50

LOLO REGIONAL PLAN

Adopted April 24, 2002
By the Board of County Commissioners

RESOLUTION NUMBER 2002-064

A RESOLUTION TO ADOPT THE LOLO REGIONAL PLAN FINAL DRAFT.

WHEREAS, 76-1-604 M.C.A. authorizes the Board of County Commissioners to adopt and amend comprehensive plans; and

WHEREAS, the Board of County Commissioners did adopt a comprehensive plan for the County in 1975; and,

WHEREAS, the Board of County Commissioners updated and amended this comprehensive plan in 1990, and 1998, and has emended parts of it by adopting subarea and neighborhood plans; and,

WHEREAS, the Lolo Regional Plan represents an update of the 1998 Urban Area Comprehensive Plan Update; and,

WHEREAS, the Lolo Regional Plan represents an update of the 1978 Lolo Land Use Plan; and,

WHEREAS, the Lolo Regional Plan was drafted through a public planning process by the Missoula Office of Planning and Grants; and,

WHEREAS, the Lolo Regional Plan was reviewed by the Missoula Consolidated Planning Board at five public meetings, beginning 11/27/01 and ending 2/12/02; and

WHEREAS, the Missoula Consolidated Planning Board has recommended adoption of the Lolo Regional Plan as amended; and

WHEREAS, revisions have been incorporated into the final draft form of the Plan, along with a few additional corrections and clarifications;

NOW, THEREFORE, BE IT RESOLVED that the Board of County Commissioners of Missoula County hereby adopts this resolution to adopt the Lolo Regional Plan Final Draft, as amended by Planning Board and, as amended by the Board of County Commissioners. A copy of the plan document is available at the Missoula Office of Planning and Grants.

BE IT FURTHER RESOLVED that:

> This Lolo Regional Plan is an amendment to the Missoula County Plan and the Missoula Urban Comprehensive Plan. It supercedes the 1978 Lolo Land Use Plan. It is a policy document intended to provide the County and other agencies and districts with a coordinated guide for change over a long period of time. When making decisions based on the Plan, not all of the goals and implementation proposals can be met to the same degree in every instance. Use of the Plan

requires a balancing of its various components on a case-by-case basis, as well as a selection of those goals and implementation proposals most pertinent to the issue at hand.

The common theme of all the goals and implementation proposals is acceptance of them as suitable approaches toward problem-solving and goal realization. Other valid approaches may exist. Adoption of the Plan does not necessarily commit the County to immediately carry out each policy to the letter, but does put the County on record as having recognized the desirability of the goals and implementation proposals and the decisions or actions they imply. The County can then begin to carry out the goals and implementation proposals to the best of its ability, given sufficient time and resources.

Resolution of Intent passed and adopted April 24, 2002.

ATTEST:

BOARD OF COUNTY COMMISSIONERS
Missoula County, Montana

Date of signature June 11, 2002

VICKIE M. ZEIER

BY: _____
Vicki Zeier, Clerk and
Recorder

_____
Jean Curtiss, Chair

_____
Barabara Evans, Commissioner

_____
Bill Carey, Commissioner

APPROVED AS TO FORM AND CONTENT:

_____
Deputy County Attorney

Acknowledgements

This planning document owes its final form and content to the following:

The Citizens of the Lolo region including
The Community of Lolo,
Lolo Creek Valley, and
North Bitterroot Valley

(who provided information, opinions, historical facts and testimony.)

The Lolo Community Council

(who provided countless hours of time on behalf of the area as well as coordination between the Planning Office and the citizens of the area.)

Lolo School Students,
Montana - Idaho Chapters of the American Society of Landscape Architects,
and National Park Service

(for funding, coordinating, and participating in the many planning workshops including the Travelers' Rest Design Charrette (100 Years, 100 Parks – ASLA Centennial Program).)

Members of the Missoula Consolidated Planning Board

(at time of review)

Troy Kurth, Chair	Tom Maclay
Mike Kopitzke	Chuck Gibson
Don MacArthur	Helen Cipolato, Alternate
Deb Halliday	Tim Ibey, Alternate
Russ Fletcher	Len Broberg (term ended 12/31/01)
Bruce Haroldson	John Spangler (term ended 12/31/01)
Fred Reed	Dale A. Clouse (term ended 12/31/01)

Board of County Commissioners

Jean Curtis, Chair
Barbara Evans
Bill Carey

Missoula Office of Planning and Grants

Laval Means, Nancy Heil, Tim Hall, Brian Maiorano, Dave Dewing, Erik Benson, David Gray, Krisin VanValkenburg (intern), Bobbi Day, Jeff Schalow, Philip Maechling, and Director Cindy Klette. In addition, all of the staff who reviewed preliminary drafts, participated in neighborhood meetings, and provided moral support.

Missoula County

Deputy County Attorney, Colleen Dowdall
Chief Administrative Officer, Ann Mary Dussault

All County, State, and Federal agencies as well as private organizations who assisted in the development of this document.

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Maps

These maps are located in the pocket at the back of this document

CHAPTER ONE: INTRODUCTION

A. The Process of Planning the Lolo Region

1. Citizen Involvement

The *Lolo Regional Plan* update planning process began in November 1995 at a public meeting at the Lolo Community Center, attended by over 150 residents. Following this initial meeting, residents formed interest groups and committees that completed hundreds of hours of work, allowing the planning staff to coordinate comments and analyze information.

Residents identified specific areas of interest and working subcommittees were formed including:

1) Land Use
2) Parks
3) Economic Development
4) Community Design and Architecture
5) History
6) Transportation
7) Sanitation

Planning staff provided monthly updates during the regularly scheduled Lolo Community Council meetings and held other meetings when necessary. The work of each committee is summarized below.

1) The Land Use Subcommittee analyzed current development patterns in the community of Lolo, the North Bitterroot and Lolo Creek. North Bitterroot meetings focused on three areas: the Bitterroot River bottom lands, the Carlton Community, and the intersection of Old U.S. Highway 93 and U.S. Highway 93 at Rowan Road, east of Mackintosh Manor. Land up Lolo Creek was discussed at a meeting of the Flood Event Management Planning Effort, coordinated with the Missoula Office of Disaster and Emergency Services and the Montana branch of the Federal Emergency Management Agency.

2) The Parks Subcommittee coordinated the disbursement of nearly $20,000 for county parks in Lolo, contributed by Missoula County and a local developer. Issues identified included maintenance of existing parks and dedication of new parks.

3) The Economic Development Subcommittee met on two occasions to discuss goals for the region, such as creation of jobs and the development of a sustainable tax base to support the school districts. Expected tourism for the Lewis and Clark Bicentennial (2003-2006) has spurred a renewed interest in the community, the regional identity, and the community character.

4) The Community Design and Architecture and
5) History Subcommittees combined informally to discuss development of a Historic Community of Lolo. The committee concluded that community aesthetics and beautification prior to the Lewis and Clark Bicentennial will make the community of Lolo more desirable for tourists as well as residents.

6) The Transportation Subcommittee originally focused on improving traffic flow and safety through Lolo. The committee made formal requests to study speed limits, oversaw installation of a signalized intersection and realignment of Glacier Drive and Ridgeway, requested installation of an activated signal at the intersection of U.S. Highway 93 and U.S. Highway 12, and requested funding for pedestrian improvements from the Community Transportation Enhancement Project (CTEP). Committee members formed the Lolo Focus Group to encourage project enhancements for the Lolo phase of the U.S. Highway 93 South improvement project.

7) The Sanitation Subcommittee participated in the Lolo RSID 901 Sewer and Water District Improvement Planning, authorized by the Board of County Commissioners. The Sewer and Water District Board and the Commissioners adopted a study area and a service area that reflects the input of this committee.

Residents and members of the Community Design and Architecture Subcommittee participated in a two-part Citizen Community Design Workshop in the summer of 1997 that engaged all participants in a process of open discussion and creative problem solving for the Community of Lolo Development Area. Participants reviewed educational, resource and historical information, and discussed existing land use patterns. Examples of redevelopment scenarios were used to create maps and overlays of the Lolo community. Lolo School fifth graders and eighth graders completed the same design workshop exercise. The resulting ideas are the basis for community design guidelines outlined more specifically later in this Plan.

In 1999 a two-day design workshop, known as a charrette, held in conjunction with Lewis and Clark Bicentennial, focused on preservation and interpretation of the Travelers' Rest Campsite, located in Lolo. The discussion included development of a sense of community through the following: community connections and pathways, community gateways, a Lolo town center, U.S. Highway 93 crossings, and a Travelers' Rest Overlook on the hill overlooking Lolo.

2. Plan Development

In February 2001 staff presented an outline of this Plan at community meetings in Lolo and in the North Bitterroot Valley. A short time later, staff and residents attended a workshop allowing for comments in small groups on separate aspects of the Plan.

A second draft resulted from the analysis and incorporation of public comment. Additional analysis of past land use recommendations, current land uses, future infrastructure plans, and limitations to development were also considered. These and other issues were balanced to determine land use recommendations for the planning region. The Plan includes a rationale for the recommendations for most land uses. Staff presented this new draft to a meeting of residents of the planning region in May 2001. Staff received additional comments until early August.

The final draft was distributed to the public in November 2001 and presented at meetings in the planning region.

3. Review and Adoption

The Missoula Consolidated Planning Board completed their review of the final draft of the *Lolo Regional Plan* on February 12, 2002. They recommended the Plan as amended to the Board of County Commissioners for adoption.

The Commissioners held their first public hearing on the Plan in Lolo on March 27, 2002. They continued the hearing to April 10, 2002 and April 24, 2002. After further amendments to the Plan were made, the Commissioners passed a motion to adopt the Resolution of Intent to Adopt the Plan as amended on April 24, 2002.

B. Past Planning and Policies

1. Adopted Plans

Missoula County is required to adopt a comprehensive land use plan for the jurisdiction of its planning board. It acts as an umbrella to regional, area, and neighborhood plans which must be generally consistent with the *Missoula County Comprehensive Plan*.[1]

An area or neighborhood plan is an examination of a smaller area and allows the planning of a specific development pattern. Missoula County has adopted several area, regional, and neighborhood plans, throughout the County. These include the *Miller Creek Plan*, the *Swan-Condon Plan*, the *Seeley Lake Plan*, and the *1978 Lolo Land Use Plan*.

This *Lolo Regional Plan* reflects the goals and objectives of the *1975 Missoula County Comprehensive Plan*. The following paragraphs describe the chronology of land use planning for the Lolo planning region. While the *1975 Missoula County Comprehensive Plan* includes general goals and objectives, the *2002 Lolo Regional Plan* provides the best and most reliable recommendations for how development should occur in the planning region.

1975 Missoula County Comprehensive Plan

The *1975 Missoula County Comprehensive Plan* made general land use recommendations for the entire County, including Lolo. The recommendations were based upon a broad analysis of the physical capabilities of the natural environment, the development in communities, the cultural environment, and countywide goals and objectives.

The Plan was intended to guide but not to regulate. The Plan addressed development over a period of 20 years, recommending review and revisions to reflect changes in policy, state law, or community and regional character.

In 1981 the Montana Supreme Court decided the case of *Little v. Board of County Commissioners*,[2] ruling that zoning decisions had to be in substantial compliance with a comprehensive plan. The *1975 Missoula County Plan* was not adopted with the intent that there be strict compliance.

1978 Lolo Land Use Plan

In 1974 the community of Lolo initiated a planning process to more specifically outline land use planning goals and implementation strategies for the area. Planners collected data from a community survey, conducted a land use capability analysis of the physical limitations of the land, gathered transportation statistics, and engaged in a broad analysis of social and economic conditions. The final plan was an executive summary of these reports, including a map recommending land uses and residential densities.

[1] *Bridger Canyon Property Owners' Ass'n, Inc. v. Planning & Zoning Comm'n*, 270 Mont. 160, 890 P. 2d 1268 (1995); Ash Grove Cement Co. v. Jefferson County, 283 Mont. 486, 943 P. 2d 85 (1997).
[2] *Little v. Board of County Commissioners*, 193 Mont. 334, 631 P. 2d 1282 (1981).

The Missoula Consolidated Planning Board recommended adoption of the Plan and the Commissioners adopted the *Lolo Land Use Plan* in 1978. It was designed to guide growth for a period of 20 years with periodic review and revisions.

1990 and 1998 Missoula Urban Comprehensive Plans

In 1990 the City and County of Missoula adopted an *Urban Area Comprehensive Plan* with boundaries that coincided with the building permit jurisdiction of the City of Missoula. The 1990 Plan was consistent with the *1975 Missoula County Plan*. It also relied upon and reflected the land use designations of the *1978 Lolo Land Use Plan*.

In 1998 the City of Missoula and Missoula County updated the *Missoula Urban Comprehensive Plan* to incorporate "Growth Management Themes" described below. The 1998 Plan acknowledged that the Lolo area was engaged in its own planning effort. The land use map was not changed. The land use map, adopted with this Plan, amends the Urban Plan Land Use Map and the 1975 Missoula County Comprehensive Plan Land Use Map.

2. Growth Management Themes

In 1995 the Commissioners adopted as policy "Planning for Growth in Missoula County," known as the Growth Management Themes, and was developed as a part of a growth management planning process. The themes established as an overall policy for guiding development the following:

> Throughout the process of growth and change, we must preserve the valued characteristics of our communities. To be a truly healthy community, we must achieve two equally important goals: (1) protect our critical lands and natural resources, such as wildlife habitat; riparian resources; hillsides; water quality; and open spaces; and (2) enhance human resources, such as health and safety; social, educational, recreational and cultural services; employment; and housing.

In "Planning for Growth in Missoula County," the City and County agreed that:

> . . . a strategy for successfully managing growth. . . depends upon our ability to guide three key forms of future development without exceeding the County's carrying capacity: (1) housing projects that will produce an adequate supply and variety; (2) business activity that will provide good jobs and a reliable tax base; and (3) infrastructure, including public works, human and educational services, and public uses of land such as parks and recreation. By meeting development objectives in these three areas, we can achieve a county-wide pattern of community building, land-use, and conservation that reflects the environmental, economic, aesthetic, health and social values of Missoula County residents.

Neighborhood and regional planning is one of ten recommended implementation tools developed by the Growth Management Task Force as part of an implementation strategy based on these themes and recommendations from community stakeholders**,** as part of a "Scenarios Planning Process."

More information regarding the Growth Management Themes is available in Appendix A of the *1998 Missoula Urban Comprehensive Plan Update*.

C. Plan Organization

1. Brief Description of the *Lolo Regional Plan*

This Plan analysis focuses on three development areas within the planning region where development has occurred or is likely to occur: the Community of Lolo, the North Bitterroot Valley, and the Lolo Creek Valley. Land within the planning region outside of these development areas was included in a more general analysis and is recommended for Open and Resource land use. Each chapter addresses issues in each development area, with differing recommendations for land use and implementation strategies, reflecting the characteristics of each area or of the planning region as a whole. Sources of information used to recommend land uses and acknowledge limitations are included in the appendices.

2. Summary of Each Chapter

In order to implement the regional vision, a series of goals and policies are affirmed. Each chapter, and in some cases part of a chapter, begins with a goal. The Plan considers three main areas of resource issues: historic, natural, and development. Each chapter provides a summary of information about the chapter's subject, with specific references to each development area as needed. Policies and implementation strategies are listed at the end of each chapter.

Goals are value-based, general statements that are not necessarily measurable but are statements by the residents of the community that articulate the type of community they wish to live in.

Policies are more specific, usually measurable statements of desired ends. Missoula County policies are outlined as should-do elements. They are components or procedures of importance for infrastructure extension or resource preservation.

Implementation Strategies are actions. Implementation strategies recommend specific actions or guidelines to achieve the goals and enact the policies of the Plan. Implementation may include development of more specific plans or regulations that achieve the goals and policies of the Plan.

Chapter 2: Plan Overview

This chapter describes the regional context of the Plan. It also summarizes plan goals.

Chapter 3: Historic and Cultural Resources

This chapter includes a summary of the region’s history, a description of the types of historic resources to be protected, and policies and implementation strategies for this protection.

Chapter 4: Natural Resources

This chapter briefly describes various natural resources in the region as they relate to land use planning.

Chapter 5: Development Resources

This chapter provides background information to evaluate development and assess community needs in the planning region.

Chapter 6: Community Character

This chapter describes the existing character of each development area, the desired character that residents wish to maintain or enhance, and policies and implementation strategies as they relate to land use planning.

Chapter 7: Land Use Types and Guidelines

This chapter describes the land use types that appear on the land use map as well as guidelines for development. The chapter also explains why and where certain land use designations were applied within the planning area. The land use designations are intended to meet the goals and policies articulated throughout the Plan.

Chapter 8: Plan Implementation

This chapter describes the various ways to implement the Plan. It also describes the legal limitations of the Plan as a land use planning tool, provides guidelines for use of the Plan in evaluating projects, and provides a summary of the reasons for, and the process of, plan amendment.

CHAPTER 2: PLAN OVERVIEW

A. Regional Context of the Lolo Planning Region

The Lolo planning region, located in southwestern Missoula County is 234,945 acres (367 square miles) in size. Land ownership is a mix of private land, primarily in the valley bottoms and low-level woodlands, and private corporate, state, and federal land.

The planning region is defined by two major watersheds: the Bitterroot River Valley and the Lolo Creek Valley. The Bitterroot River flows south to north on the eastern edge of the planning region. The watershed extends into the planning region to the west, including a broad floodplain. Lolo Creek flows west to east through a narrow canyon with steep walls on both sides. The creek has been channelized by highway projects, locating it mostly on the south side of U.S. Highway 12. It flows into the Bitterroot River at the southern end of the Community of Lolo Development Area.

The highest point in the planning region is Lolo Peak at 9,096 feet above mean sea level. The peak can be seen from most locations in the region. The lowest area, where the Bitterroot River crosses into the Missoula Valley**,** across from Deadman Gulch, is 3,140 feet above mean sea level.[1]

The planning region is bordered by the Miller Creek Valley to the northeast, the Clinton-Turah area to the east, Ravalli County to the south, the State of Idaho to the west, and the Missoula area to the north. It is between Hamilton in Ravalli County**,** and the City of Missoula in Missoula County. The planning region relies heavily upon Hamilton and Missoula for employment, transportation, medical services, and major retail and personal services. Residents have stated that the planning region should be more than an area to pass through between these two communities. An expressed community goal is to plan so that each of the development areas is a place where residents live, work and play. It is within this context that the following development areas have been identified. (See Map 2-1 in the Maps section.)

B. Development Areas

1. The Community of Lolo Development Area

The community of Lolo grew out of the historic settlement at the intersection of U.S. Highway 12 and U.S. Highway 93. Workshop participants identified what they considered the northern and southern boundaries of the community as well as its western edge up Lolo Canyon.

The development area extends to the northern boundary of the planning region and past Sleeman Gulch to the west; it includes the section of land east of the Bitterroot River to the east; and extends to the section line south of Bitterroot Meadows to the south. This area roughly follows the same boundary as the *1978 Lolo Land Use Plan* area. This area is more densely developed than the rest of the planning region and is served by infrastructure that supports a more dense level of development.

[1] Section 15, Township 12 North, Range 20 West.

2. The North Bitterroot Valley Development Area

This development area runs from Mormon Creek Ridge across the valley floor to the Bitterroot River, and it extends to the Missoula-Ravalli County line to the south. It includes Mackintosh Manor, one of the oldest platted subdivisions in Missoula County, and the community of Carlton. The area is a mix of large agricultural tracts with pockets of residential development ranging from a small number of one-acre parcels to very large parcels.

3. The Lolo Creek Valley Development Area

This development area includes the Lolo Creek Valley west along U.S. Highway 12 to west of Bear Creek. Development is predominantly located along the valley bottom. Small parcel development is located closer to Lolo. Woodman School serves as the community center for this development area.

C. General Plan Goals

OVERALL GOAL:

The overall goal of the *Lolo Regional Plan* is to guide development, redevelopment, and community projects in a manner that will enhance the planning region as a place to live, work, and recreate while preserving the region's unique character and natural resources.

More specific goals are articulated throughout the Plan. The goals are numbered based on the chapter in which they appear.

GOAL 3: HISTORIC AND CULTURAL RESOURCE

Protect and preserve historic and cultural resources in the planning area to safeguard the Lolo region's heritage.

GOAL 4: NATURAL RESOURCES

Protect natural resources in the planning region including hillsides, agricultural soils, wildlife, wildlife habitat, surface water, groundwater, and air.

GOAL 5: DEVELOPMENT RESOURCES

5B:

- Efficiently integrate new development and infrastructure with existing land use patterns.
- Enhance the small town development pattern of the community of Lolo in order to encourage a broad range of uses ranging from more intense uses closer to the community core and less intense uses further from the core.
- Concentrate new residential development in proximity to two focus areas identified in the North Bitterroot Valley Development Area. Decrease the intensity of development as it occurs further from the focus areas in order to retain the rural development pattern.
- Reinforce the existing rural development pattern in the Lolo Creek Valley Development Area.

5C: Plan housing that meets the needs of residents, provides a diverse housing stock, respects the capacities of existing or future development of public services and facilities, and recognizes the limitations of the land for development.

5D: Sustain and continue to develop a diverse local economy that provides employment opportunities and a level of taxable value that contributes to the vitality of the Lolo community and region. Cultivate the economic independence of the community and the planning area.

5E: Ensure that transportation systems are adequate to meet the present and future needs of the Lolo planning region. Provide a safe, integrated, and efficient transportation system that allows people and products to travel through the region without negatively impacting adjacent uses and character.

5F: Protect open space resources. Provide recreational opportunities for community residents.

5G: Ensure that community services are adequate to meet the present and future need of the Lolo region.

GOAL 6: COMMUNITY CHARACTER

6A: Maintain the integrity of the Community of Lolo apart from the Missoula Urban Area and adjacent Development Areas. Enhance the small town characteristics of Lolo, with streets and neighborhoods linked to commercial areas and community facilities.

6B: Preserve the rural character of the area while also establishing areas for additional development.

6C: Maintain the integrity of the Lolo Creek Valley as a rural area with scenic and recreational elements associated with the Nez Perce Trail and the Lewis and Clark Trail.

GOAL 7: LAND USE

Recommend a land use pattern that collectively contributes to the community and the region while retaining cultural and physical characteristics that make the Lolo planning region unique.

D. Plan Policies and Implementation Strategies

Policies and implementation strategies have been established for each section of the Plan. An "Implementation Table" is included to summarize the goals, policies, strategies, and identify parties who might participate in implementing the *Lolo Regional Plan*. In most cases, multiple parties are identified and their participation may overlap or vary. The table serves as reference for residents as well as the listed participating groups to track plan implementation. Like other recommendations of this Plan, the table is intended as a guide. The table creates no legal rights or responsibilities. Implementation by the governing body or agencies of government can only respond within the limitation of budgeting capability, balancing the needs of the County as a whole with those of the planning region.

CHAPTER 3: HISTORIC AND CULTURAL RESOURCES

Goal 3:

Protect and preserve historic and cultural resources in the planning area to safeguard the Lolo region's heritage.

Introduction

This chapter includes a summary of the history of the region, a description of the types of historic resources to be protected, and policies and implementation strategies for their protection.

A. History

1. History of Settlement

Native People

The first Indian artifacts found in Missoula County date from approximately 12,000 years ago and the first known semi-permanent sites developed about 5500 years ago. During this time, what is now the Lolo Trail may have been used as a migratory and trading route. In 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. The Salish and the Pend D'Oreille were the primary occupants of the Lolo region before the migration of white settlers, although other tribal groups, such as the Kootenai, Nez Perce, Shoshone, and Blackfeet, entered the area to trade, hunt, or raid.

The Salish people hunted large game such as bison, elk and deer and harvested a variety of berries and roots. It is also believed that the Salish crossed the Lolo Trail in search of the salmon runs in the rivers on the western slopes of the Bitterroot Mountains. Prior to the introduction of the horse by white explorers, the Salish traveled by foot. The Salish people followed the game populations by moving from one hunting area to another, and constructed winter lodges in the Bitterroot Valley. The Salish had trading, and sometimes hunting, relationships with other neighboring tribes such as the Pend D'Oreille, the Nez Perce and the Shoshone.

Lewis and Clark Expedition

The first documented entry of Euro-Americans into western Montana's Bitterroot Valley 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 to find a western path to the Pacific Ocean. While they traveled, they mapped their route and detailed all aspects of their journey, including flora and fauna, minerals, soils, and lifestyles of the native people.

In 1805, on their western trek to the Pacific Ocean, they camped very near present-day Lolo, at what was called Travelers' Rest. The Expedition had undergone great difficulty prior to camping along Lolo Creek due to rough travel and lack of wild game to supplement their food rations. They rested near the creek, supplemented their rations with deer shot in Lolo Canyon, and gained strength for their remaining journey. They followed the Lolo Trail up and over Lolo Pass, through the Bitterroot Mountains to Idaho. The Expedition returned to the Bitterroot Valley and Travelers' Rest in 1806. Upon their return from the

west, Meriwether Lewis and William Clark split the expedition into two groups, hoping to find additional east-west routes while exploring western Montana.

Euro-American Exploration

Lewis and Clark may not have actually been the first white explorers to enter western Montana. Early fur trading interests, backed by the British and Americans, were exploring new routes and trade zones in the region. Most entered Montana from Canada. However, none of these explorers documented their trip as specifically as did Lewis and Clark. Both the Hudson's Bay Company and the British-based Northwest Company established trapping outposts in present-day Montana. In an effort to discourage American exploration into areas controlled by the trading companies, these companies tried to "trap out" the region, reducing incentives for other exploration and competition. As a result, very little settlement and trapping occurred in the Lolo and north Bitterroot Valleys, with no known permanent trading outposts established prior to the early 1800s.

Both Catholic and Protestant missionaries entered the Bitterroot Valley to convert the native people and build congregations. The Salish nation requested that Catholic priests establish a presence in their homelands. In 1841 Fathers DeSmet, Mengarini and Point built the St. Mary's Mission in what is now Stevensville. That mission was abandoned by the Jesuits and later leased by John Owen, who planned on operating a trading post; the actual encampment and fort were moved away from the mission site. Fort Owen was one of the first white settlements in the Bitterroot Valley. In the 1850s army outposts were built and exploration occurred, which greatly assisted Owen's operation. During the same decade, army engineers and surveyors searched for railroad crossing sites through the mountains.

Hellgate Treaty

In 1855 Isaac Stevens, governor of Washington Territory, met with the chiefs of the Salish, Pend d'Oreilles, 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 above 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 sub-chiefs, 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 moved under military escort.

Fort Fizzle

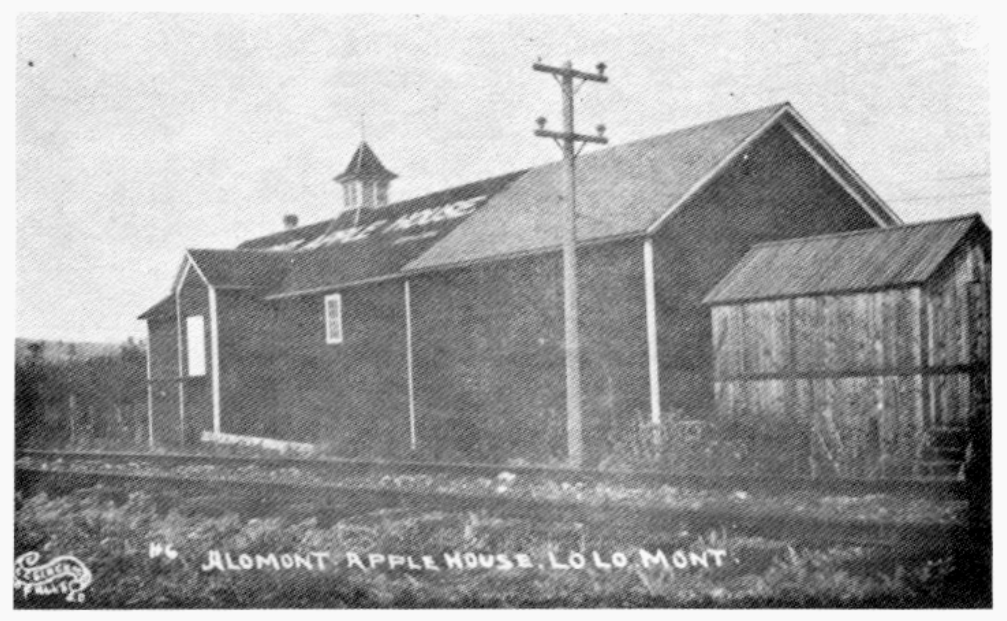
With the discovery of gold in Idaho, the U.S. government unsuccessfully tried to persuade the Nez Perce to move to a reservation. United States Army troops were summoned to force relocation. As battles between the Nez Perce and the U.S. Army began, the flight of the Nez Perce followed the Buffalo Trail (Lolo Trail) east from Idaho into Montana. In 1877 the army enlisted a small detachment and many volunteers to construct a log barricade (Fort Fizzle) just west of present day Lolo. When confronted by the troops and civilian volunteers, the Nez Perce skirted the log barricade and impending skirmish by traversing behind hidden ridges. They successfully passed the "fort" and continued their migration into the Bitterroot Valley, hence "fizzling" any effect the fort would have had on their journey.

In 1894 Territorial Governor Stevens ordered a map of the area on which the Lou Lou Fork (Lolo Creek) was first named. No definitive explanation of how the creek was named has been found. Settlement in the planning region's development areas is described below.

2. Community of Lolo Settlement

The townsite of Lolo was first platted by John Delaney. Delaney filed for and received a patent for 160 acres near the intersection of the trail to Lolo Hot Springs and the road into the Bitterroot Valley. He opened a mercantile, blacksmith shop and livery stable at the crossroads, followed by a freight stageline and saloon. Delaney became postmaster of the Lou Lou Post Office in 1888. The town name was changed to Lo Lo and eventually, under direction from the U.S. Postal Service, to Lolo. The Delaney freight stage served as the area's primary transportation link until the railroad spur from Missoula reached Lolo in 1889. Delaney filed the 26-acre Delaney Subdivision in 1910, establishing the original 8-lot Lolo Townsite.

A few historic residences and features in Lolo have withstood the tests of time and catastrophic events. Examples include a brick residence along U.S. Highway 93 at the northern end of the community of Lolo and the old farmhouse and barn on Lewis and Clark Drive. The site of the Bitterroot Stage Station on the northeast corner of Highway 93 and Lolo Creek has historic outbuildings that may date back to stagecoach days. These structures still exist, but are in need of repair. The Kuney homestead, just up Lolo Canyon, is still a functioning residence with barns and outbuildings. While the original early 1900s Lolo Schoolhouse has been modified and added to, the original architectural form remains, complete with bell tower and flagpole. The historic Allomont Fruit Farm apple barn, constructed on the east side of the railroad tracks in Lolo, was demolished in 1994. The cupola that sat on top of the barn can be seen today on top of the Hayloft Saloon in downtown Lolo. Wood planks from the original apple barn were also salvaged and have been used for various community projects.



Allomont Apple House circa 1910[1]

[1] *Lolo Creek Reflections.* Lolo Woman's Club (1999). Edited by Mary Carpenter. Stoneydale Press Publishing Company. Stevensville, Montana. Page 37.

3. Lolo Creek Valley Settlement

Community of Woodman

In 1885 Dan Woodman, the first sheriff of Missoula County, moved his family into Lolo Creek Canyon and homesteaded at the base of what is now known as Woodman Creek. The homestead served as the community center for Woodman. A cemetery remains in the area. In the early years, the community was made up of a handful of homesteaders. A school, constructed in 1902, still stands today adjacent to an expanded facility. With the upgrade of the trail to Lolo into the Old Lolo Creek Road, a stagecoach run was established to carry patrons and travelers to Lolo Hot Springs—a two-day journey from Missoula. Woodman served as post office, as well as a halfway stop where the stage took on fresh horses and supplies, and travelers rested and ate before completing their journey the following day. A number of mining claims, including copper, gold, lead, and molybdenum, were filed and worked in the Woodman area. Families grew hay, grazed cattle and sheep, harvested timber for railroad ties and firewood, grew Christmas trees and dimensional lumber for construction, prospected, and ran trap lines.

Lolo Hot Springs

Long known to the Native Americans traveling the Lolo Creek Canyon corridor, the hot springs in the middle of Lolo Canyon were said to have healing agents for numerous ills. Lewis and Clark stopped at the hot springs to take in the healing waters in 1805. Missoula County records show that W. Harris first sold the hot springs to Fred Lembke in 1885. Although it was a long and rough journey up the Lolo Trail, the area was developed as a resort. Two white settlers named Boyle and Mussey erected hotels at the Lolo Hot Springs site, and the hot springs became a popular recreational destination for the growing populations in Missoula and the Bitterroot Valley. The hot springs not only served as a stagecoach station and post office, but also has been the site of numerous camps set up by the U.S. Forest Service (USFS), road crews, miners and railroad construction crews. A commercial resort is still in operation on the site today.

4. North Bitterroot Valley Settlement

Community of Carlton

The family of Eliza Foster Carlton Holden Lavey homesteaded along a mountain stream south of Lolo in the mid-1860s. The creek, lakes, dam, and community are all named after Eliza's oldest son, Robert McMurdick Carlton.[2] In the 1860s the Carlton Creek area became the site of one of the first sawmills in the Bitterroot Valley. Timber cut along the banks of the Bitterroot River and in the Carlton Creek area became railroad ties for use on the Bitterroot railroad line. A stage station, livery, and trading post were also established in Carlton, followed by a post office, school, railroad depot, and the Carlton Cemetery.[3] During the flight of the Nez Perce in 1877, the Carlton Homestead allowed the Nez Perce to camp just north of the homestead house. In 1884 several families constructed a community church on land deeded by Robert Carlton. "In 1886 the Carlton Lakes Dam fed by Lolo Peak watershed was built. It is still the oldest irrigation storage in the Bitterroot Valley, although it was rebuilt in 1948."[4]

The church still stands today adjacent to a new facility and serves the Carlton Creek, North Bitterroot Valley and Florence areas. The original Carlton home, stage station corral, and log cabin are also still standing.

[2] "Eliza Foster Carlton Holden Lavey" by Cherly Holden Rice in *Dream Across the Divide, Stories of the Montana Pioneers*, Linda Wostrel, editor. Sons and Daughters of Montana Pioneers, 2001.
[3] Ibid.
[4] Ibid.

Carlton Church

Mackintosh Manor

Starting in 1911 land prospector, William Ranft, enticed investors to purchase shares in an apple and ranching cooperative. In 1913, 200 acres of land were divided into ten-acre orchard tracts and one-acre residence tracts. Investors moved to the region to fulfill their obligations to build residences at Mackintosh Manor, three miles south of Lolo. Once there, the investors found that the dream of growing rich off the bountiful apple harvests was severely hampered by lack of access to sufficient water for the orchards. Only one family developed a homesite at that time. Many of the subdivided tracts have since been developed as small ranchette tracts and residences.

Missoula & Bitter Root Valley Railroad (M&BRV)

Construction began on the Missoula & Bitter Root Valley Railroad (M&BRV) in 1887.[5] The connection between Missoula and Hamilton was completed in 1888, and the final segment between Hamilton and Darby was completed in 1910. Local businesses financed the construction of the branch that would be purchased by the Northern Pacific Railroad upon completion. The railroad and the access it provided stimulated the development in the Bitterroot Valley south of Missoula.

The railroad was intended to spur the development of the silver mines in the Bitterroot Valley; however, the movement of timber and agricultural goods provided the bulk of service. In addition, the branch began passenger service between Grantsdale (south of Hamilton) and Helena in 1890 and Grantsdale to Butte in 1896. The automobile ushered in the demise of large-scale railway transportation in the Bitterroot Valley. Reliance upon rail transportation decreased as the availability of cars and trucks increased. The Lolo Station was closed in 1926, and passenger service on the M&BRV was discontinued in 1927. The branch transferred to Burlington Northern in the 1970s and Montana Rail Link in 1987. Its service has greatly diminished, handling between one and three freight trains per week.

Plans to extend the Clearwater Shortline Railroad began around 1900 to connect the M&BRV to Lewiston, Idaho via Lolo Pass. Surveys and preliminary construction took place but never exceeded bed grading and initial tunnel headings. The bed grading itself was sporadic and can still be seen along the intended route. Complex topography requiring steep grades and tunnels led to the abandonment of the project in 1910.

[5] Taylor, Bill & Jan. *Rails to Gold & Silver.* Missoula: Pictorial Histories Publishing Co., 1999.

The old county road closely followed the proposed route for the Clearwater Shortline Railroad. U.S. Highway 12 currently occupies portions of the route, however much of the right-of-way has reverted back to private use. Much of the land currently under Plum Creek ownership in the Lolo Creek Valley is a remnant of the land grants provided for the construction of the railroad.

B. Historic Resources

1. 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 also exist.

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 to request a file search by the State Historic Preservation Office (SHPO). This search should be conducted prior to any earth moving activities and 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 SHPO in Helena should be contacted before further disturbance of the site occurs.

2. Historic Sites

The National Register of Historic Places (NRHP) is the official list of the nation's historic buildings and sites that are considered to be worthy of preservation. Sites and structures on the NRHP in the planning region include Travelers' Rest, Fort Fizzle, and the Lolo Trail. (See Map 3-1 located in the Maps section.)

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 U.S. Highway 93 is not the actual Lewis and Clark campsite. Archeological investigations are being conducted on 80 acres west of Highway 93 along Lolo Creek to verify the campsite location.

In 2001 the Montana Department of Fish, Wildlife, and Parks (FW&P) purchased a portion of Travelers' Rest for the creation of a state park. A variety of community, government, and historic groups are pursuing other measures for preservation of the Travelers' Rest site. Due to increased interest in the site with the Lewis and Clark Bicentennial, economic development planning is also underway. (See also Chapters 5D Economy, 5F Parks, and 6A Community of Lolo Character.)

Fort Fizzle

A roadside monument along U.S. Highway 12 administered by the USFS Lolo National Forest allows travelers to read about the history of Fort Fizzle. Fort Fizzle is listed on the National Register of Historic Places.

3. Historic Buildings and Structures

A historic building is one that displays architectural characteristics that reflect the history of the time it was built, is associated with significant people or events in the past, or may provide important historical information. A historic building may be listed on the National Register of Historic Places (NRHP). For instance, Mud Creek Ranger Station cabins, now serving as warming huts at Lolo Pass, were built in 1922 as forest service facilities and are eligible for listing.

The register listing provides recognition to the property and can reward landowners for their preservation efforts through access to grants and tax credits. Listing in the register does not interfere with a landowner's right to paint, remodel, sell, or even demolish the building. Nor does listing require that a building be open to the public. (For more information, see List of Additional Resources in Appendix 1A.)

The community may identify structures of significant historical value to the community, regardless of whether they are formally listed. For instance, at a community workshop in Lolo, residents recognized the apple barns east of Highway 93 and the Larson's homestead as having historical significance. The following structures, as well as other homesteads in the planning region, may also be considered by the community to have historic significance:

- Brick house on U.S. Highway 93
- Lolo School-1909 structure
- Farmhouse on Lewis and Clark Drive
- Bitterroot Stage Station
- Van Ostrand dairy barn on Mormon Creek Road
- Hughes barns, south of Lolo
- USFS work station/former ranger station on Lolo Creek
- Woodman schoolhouse up Lolo Creek
- Carlton Church

Recognition that structures are historic does not necessarily mean that historic designation is being pursued. Preservation of historic buildings is encouraged. Retaining unique architectural features and supporting compatible uses for historic property that require minimal alteration of structure, site, and environment are ways to accomplish preservation.

Incentives for historic preservation are being explored. For example, the *County Subdivision* and *Zoning Regulations* state that within the County Urban Growth Area, an applicant may receive a 20% density bonus (if other criteria are met) for adaptive reuse of historical buildings and structures approved by the Missoula County Historic Preservation Officer (HPO). Other types of incentives could be considered in the Lolo planning region.

The Bitterroot Railroad may also be considered by residents to have historic value as one of the last surviving branches still operating today. There has been ongoing discussion regarding future uses of the branch which could include passenger service tourist trains and trails.

4. Historic Trails

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 up and over Lolo Pass. The Lolo Trail was a historic Indian trade and hunting route across the Bitterroot Mountains and what is now known as Lolo Pass to the Clearwater River. The Salish traveled west over the trail to collect camas roots and fish on the Clearwater and Salmon Rivers.

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 Nez Perce Tribe traditionally used Lolo Trail (which they called "Khoo-say-na-is-kit") as a route to buffalo hunting grounds and eventually as a trade route. Congress designated the Lolo Trail route as a National Historic Trail in 1978, and it has also been given National Historic Landmark status.

In 1805 the Lewis and Clark Expedition used the route across the Bitterroot Mountains and again in 1806 for their return. The Lewis and Clark route was designated a National Historic Trail in 1978. The National Park Service (NPS) does not own any portion of the trail. Various organizations and individuals are responsible for trail stewardship with oversight provided by the Lewis and Clark National Historic Trail office.

After the Lewis and Clark expedition, other trappers, traders, miners and the military used the route. The route, improved in 1866, facilitated passage from the gold fields in Montana and Idaho.

In 1877 the Nez Perce were ordered to leave their ancestral homelands and move to a reservation east of Lewiston, Idaho. The U.S. Army was called in when hostilities broke out between white settlers and some groups of the Nez Perce. The resisting bands headed east across the Rocky Mountains in an attempt to find refuge in Canada. Led by several commanders, including Chief Joseph, they eluded capture for months, traveling through the newly established Yellowstone National Park and out onto the Great Plains. Just short of reaching the Canadian border in Montana, most of the party was overtaken near the Bearpaw Mountains. The route that the Nez Perce followed from Oregon to Montana, including along Lolo Creek, was designated as the Nez Perce National Historic Trail in 1986. The USFS has primary administrative responsibility for the trail. The Nez Perce Historic Trail Foundation acts as a partner and volunteer group for the forest service.

C. Policies and Implementation Strategies

1. Identify, evaluate, and develop ways to protect historic and cultural sites, structures, and trails in the region.
   a) Support historic and architectural surveys of the planning region, multiple properties studies, and archeological/cultural studies of local historical resources and contexts.
   b) Consider incentives for historic preservation.

2. Encourage the preservation of the Travelers' Rest Lewis and Clark campsite and other cultural sites.

3. Encourage the preservation of historic buildings.
   a) Support compatible uses for historic property that require minimal alteration of structure, site and environment.
   b) Encourage the retention of what is special about a historic building, structure, or site.
   c) En**c**ourage developers to avoid destroying, removing, or altering historic materials or distinctive architectural features.
   d) Encourage repair**,** rather than replacement**,** of deteriorated architectural features whenever feasible by replicating the original design and materials.

4. Protect and preserve archeological resources affected by or adjacent to any project.
   a) If cultural resources are uncovered during any earth moving, contact the Confederated Salish and Kootenai Tribe's Tribal Preservation Office in Pablo and the State Historic Preservation Office (SHPO) in Helena before further disturbance of the site occurs.
   b) Collaborate with Native American tribes on any archaeological investigation and interpretation connected with the Travelers' Rest Project.
   c) Encourage cooperative efforts among FWP, USFS, NPS, Travelers' Rest Chapter of the Lewis and Clark Trail Heritage Foundation, Bitterroot Valley Historical groups, the Tribes, and other interested parties on Travelers' Rest projects.
   d) Encourage SHPO file searches when appropriate during project review.

5. Provide education on area history and environment.
   a) Support informational areas such as interpretive sites, community bulletin boards, or historical signs.
   b) Support cross-cultural work on cultural, historic, and archeological sites in the area.

CHAPTER 4: NATURAL RESOURCES

Goal 4:

Protect natural resources in the planning region including hillsides, agricultural soils, wildlife, wildlife habitat, surface water, ground water, and air.

Introduction

The Lolo region 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. Missoula County intends to both preserve natural resources and allow for growth that does not occur at the expense of public health and natural system functions. This chapter will briefly describe various natural resources that exist in the region as they relate to plan implementation. The following description of resources, with their associated policies and implementation strategies, should be used to design and evaluate projects within the planning region.

Part 4A: Geology

1. Geology

The Bitterroot Mountain Range, which forms the west side of the planning area, is granitic and metamorphic rock that was highly eroded through glaciation.[1] The east side of the Bitterroot Valley is bounded by the Sapphire Mountain Range, which is comprised of precambrian sedimentary rock. The range gets its name from the presence of sapphire gems found on the range's east side on the West Fork of Rock Creek. The Bitterroot Valley has a series of benches, or terraces, above the valley floor that are comprised of tertiary valley fill sediments washed out of the canyons of the Bitterroot Mountains.

The geological composition of the Lolo Creek watershed varies from the valley fill and alluvium associated with the stream corridor and adjacent uplands to deposits of glacial till and drift near Lolo Pass. The lower portions of the watershed are composed of weathered metasedimentary rocks made up of quartzite, argillite and siltites. The mid-watershed's southern slopes are composed of mica schist and micaceous sandstones that are very erosive when slopes steepen. The mid-watershed's northern slopes and stream corridor are composed of terrace alluvium, which has a high water storing capacity. The upper reaches are composed of decomposed granites. These granitic areas and soils are highly erodible and break up into pea sized gravel and sands when under pressure.

Lolo Hot Springs is a unique feature where fractures in the early tertiary Lolo Batholith granite formation collect rain water and underground water at a presumed depth of 5000 feet beneath the earth's surface and heat the "hot spring water" to a temperature of 100 degrees Fahrenheit. Granite boulders remain near the springs, evidence of past erosive forces from ice, water, and wind removing the soil that once surrounded the area. Hot spring areas are very rare in Western Montana. Lolo and Granite Hot Springs (east of Lolo Hot Springs) are the only hot spring areas located in Missoula County. Other unique geologic features include smoky quartz crystals, which can be found in cavities of the Idaho and Lolo Batholith near Lolo Pass. The white cliffs along the Bitterroot River near the Missoula County line provide evidence of the earlier geologic history of the Bitterroot Valley and surficial access to one of the main aquifers in the Bitterroot Valley.

[1] For general information on the geology of the area see "Roadside Geology of Montana." David Alt and Donald W. Hyndman. Montana Press Publishing Co. Missoula, 1977.

There are several fault lines in the planning region, including one in the vicinity of Lolo Creek and the Bitterroot River. The major faults in the planning region do not appear to be seismically active. However, excavating or siting septic systems in fault areas can be problematic due to increased permeability of the fractured fault zone. There are also areas of potential landslide within the planning region, especially in the steeper valleys. Individual parcels of land should be assessed for these hazards prior to development. Other hillside and slope constraints are discussed below.

Soil characteristics throughout the planning area affect the types of land uses that are suitable for a particular location. The U.S. Department of Agriculture Natural Resource 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, development constraints for foundations and road building, and general erosion potential. As noted above, many of the soil types in the planning area are highly erodable. Others may be unsuitable for septic system siting due to percolation rates or other constraints. Agricultural soils are further discussed below. Individual parcels of land should be assessed for soil constraints prior to development.

2. Hillsides

Much of the land above the valley floor 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.

Slopes greater than 25% (twenty-fiver percent) are generally considered too steep for building purposes. Special requirements apply for the siting of septic systems on slopes greater than 15% (fifteen percent). *Missoula County Subdivision Regulations* require that roads and driveways be constructed at an 8% (eight percent) grade or less.

Missoula County Subdivision Regulations include Hillside Design Standards that apply to new subdivisions on land greater than 10% slope. *Missoula County Zoning Regulations* addressing hillside development and grading, drainage, and erosion control apply to all County zoned land in the planning region. Landowners are also encouraged to follow these guidelines throughout the planning region on unzoned hillside land and in areas with citizen initiated zoning districts (ZD #31, 33, 40, 41A, and 41B). (See guidelines in Appendix 4A.)

Map 4A-1 (located in the Maps section) shows lands in the planning region on slopes greater than 25% (twenty-five percent), 15-25% (fifteen to twenty-five percent), and less than 15% (fifteen). The approximate percentages of lands within the planning region by slope category are:

Greater than 25%:	23%
15%-25%:	40%
Less than 15%:	37%

Due to the scale of the mapping techniques used, the slope of individual parcels may be more or less than that indicated on the map. Generally, land with slopes greater than 25% (twenty-five percent) is recommended for Open and Resource use.

3. 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 (if irrigated), and Farmland of Local Importance (if irrigated). 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.

The Lolo planning region contains approximately 10,450 acres of land with important agricultural soils. These lands are generally located on the Bitterroot Valley floor and along Lolo Creek (see Map 4A-2 in the Map section). Land with important agricultural soils comprises 4% of the total planning area. However, it makes up 13% to 22% of the land in the Development Areas as shown below:

Distribution of Important Agricultural Soils in the Lolo Planning Region

	Prime (acres)	Statewide Importance (acres)	Locally Important (acres)	Total Farmland Soils (acres)
Community of Lolo	1734	608	283	**2,625** (21% of Dev. Area)
Lolo Creek Valley	1706	468	0	**2,174** (13% of Dev. Area)
North Bitterroot Valley	733	0	2799	**3,532** (22% of Dev. Area)
Outside Development Areas	117	0	1002	**2,119** (1% of Area Not in Dev. Area)
Total Planning Region	**5,290**	**1,076**	**3,523**	**10,450** (4% of Plan Region)

Within the Lolo region, cropland has been irrigated primarily to produce hay and alfalfa with the remaining agricultural lands used for grazing livestock. In addition to providing a means to earn a living, agricultural lands shape the character of the region and provide open spaces and buffers from residential uses and wildlife habitats.

Approximately 54% (5,699 acres) of land with important agricultural soils in the Lolo planning region remains in parcels of 40 acres or greater. Approximately 84% (8,734 acres) of the land with important agricultural soils in the Lolo planning region remains in parcels of ten acres or greater. However, pressures from residential growth and other non-agricultural uses combined with reduced agricultural revenues are making large scale agricultural operations less feasible in the region. Land is being removed from conventional agricultural operation as land use changes.

Agriculturally productive soils are slowly being lost to continued residential development. Smaller parcels, when removed from large-scale production, are less economical to harvest with conventional methods. Existing operations can become more isolated, fragmented, and difficult to operate. Conversion of agricultural land to small residential lots may affect the remaining agricultural users. Domestic pets can harass livestock or wildlife, and noxious weeds may spread through increased activity in rural areas and lack of weed management on small parcels. New residential owners may have different goals for land use, may become disturbed by noise or odor from pre-existing agricultural operations, or may be critical of management strategies, creating conflict between old and new rural uses. New residents should recognize the agricultural nature of an area and expect to live with those uses.

This Plan recommends continued agricultural uses in areas not designated for urban levels of development and encourages development design that allows continued agricultural use. There are a number of measures that can be used to support continued agricultural land use. Agricultural conservation easements, conservation easements with reserved homesites, and deed restrictions/covenants can define the types and locations of uses allowed on properties. Development density can be transferred from valuable agricultural or resource land to land more suitable for development. Projects can be designed to cluster residential uses and maximize open space agricultural land through overlay district and performance zoning, conservation design, or Planned Unit Developments (PUDs). Some of these measures, such as agricultural conservation easements, could be carried out by individual landowners working with supporting organizations. Other measures, such as PUDs, would be reviewed by the governing body during subdivision review.

4. Policies and Implementation Strategies

1. Protect significant geologic features.
   a) Identify the location of significant geologic features, such as the white cliffs along the Bitterroot River or Lolo Hot Springs, prior to development.
   b) Locate new development to minimize impacts to the key aspects of significant geologic features.

2. Place new development on stable underlying geologic areas.
   a) Map unstable geologic areas in areas of new development.
   b) Locate new development on geologically stable areas.

3. Protect hillsides and other areas from erosion.
   a) Map steep slopes and erosive soils prior to development.
   b) Address soil type and slope as related to the type of development planned.
   c) Minimize and mitigate erosion from construction and other land uses that may affect the landscape and surrounding resources.
   d) Follow hillside development guidelines (Appendix 4A) for new construction.
   e) Follow grading and drainage guidelines (Appendix 4A) during construction.
   f) Avoid new road construction in steep hillside areas by using existing roads when possible.
   g) Use waterbars, drainage ways, and other means to control erosion and run-off of storm water on roads.

4. Preserve important agricultural soils for agricultural use.
   a) Map soils identified by NRCS as prime, state, or of local agricultural importance prior to development.
   b) Identify existing or potential agricultural uses on lands with important agricultural soils and monitor changes in use.
   c) Direct development away from areas with important agricultural soils that are suitable for agricultural use. Design development that protects agricultural soils and allows agricultural use.
   d) Encourage and support measures that promote continued agricultural land uses.

Part 4B: Water

Introduction

The Bitterroot River and its tributaries are the lifeblood of the Lolo region. 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 of the area.

The entire planning region is within the Bitterroot River watershed. Lolo Creek is the primary tributary in the planning region, but other smaller watersheds are equally important. The surface water and groundwater components of the watersheds will be described in this section as they relate to natural stream function, flood hazard, high groundwater, and water quality, as well as associated land use recommendations.

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 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.

Components of natural stream stability

For a stream to be naturally stable, it must have a stable width, depth, slope, and meander pattern so that over time, channel features are maintained and the stream efficiently transports its sediment load and neither aggrades (stream channel elevation rises through sediment deposition) nor degrades (stream channel elevation decreases through erosion).[1] The stream must constantly keep in balance its sediment load, sediment size, channel slope, and the volume of discharge. A change in one of these factors will either cause a change in at least one other factor or cause the stream to aggrade or degrade.

Common impacts to natural stream stability

Natural stream stability can be impacted by the following:

- Stream Bank Armoring. When a stream erodes a bank it is trying to achieve stability. It can become stable by either slowing itself down by gaining more channel length and flattening its slope, or by increasing its sediment load. A common response of landowners to bank erosion is to rip rap or otherwise armor the bank. Standard bank armoring, however, neither slows the stream nor increases sediment supply. Thus, the stream will still try to reach a balance by either eroding some other bank or by degrading its bed.
- Channel Straightening. Many streams have been straightened, often for the convenience of highway construction. Straightening a channel decreases its length, increases its slope, and increases the velocity of the water. This leads to either channel degradation or bank erosion.

[1] Rosgen, Dave. *Applied River Morphology,* 1996 Wildland Hydrology. Pagosa Springs, Colorado.

- Channel Constrictions. Constrictions, such as bridges or fill for building purposes, causes water to backup upstream raising flood heights and causing sediment deposition. Mid-stream islands are often seen just upstream from bridges that are too short. This sediment deposition often causes changes in the stream course and bank erosion.
- Loss of Flood Storage. When floodplains are filled for building or for other purposes, the stream loses its ability to discharge large volumes of water. Floodplains not only store floodwater on the surface, but also absorb floodwaters into their soils for slower release. Floodplain vegetation slows stream velocities. When floodplains are filled in one area, the floods in other areas are always greater and flow with greater velocities.
- Loss of Riparian Vegetation. Riparian vegetation is often destroyed by improper grazing practices or the desire of homeowners to have a lawn bordering the stream. Riparian vegetation slows stream velocities, slows bank erosion, provides cover for wildlife and fish, filters nutrients, and keeps water temperatures cool for trout habitat. Loss of riparian vegetation is almost immediately followed by bank erosion.
- Increased Sediment. Timber harvest, road construction, and other disturbances to soil in the watershed can cause increased sediment to enter streams. In addition to impairing the fish habitat, this can cause stream aggradation that results in channel changes and increased flooding.
- Changes in Vegetation Type. Large scale changes in vegetation type and coverage can have great effects on the volume of water in streams. Loss of shading caused by timber harvest or forest fires results in earlier snowmelt and higher spring runoffs. Similarly, loss of vegetation due to pavement or conversion of floodplain forests to grazing lands causes less water to be stored in the soil for slow release and more water to enter the stream in "flashy" runoffs. This can increase the magnitude of spring flooding and summer droughts.

Flood Hazards

Hazards from flooding occur in many forms. The most commonly recognized type is when streams spill their banks onto their floodplain during high spring runoff. However, flood hazards also exist from excessive ground water filling an aquifer and then surfacing, or from stream channels eroding their banks and threatening development that is otherwise well above the height of overbank flooding.

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*, adopted in 1975, are meant to achieve these goals but have a limited jurisdictional area. (See *Missoula County Floodplain Regulations*.)

Flood hazard mapping and its limitations

Although all streams and rivers have a functional floodplain, floodplain is delineated by the Federal Emergency Management Agency (FEMA). FEMA has developed and published maps that depict the 100-year and 500-year floodplain boundaries. The 100-year floodplain is the area of land that would be inundated by a water discharge having a one percent chance of occurring in any given year. The magnitude of these floods and the amount of land that they would inundate are based on hydrologic and hydraulic models. The calculated flood elevations derived from these models are not precise due to the age of the data that was used, natural changes to the river and man-made changes to the floodplain, the approximate methods used to estimate land elevations, and the inherent complexities of trying to reduce a complex stream system to a statistical calculation.

Floodways are areas of the 100-year floodplain with deepest flood depths, highest velocities, and extreme hazards to any construction. Any placement of fill in the floodway can have impacts to adjacent properties. The floodway fringe is the area outside the floodway but within the 100-year floodplain.

Lolo Creek and the Bitterroot River are the only watercourses in the planning area that have had floodplains delineated by FEMA. The flood hazards of other streams in the area are largely unknown. Given the great topographic relief of the planning area, it is often relatively easy to identify high terraces that are free from surface flooding. However, even the delineated floodplains do not consider flooding caused by ice jams, stream bank erosion, or surfacing groundwater.

Ice jam floods. Ice jam floods can occur either when 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. The U.S. Army Corps of Engineers estimates that ice jams are much more likely to occur than the 100-year discharge flood and typically flood an area larger than would be inundated during the 100-year discharge flood. Ice jam floods are almost impossible to predict, and mapping their flood boundaries is very difficult to do with any certainty.

Stream bank erosion. Stream bank erosion is also very difficult to predict. Past erosional rates are not an indication of future erosional rates due to changing conditions. Streams naturally move across their floodplains over time, but erosion can be greatly exacerbated by human-caused disturbances. Trying to stop erosion by stream armoring often causes erosion in a different place. While erosion obviously threatens structures built too close to a stream, there are also indirect threats. For example, a home or other structure swept into a stream can lodge against and destroy a downstream bridge.

Surfacing groundwater. Surfacing groundwater can cause damage to structures and can occur even in areas not in close proximity to streams. Current methods of determining high ground water hazards are imprecise, although careful examination of topography, soil type, vegetation type, local hydrology, and historical records can provide clues. Groundwater monitoring conducted as part of septic system approval may determine peak seasonal groundwater elevation in the year the test is conducted; however, it is not intended to detect all hazards that can occur during high groundwater years, such as those associated with high precipitation and snow melt. Alterations to natural features, such as construction of roads, railroad berms or irrigation ditches can contribute to groundwater hazards.

Water Quality

Surface water and groundwater provide drinking water, support habitat, and provide resources for fisheries. 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. Water quality in relation to land use is discussed below.

1. Surface Water

Bitterroot River

Bitterroot River Watershed

Characterized by a wide valley and a meandering river channel with riparian forest and floodplain, the Bitterroot Valley watershed to the northern limits of the planning area is 1,750,000 acres in size. The valley is bounded by the Bitterroot Mountain Range to the west and the Sapphire Mountain Range to the east. Elevations range from 10,131 feet atop Trapper Peak in the Bitterroot Mountain Range (within Ravalli County) to 3,120 feet where the Bitterroot River leaves the planning area. The watershed is characterized by abruptly rising mountains to the west and more gentle foothills to the east.

Agricultural uses have diverted many of the tributary streams feeding the Bitterroot River for irrigation and stock watering. Historical records show at least 13 ditches of Bitterroot River tributaries that have been diverted for agricultural uses in the Lolo region. Operating ditches have decreased in numbers due to costs of maintaining ditches and the conversion of these rights to ground water sources from wells.

Bitterroot River Floodplain

The Bitterroot River flows through a wide valley with a gentle slope, dropping an average of 4.5 feet per mile. The river has a relatively wide meandering pattern and is somewhat braided in nature. Changes in course, creation of new channels, and abandonment of old channels are quite common. These changes are influenced by the non-cohesive nature of the river bank soils and historic impacts which include increased sediment load from the upper watershed, constrictions on the floodplain such as levees, bridges and rip rap, and loss of riparian vegetation from agriculture and homesite development.

The river volume typically ranges from 600 cubic feet per second (cfs) to 1200 cfs from August through April. Snow melt and spring rains typically increase this volume to between 8,000 cfs and 15,000 cfs. The 50-year flood (having a two percent chance of occurring in a given year) carries about 27,000 cfs, and the 100-year flood (having one percent chance of occurring in a given year) carries about 29,100 cfs. High water in the spring of 1997 was considered to have been approximately a 25-year flood.

Due to the high volume of the river and the flat gradient of the valley, the Bitterroot River covers a wide floodplain. The 1988 Flood Insurance Study for Missoula County, conducted by the Federal Emergency Management Agency, shows that the river's 100-year floodplain varies in width from one to two miles over most of its length in the County. South of Lolo Creek, nearly the entire valley floor east of the railroad tracks is within either the 100-year or 500-year floodplain. (See Map 4B-1 in the Map section.)

Upstream of U.S. Highway 12. South of Highway 12, approximately 6200 acres lie within the 100-year floodplain of the Bitterroot River; approximately 1,075 of these acres are publicly owned. This floodplain is divided into 302 separate properties with 166 different ownerships. One hundred and nine (109) properties are completely within the floodplain, and 19 of these are entirely within the floodway portion of the floodplain. Approximately 80 residences are in the 100-year floodplain most of which have not been elevated above the 100-year flood height. Approximately 14 of these are within the floodway and cannot be reconstructed or substantially improved in their current locations by state and federal law. Another 690 acres lie within the FEMA designated 500-year floodplain. Aerial photos from May 1997 show that the 25-year flood inundated many acres outside the mapped 100-year floodplain.

Approximately 1,142 acres east of the railroad tracks and south of Lolo Creek that are located within the FEMA mapped 100-year and 500-year floodplains are also zoned to allow one residence for each 4.5 to 5 acres. This zoning could allow 83 existing properties to be split into a total of 335 properties. More residential development in this area will increase the flood damage potential, impact natural resources, and impact ground water quality.

A 1999 inventory of bank stabilization projects on the Bitterroot River upstream of Lolo to the Ravalli County line showed that of the nine miles of the current main channel; approximately 3000 feet have been armored with rip rap and levees. Alterations to the numerous side channels and backwater sloughs were not inventoried. The relatively small amount of armoring constructed is likely due in part to the lack of residential development near the river.

Downstream from U.S. Highway 12. From Highway 12 downstream to the northern boundary of the planning area, approximately 1,065 acres are within the 100-year floodplain; 150 of these are publicly owned. Two hundred and five (205) properties in 175 different ownerships are within the 100-year floodplain.

One hundred forty-three (143) of these properties are within the "Lakes Neighborhood," a series of subdivisions constructed during the 1970s. This neighborhood sits atop a myriad of backwater sloughs and old overflow river channels. The "lakes" are sloughs that have been shaped and deepened by excavation. Check dams at the outlets maintain water levels.

The first of these subdivisions, located at the north end of Lakeside Drive, was constructed before the adoption of County floodplain regulations**,** and homes were not elevated above flood heights. In 1974, a 50-year flood on the Bitterroot River caused damage to most of these homes and inundated the Lolo sewage treatment plant causing the discharge of raw sewage into the river. After this flood, Missoula County attempted to prevent further development in the area, but court orders allowed the continued construction of homes as long as they were elevated above flood heights. The vast majority of current neighborhood residents chose to purchase their homes long after the flood risks of the area had been identified.

A number of mobile homes on Lakeside Drive have been replaced and elevated above flood height. An estimated 16 homes in the entire Lakes Neighborhood are still below the FEMA estimated 100-year flood elevation.

A non-engineered and poorly built levee was constructed on the riverbank about 30 years ago. The river routinely breeches this levee and ground water regularly surfaces behind it. When water gets behind the levee, it is constrained from getting back into the river at the downstream end, consequently causing higher flood elevations around the residences than if the levee were not there. While this levee is not lowering flood elevations around the homes, the upper part may be helping to prevent channelization of the river into the lakes. If the river channel were to "capture" the lakes, homes would be threatened by bank erosion. Finally, this levee raises flood heights and increases bank erosion potential on the other side of the river, which could threaten a number of homes in the Rodeo Ranchettes neighborhood.

The levees around the sewage treatment plant and the approach road also constrict the floodplain and cause increased flood elevations upstream. The 1988 FEMA flood study did not take this constriction into account. Consequently, the 100-year flood elevation in the Lakes Neighborhood could be as much as one foot higher than estimated by FEMA. However, floodplain regulations require that the lowest floor of residences be two feet above the 100-year flood elevation. Thus, the elevated homes should still be protected from damage during a 100-year flood.

Residents of the Lakes Neighborhood are working with the Natural Resource and Conservation Service (NRCS) and Missoula County to develop a floodplain management plan for the area. The goals are to provide flood damage protection to homes in this neighborhood and in the Rodeo Ranchettes neighborhood, protect the Lolo sewage treatment plant, restore normal floodplain functioning, improve fisheries, restore riparian and wildlife habitat in the floodplain, protect and enhance recreational values and maintain the aesthetic characteristics of the lakes.

These goals could be met by implementing some or all of the following measures:

- Remove enough of the existing levee to allow free flow of water between the river and its floodplain.
- Construct grade control structures to prevent "capture" of the lakes by the river.
- Reinforce the upstream end of the levee to prevent "capture" of the lakes by the river.
- Construct a setback levee along the eastern edge of Lake Lolo.
- Raise and reinforce the levees around the sewage treatment lagoons.
- Lower Lakeside Drive along Riverside Park to prevent a damming effect and to allow the free passage of floodwaters.

- Elevate the approximately 16 homes that are below the 100-year flood elevation.
- Stabilize the riverbank with revegetation and other bio-engineering techniques.
- Restore overflow channels to improve fish habitat.

The 1999 inventory of bank stabilization projects on the Bitterroot River showed that, on the 11.5 mile reach from Lolo to the confluence with the Clark Fork River, over four miles of bank have been armored with rip rap and levees. These alterations have caused considerable impacts to downstream property owners, riparian vegetation, and fisheries. Most of this armoring has coincided with residential and commercial development near the river or in the floodplain.

Lolo Creek

Lolo Creek Watershed

Elevations within this watershed range from 9,075 feet at Lolo Peak to 3,150 feet above sea level at the confluence with the Bitterroot River. The watershed is 172,800 acres in size. Historically, over 30 ditches have been constructed on the tributaries and main channel of Lolo Creek, diverting water for agricultural uses.

Land uses in the watershed have had a considerable effect on the creek. Timber harvesting and road construction has increased erosion of upland slopes and subsequently added sediment loads to Lolo Creek, impairing the fishery habitat as well as changing the dynamics of the stream.

Agricultural uses, primarily livestock grazing and irrigation diversions to supply upland irrigation for hay and alfalfa crops, have resulted in bank erosion, riparian vegetation disturbance and significant dewatering. Livestock have destabilized creek banks by trampling and destroying riparian vegetation.

Lolo Creek Floodplain

Lolo Creek flows through a relatively narrow stream corridor with valley floor widths varying from approximately 400 feet in the upper reaches to several thousand feet in the middle and lower reaches. Its delta at the confluence of the Bitterroot River is well over a mile wide. In the upper and middle reaches, the stream drops approximately 32 feet per mile. It is subject to channel changes that are influenced by naturally occurring log jams and ice jams. Near its mouth, the volume of Lolo Creek typically ranges from 100 cfs to 250 cfs from August through April. Snow melt and spring rains typically increase this volume to between 1200 cfs and 1800 cfs. The 50-year flood carries about 2900 cfs, and the 100-year flood carries about 3300 cfs.

Lolo Creek used to meander across most of its valley floor. When Highway 12 was rebuilt in the 1950s, the Montana Highway Department straightened miles of the creek to accommodate construction. Eliminating so many meanders steepened the grade, increased stream velocities, destroyed riparian vegetation, and cut off the stream's access to its floodplain. Consequently, bank erosion has increased, downstream flooding of homes has increased, and continual maintenance is needed to protect the highway from erosion.

The 1999 inventory of bank stabilization projects on the lower ten miles of Lolo Creek showed that 2.4 miles of bank have been armored with riprap and levees. Most of this armoring has coincided with highway construction and residential development near the creek. Impacts to downstream property owners are similar to that on the Bitterroot River.

Upstream of U.S. Highway 93. FEMA has studied only the floodplain upstream to the Mill Creek Road bridge. This 100-year floodplain encompasses approximately 350 acres. They are divided into 78 separate properties with 60 different ownerships. Twenty (20) of these properties have structures in the floodplain; approximately ten homes are in the floodplain. All of these properties also have land outside the floodplain.

Several miles above Highway 93, old creek channels were closed off during highway construction. Below this area, these channels used to spread across the entire valley floor, including the area currently occupied by the Lolo Community Center and the nearby mobile home parks. While this area is not within the FEMA designated 100-year floodplain, it is subject to significant flood risks. During 1996, ice jams caused flooding throughout much of this area.

Although the creek runs on the south side of the highway, further up the valley old stream meanders remain on the north side of the highway. While not designated as being in the 100-year floodplain, they**,** and the areas around them**,** are in significant danger of flooding. Groundwater surfaces in these areas and the old channels are subject to being reclaimed during a large flood.

Downstream of U.S. Highway 93. The 100-year floodplain of Lolo Creek downstream of Highway 93 encompasses approximately 325 acres. It is divided into 91 separate properties with 49 different ownerships. Sixty-nine (69) properties are entirely within the floodplain. Approximately 32 residences are located in the 100-year floodplain.

This reach of Lolo Creek is on an alluvial fan. This fan has been formed over thousands of years where Lolo Creek slows and drops its sediment loads as it meets the Bitterroot River. Historically, the creek meandered all across this alluvial fan. Within the past century, the creek has been constrained from moving laterally by development, road construction, and bank armoring. This has caused the creek bed to aggrade and decrease the capacity of the channel, consequently increasing the heights of floods in the area.

Missoula County, in conjunction with the Montana Disaster and Emergency Services Offices, produced a workbook outlining Flood Event Management Planning for the Lolo Creek Corridor. Recommendations in that workbook are designed to prepare landowners in the event of an emergency. The workbook is available at the Missoula County Office of Emergency Management.

Floodplain Recommendations

The implementation strategies at the end of this section include measures to address natural stream functioning and floodplain hazards through setbacks, land use designations, limits on development, transfer of density, design requirements, and stream restoration.

Setbacks

Buffers and setbacks from major watercourses are a means of preventing structure and other property losses by allowing for natural stream channel movement and recharge in times of seasonal high water. In addition to adding security to structures, stream and riverside buffers create wildlife movement corridors and habitat areas in the corresponding riparian zone.

Missoula County Subdivision Regulations require that riparian areas be protected during development and that mitigation measures be implemented for impacts that do occur. Regardless of development impacts, landowners are encouraged to maintain and revegetate riparian areas and floodplains to hold soil in place, prevent erosion, and provide for flood and storm water storage.

Development Limitations in Flood Hazard Areas

New development within flood hazard areas presents a substantial hazard to owners and residents of those structures, increases flood hazards for nearby properties and public infrastructure, and creates an unreasonable burden on the general public which must engage in relief efforts before, during, and after floods.

Flood Hazard Areas. Flood hazard areas are those that may be inundated by floodwaters, surfacing groundwater, or places where alteration of the land could increase flooding danger for other properties. A flood hazard area includes land that meets any of the following criteria:

1. Land in the 100-year floodplain as designated by FEMA or shown to be such by some other reliable information.
2. Land above the 100-year flood elevation that meets one or more of the following criteria:
   a. Completely surrounded by land in the 100-year floodplain;
   b. Not accessible by road during a 100-year flood; or,
   c. Subject to erosion by changes in a watercourse channel.
3. Land in the 500-year floodplain as designated by FEMA or shown to be such by some other reliable information.
4. Land that would be inundated by surfacing groundwater either during a 100-year flood, 500-year flood, or high groundwater event.
5. Land that would likely be inundated by surface water or surfacing groundwater during an ice-jam flood or sheet flooding during spring thaw.
6. Land that is separated from a flood only by an elevated road, railroad berm, irrigation ditch, levee or other man-made structure.
7. Land that is less than two feet above the elevation of the 100-year flood.

Some known flood hazard areas are shown as Areas of Significant Flood Risk on the land use map based on currently available information; however, additional risk areas are sure to be discovered during more detailed analysis of parcels proposed for development. Areas of Significant Flood Risk are further described on page 7A-5.

In the North Bitterroot Valley Development Area, the Area of Significant Flood Risk shown on the map includes most of the land east of Highway 93 to the hillsides east of the Bitterroot River. This area includes the FEMA mapped 100-year floodway, 100-year floodway fringe, 500-year floodplain adjacent to the 100-year floodplain, islands of 500-year floodplain within 100-year floodplain, and some areas near the County line that are located between mapped 100-year floodplain areas. The FEMA flood profiles show that the 500-year flood is only one half to one foot higher than the 100- year floodplain along the Bitterroot River. Aerial photos from the May 1997, 25-year flood show water surfacing in parts of the 500-year floodplain.

The islands of land that are above flood elevation still have risks associated with their development. Even though the houses built on those “islands” may not get wet during a flood, ordinary and emergency services may not be available during a flood since access roads will be under water. This includes the areas near the County line located between 100-year flood areas, which may also prove to be in the 100-year floodplain based on preliminary information from the 1996 Ravalli County flood study.

There are also several areas west of Highway 93 shown as Areas of Significant Flood Risk, based on evidence of flooding, wetlands, or surfacing groundwater. Some steps have been taken to address the problem. As projects are proposed in this area, engineering documents should be submitted to show the improvements and address the concerns over flooding. (See "Development Policies" below.)

In the Community of Lolo Development Area, the mapped Area of Significant Flood Risk along the Bitterroot River includes the FEMA mapped 100-year floodway, 100-year floodway fringe, the Lakes Neighborhood, and an area west of Highway 93 separated from a flood by an elevated road and railroad berm. A revised flood study is being completed that will help clarify what portions of the Lakes Neighborhood are located within 100-year or 500-year floodplains.

In the Community of Lolo Development Area, the mapped Area of Significant Flood Risk along Lolo Creek includes land north of the creek and south of Highway 12 at the former confluence of the creek and the Bitterroot River. This area could be inundated by surfacing groundwater during a flood or high groundwater event, could be inundated during an ice-jam flood, and is separated from a FEMA designated floodplain by a man-made structure. The mapped Area of Significant Flood Risk also includes land south of Lolo Creek and west of Highway 93 that could be subject to flooding.

In the Lolo Creek Valley Development Area, the mapped Area of Significant Flood Risk along Lolo Creek includes FEMA designated floodplain, the creek channel west of the FEMA mapping, areas along the creek subject to flooding, and areas north of Highway 12 in the former creek channel.

Development Policies in Flood Hazard Areas. Before development in a flood hazard area, a property owner is responsible for demonstrating that the land is either free from flood hazards or that those hazards can be adequately mitigated. This analysis of flood hazards may involve providing detailed topographic, hydrologic, hydraulic, and groundwater information. Development on land that meets one or more of criteria #1 through #7 (under Flood Hazard Areas) is severely constrained. Agricultural structures or other uses not subject to flood damage or not likely to cause impacts to other properties may be allowed depending on site specific evaluations of hazards and issuance of proper permits. Improvements to or replacement of existing homes in flood hazard areas is allowed outside of floodways, if a floodplain permit is issued. If a property owner demonstrates that their land is not located within a flood hazard area, then development may be appropriate.

Along the Bitterroot River and in the Lolo Creek Watershed, no new development, except for agricultural structures, should be allowed if the land meets criteria #1, #2a, #2b, or #2c (under Flood Hazard Areas). Development in areas meeting other criteria (#3 through #7) would be evaluated on a case by case basis, based on ability to mitigate; impacts to other properties or structures, impacts to natural stream function, and impacts to public health and safety. Flood hazards need to be comprehensively addressed. Mitigation could include adequately floodproofing structures and infrastructure and clustering development to the greatest extent feasible. Typical floodproofing involves filling the land and/or elevating homes and roadways to an adequate height.

For development to occur in identified flood hazard areas outside of the FEMA mapped 100-year floodplain north of lower Lolo Creek, flood hazards need to be comprehensively addressed, including drainage impacts to adjacent land.

Land Use Designation in Floodplain. The land use map designates land near the Bitterroot River in the FEMA mapped 100-year floodway as Floodway and land in the 100-year floodway fringe and 500-year floodplain as Open and Resource.

Some land in the North Bitterroot Valley in the 500-year floodplain is designated Open and Resource. If a landowner can demonstrate that the land is not within a flood hazard area, then it can be considered for development.

FEMA mapping along Lolo Creek only extends to the Mill Creek area. The land use map designates land along Lolo Creek in the FEMA mapped 100-year floodplain and in the creek channel as Floodway. South of Highway 12, land along the creek in the flood hazard area is designated as Open and Resource.

Zoned Land in Floodplain. Exceptions to the Floodway and the Open and Resource designation in the floodplain are located on some land that is already zoned. The land use designation on some land that is zoned and in the floodplain reflects the existing zoning. However, a goal of this Plan is that no new development occurs in flood hazard areas. The intent of the designation is to allow transfer of density to areas more suitable for development.

Transfer of Density

Transfer of density from land within flood hazard areas to areas more appropriate for development is encouraged. Transfer of density can occur on land within the same ownership or between different land ownerships. (See Chapter 7A, Open and Resource Lands.)

Irrigation Ditches

Several irrigation ditches in the planning region convey water from the Bitterroot River, Lolo Creek, and their tributaries. These ditches can also support riparian vegetation. The Carlton Irrigation Company operates and maintains ditches from Carlton Creek, Carlton Creek Lakes, and their tributaries. Numerous other ditches are privately operated.

State law requires that subdividers provide easements for use and maintenance of irrigation facilities that convey water through a subdivision to other land. Landowners are not allowed to obstruct access to the ditch with fences, trees, or by any means or equipment necessary for upkeep and maintenance of the ditch. 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.

A subdivision cannot impede the flow of irrigation ditch water. A ditch company has the right to access the ditch for upkeep and maintenance. Landowners along the ditch may not use the irrigation ditch water unless they have an established water right. Water rights are administered by the Montana Department of Natural Resources.

2. Groundwater

Much of the valley bottom land in the planning area lies within the Bitterroot River and Lolo Creek floodplains and is subject to high groundwater, especially during spring runoff. Additional areas, which were once part of the floodplain and are now protected from river flooding by 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. For the purpose of granting septic permits, the Missoula City-County Health Department requires that an applicant demonstrate that groundwater is more than six feet below ground surface. There are also areas that present a percolation hazard for septic systems due to low soil permeability or infiltration rates.

3. Water Quality

Threats to Water Quality

Threats to water quality in the Lolo area include residential and commercial septic systems and the potential for an accidental release from either a hazardous materials transportation accident, fixed facility storing 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.

Recent analyses completed by the Missoula City-County Health Department and the University of Montana show a direct correlation between ground water flow and surface water. Contaminants in wastewater, including nitrogen, can be carried with the ground water flow until it emerges as surface water. Septic systems in the areas surrounding Lolo discharge nitrogen to ground water that eventually recharges the Bitterroot River somewhere between Lolo and Missoula. This nitrogen becomes part of the total load of nitrogen in the Bitterroot River.

Existing Water Quality

The Missoula Water Quality District was formed by joint resolution of the Board of County Commissioners and City Council in 1993. In 1994 the City Council also adopted, with the Commissioners' concurrence, the Missoula Valley Water Quality Ordinance (Ch. 13.26 *Municipal Code*) administered by the Water Quality District. This district includes the area surrounding the community of Lolo (see Map 4B-2 in the Maps section).

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-N 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. The area around Mormon Creek Road has the highest density of existing septic systems and has a recognized nutrient load to groundwater.

The Missoula Water Quality District maintains two monitoring wells located in Lolo. One is on Michael Lane north of Lolo Creek and west of the Bitterroot River. The other well is on Glacier Drive west of the railroad tracks. Water quality at both locations is generally good, as reported by Missoula County Water Quality District staff, although both have nitrate-N levels elevated above typical background concentrations. Sources of nitrate-N are septic systems, fertilizer and livestock.

Water Quality Protection

Septic Requirements

City-County Health Code Regulations require approximately 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. This ensures adequate space for septic system, wells, and improvements on each one acre lot. It also limits the density of septic systems and the amount of sewage discharged to groundwater.

Lolo Wastewater Treatment Facility Upgrade

Planned upgrades and expansion to the Lolo Wastewater Treatment Facility will provide better treatment of wastewater discharged into the Bitterroot River. The expansion will also provide connection opportunities for existing and future septic systems in the Lolo community. (See "Community Facilities" section.) Development in areas that could later be sewered requires planning that allows for infill and affordable extension of sewer. (See "Community Facilities" and "Development Pattern" sections.)

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 eliminate nuisance algae growth.

The VNRP 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 instream 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. The Bitterroot River is not otherwise addressed specifically by the VNRP, except as a background contributor of nutrients to the Clark Fork River where they intersect. The Lolo Wastewater Treatment Facility is not at this time addressed by the agreement, except as a part of the background contribution of nutrients in the Bitterroot River.

4. Policies and Implementation Strategies

1. Protect surface water resources by maintaining surface water quality, quantity, and instream flows and groundwater quality and quantity.

2. Preserve the floodplain for flood attenuation, aquifer recharge, fish and wildlife habitat, and a buffer for pollutants.
   a) Require that developers conduct detailed analyses to determine actual flood elevations and flood hazards before development occurs in or near the designated 100-year or 500-year floodplain or other flood hazard area.
   b) Require that all lots in new subdivisions have a buildable area and road access that are naturally outside flood hazard areas, unless mitigation is approved as described in the Plan text.

c) Do not allow new development of homes, commercial, or industrial buildings in the 100-year floodplain unless improving or replacing an existing structure. The new development must meet *Missoula County Floodplain Regulations*.
d) Establish a mechanism to allow transfer of development density from flood hazard areas to sites outside flood hazard areas.

3. Promote natural stream function and stability.

a) Encourage stream restoration efforts that promote naturally stable river systems.
b) Maintain and revegetate riparian areas and floodplains where necessary to hold soil in place, prevent erosion, and provide for flood and storm water storage.
c) Use streambank protection measures that do not cause impacts to other property owners or negatively impact fisheries or other wildlife habitat.
d) Minimize non-point source runoff.

4. Protect development and public infrastructure from flood hazards.

a) Require that landowners demonstrate that proposed development will be free from high groundwater hazards.
b) Complete the Lakes Neighborhood Flood Damage Control Plan and implement recommended measures. Incorporate elements of the Flood Damage Control Plan into new development proposals.
c) Require that public infrastructure minimally impacts streams and floodplains.

5. Maintain and improve surface water and groundwater quality.

6. Recommend land use densities to support groundwater protection and reduction of nutrient loading.

a) Identify areas of high groundwater and groundwater contamination concern during project review.
b) Limit residential densities in areas of groundwater concern.

7. Coordinate land use planning with the expansion of the sewer service boundary.

8. Ensure that new development is placed an adequate distance from watercourses to protect the watercourse and its associated natural habitat and to protect development. It is desirable that proposed development be placed at least 300 feet from the Bitterroot River and no closer than 100 feet. Proposed development within 300 feet of the average high water mark of the Bitterroot River should undergo an environmental analysis addressing water quality, riparian habitat, wildlife habitat or corridors, social, cultural, and recreational values. Specifically, factors to be addressed may include:

a) The importance of the wildlife habitat and/or corridors on the property**,** as identified by Montana Fish, Wildlife and Parks.
b) The existence of riparian vegetation on the property.
c) The existence of soil types, slope characteristics, groundwater levels, and other characteristics that would allow for the likely natural reestablishment of riparian vegetation following a change in land use practices.
d) The amount of impervious surfaces proposed in the development.
e) The proposed density of development.
f) The likelihood of degradation of surface or ground water quality from the proposed development.
g) The steepness of the slope to be developed.
h) Social, cultural, and recreational values.
i) The likelihood or river/stream migration toward the proposed development.
j) The likelihood of flooding or surfacing groundwater on the property.
k) Other relevant issues.

Part 4C: Biology

Introduction

The Lolo planning region supports considerable plant and animal resources that shape the region and are of significant value to the community. This section includes general descriptions of vegetation and wildlife habitat that occur in the region, especially as they relate to land use. The descriptions are based on information from general surveys and may not reflect the specific characteristics of an individual property. This section also includes policies and implementation strategies aimed at meeting the goal of resource protection. As with other sections, these must be balanced with other goals and policies on a case by case basis.

1. Vegetation

Approximately 75% of the planning region is forested. Native vegetation in the planning region ranges from riparian black cottonwood trees and shrub communities along Lolo Creek, the Bitterroot River, and their tributaries to upland coniferous forest and grassland areas. Where opportunity for sunlight changes and elevations increase, the forest becomes predominately coniferous composed of douglas fir, ponderosa pine, engleman spruce, lodgepole pine, subalpine fir, grand fir, and larch. Grasses, sedges and shrub communities are also present. Where noxious weeds have not displaced native vegetation, bunch grasses remain with shrub communities comprised of serviceberry, dwarf huckleberry, mountain alder, and mountain maple.

Forested Land

Timber Management

Much of the planning region above the valley floor is forested. Over 80% of the planning region is owned and managed by either Plum Creek (approximately 30%) or the United States Forest Service (USFS) (over 50%) for timber and other uses (see Map 4C-1 in the Map section). These lands are generally shown with a land use designation of Open and Resource.

Wildland Residential Interface Areas

Private land is also located in or near timbered areas. Some rural residents have settled into areas that are prone to periodic wildfires up tributary canyons and within the conifer forest canopy. These areas are known as Wildland Residential Interface (WRI) areas. Public safety officials and land managers have concerns about providing adequate fire and emergency services to WRI areas. In addition, forest fires originating at rural residences can threaten adjacent resource lands**,** as well as other residences.

Development in WRI areas is discouraged. However, if development occurs, the *Missoula County Subdivision Regulations* have standards that include access suitable for emergency equipment and a water source. In addition, landowners should use Class A or B fire-rated roofing materials, clear a defensible space around dwellings, and select landscaping plants that limit or retard fire spread. Vegetation clearing for wildfire prevention should be balanced with protection of significant habitats, such as riparian forests. (See also Chapter 5G, "Community Facilities and Services" and *Fire Protection Guidelines for Wildland Residential Interface Development* referenced in Appendix 1A.)

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). Within the planning region, wetlands and riparian areas are located along the Bitterroot River and its tributaries, including Lolo Creek. Wetlands are also located south of Lolo west of U.S. Highway 93.

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 need to be preserved to maintain overall ecological health.

More specifically, riparian areas are important habitats for migrating and nesting birds, as hiding and feeding areas for big game species, for many smaller mammals, reptiles, and amphibians. An estimated 90% of all bird species utilize riparian areas for some stage in their life cycle (nesting, hunting, migrating, etc.). Riparian areas function as critical wildlife corridors, providing cover and links between other wildlife habitats. Riparian areas also provide bank stability from native woody plant root systems; stream productivity from deciduous leaf fall into the water; overhead cover for fish habitat, and shading to maintain cool water temperatures.

Wetland and Riparian Habitat Protection

Wetland and riparian areas require minimal disturbance for maintenance of important functions. 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.

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. When marshes are converted to ponds, plant and aquatic life diversity is decreased. 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.

Wetland and Riparian Regulation

Stream and wetlands are protected under various state and federal laws. Work within these areas, including road construction, vegetation clearing, dredging, filling, or water diversion may require a permit. There are ongoing efforts to enhance and restore riparian areas along Lolo Creek and the Bitterroot River. 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. (For more information, see *A Landowner's Guide To Montana Wetlands*, referenced in Appendix 1A.)

Any permitted disturbance or destruction of wetland also typically requires mitigation. For instance, the Montana Department of Transportation disturbed a number of wetland areas during its improvements to U.S. Highway 93 South. Wetland banking has been initiated to mitigate for these disturbances. *Missoula County Subdivision Regulations* require that riparian areas be mapped and a management plan be developed for land proposed for subdivision.

Other Special Habitats

Other important habitats and vegetative areas include the Black Cottonwood forests along the Bitterroot River (that are threatened by lack of regeneration), high elevation prairies on Skookum Butte southwest of Lolo Peak, and Mary's Frog Pond botanical area up Lolo Creek. The frog pond has been used by botanists to analyze peat deposits for captured pollen that settled at the bottom of the pond during times of Glacial Lake Missoula thousands of years ago. Except for the Bitterroot River habitats, these other important habitats are under the management of the USDA Lolo National Forest. They are designated Open and Resource on the land use map.

A unique U.S. Forest Service site near the Selway-Bitterroot Wilderness is considered a nationally significant ecological landmark and was established as the Carlton Natural Research Area in 1987. Unusual alpine larch forests grow on the open slopes where hybridization appears to be occurring between alpine and western larch tree species.

Plant Species of Special Concern

No federally listed threatened or endangered plant species are known to occur in the planning area. There are 13 species of special concern with recorded occurrences in the planning region according to the Montana Natural Heritage Program (MNHP). These include species designated by MNHP as species of special concern in Montana or with a special designation by organizations or land management agencies in Montana. (See Appendix 4C.)

Abundant wildflower populations occur on hillsides and other areas in the planning region. While some native wildflowers, such as Bitterroot, are not listed as species of special concern, protection of native plant populations is increasingly needed 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.

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, purple loosestrife, and sulfur cinquefoil. Noxious weeds limit agricultural productivity, alter wildlife habitat, and threaten native grasslands. Ground disturbance from new roads or construction can increase the opportunity for the spread of noxious weeds.

Prevention of weed spread is best accomplished by altering land management practices through educational efforts and implementing weed control measures, including mechanical (mowing/pulling), grazing, biological controls (insect releases, fungal applications) or application of chemical herbicides. When noxious weeds are eradicated from a site, native species, crops, or appropriate landscaping must be planted to prevent their re-introduction.

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. (For more information, contact the County Extension Office listed in Appendix 1A.)

2. Fish and Wildlife

Mammals

Big game species are the best known of the County's mammal populations due to wildlife viewing and hunting opportunities. 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. By protecting their needs many other species are also protected.

The Montana Department of Fish, Wildlife, and Parks (FWP) has provided information about the general location of big game range in the planning region. **(**See Table 4-1 below and Map 4C-2 in the Map section.) Substantial numbers of elk winter on the south-facing grasslands and timberlands above Lolo Creek. White-tailed deer use the riparian corridors and lower elevations along both Lolo Creek and the Bitterroot River. Mule deer populations exist in the higher elevations of both the Lolo Creek and Bitterroot River basins. Both deer and elk use the Baldy Mountain area on the east side of the Bitterroot River and the benches of Davis Creek as important wintering areas. Moose winter range is located in the upper reaches of Lolo Creek. As illustrated by Map 4C-2, much of the planning region serves as winter range for white-tailed deer, mule deer, elk, or moose.

Table 4-1

Distribution of Big Game Range in the Lolo Planning Area (Acres)				
	Mule Deer	**White-Tail Deer**	**Moose**	**Elk**
Community of Lolo Dev. Area	4,179	9,911	0	4,947
N. Bitterroot Valley Dev. Area	5,497	15,962	175	5,995
Lolo Cr. Valley Dev. Area	11,765	11,927	9,526	12,121
Outside Development Areas	18,599	24,270	18,445	51,019
Total	**40,040**	**62,070**	**28,147**	**74,082**

Black bears, pine marten, fisher, flying squirrels, spotted skunk, hoary marmots and mountain lions are other known mammal species in the region. Townsend's big-eared bat and the California myotis (a bat species) live along the banks of the Bitterroot River in caves and old mine shafts.

Development in key wildlife range and corridors is discouraged. While this Plan identifies general range and corridor areas, key ranges and corridors of critical importance can be more specifically identified during project review. Some residential areas include habitat for white-tailed deer, smaller mammals and birds typical of the planning region. Deer may also attract mountain lions. The FWP 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; and leashing pets. Montana law prohibits supplemental feeding of game animals. (See Appendix 4B for more specific recommendations.)

The USFS is working on a wildlife connectivity study of U.S. Highway 93. The study will include habitat data for various species as well as the locations of road kills. This information can then be used to identify suitable locations for wildlife crossings along Highway 93.

Birds

Significant bird populations exist along the riparian corridor and in the many types of upland and coniferous forests of the planning area. Both resident and migratory species use the Lolo Creek and Bitterroot River watersheds. Waterfowl and upland birds use the river and creek corridors as flyways, stopping to feed en route to summer and winter areas.

Bald eagles use the Bitterroot River as an important wintering area, perching in riverside trees, fishing and searching for other food. They also nest along the Bitterroot River; a nest is located one to two miles south of Lolo. The *Montana Bald Eagle Plan* (referenced in Appendix 1A), includes guidelines for human activity in the vicinity of nests and foraging habitat. Osprey, prairie falcon, cooper's hawk, long-eared owls and golden eagles also nest and hunt in the region. Many other raptor species and more common birds can also be seen using the area.

Fish

The Bitterroot River is considered a high use fishery by the FWP. The Bitterroot River is known for its rainbow trout population, with smaller amounts of brown, westslope cutthroat trout (a statewide species of special concern), and bull trout (a federally listed threatened endangered species). Mountain whitefish are also prevalent and are becoming a popular gamefish.

Lolo Creek is also considered a native fishery and high value recruitment fishery to the Bitterroot River. The east and south forks of Lolo Creek, Grave Creek, Howard Creek, Lee Creek and Butte Creek are considered Class IV fisheries (moderate fishery resource). Lolo Creek and its tributaries contain populations of brown trout, rainbow trout, westslope cutthroat trout, bull trout, brook trout, mountain whitefish, sucker, Northern pike minnows, dace, and sculpin. Many tributary streams contain distinct populations of westslope cutthroat trout**,** due to irrigation diversions and stream segment dewatering.

Riparian protection also helps protect fishery resources. The FWP recommends limiting the number of stream crossings, preventing public access at the mouths of tributaries, and ensuring adequate flows for fish habitat and passage.

Threatened and Endangered Species and Species of Special Concern

Animal species of special concern that may occur in the planning area are listed in Appendix 4C. Public policy regarding any adverse effects to these species is coordinated through review efforts from the FWP and the U.S. Department of the Interior, Fish and Wildlife Service.

The re-established gray wolf population in the Selway-Bitterroot Wilderness may utilize the Lolo Creek corridor for migration. Radio-collared wolves have been tracked near Lolo Pass at the headwaters of Lolo Creek. The Selway-Bitterroot Wilderness is also being considered for reintroduction of grizzly bears.

As mentioned above, bull trout and westslope cutthroat trout inhabit the Bitterroot River and Lolo Creek. Bull trout has been federally listed as a threatened species. Westslope cutthroat trout is being considered for federal listing.

3. Land Use Recommendations

Resource management and protection policies for much of the planning region are administered by the USFS on large tracts of land. Plum Creek also manages the resources on a significant portion of the planning area. Resource protection on relatively smaller parcels requires coordination among landowners to protect important habitat and wildlife corridors to avoid their fragmentation or degradation.

Land outside of the developed valley areas, much of which also includes important biological resources, is designated as Open and Resource. Within Development Areas, some land with significant resource value is designated as Open and Resource on the land use maps. However, land designated for more dense development may also include important resources, such as riparian areas. Development in these areas should be designed to protect the resource as much as possible. Site specific analysis should be completed at the time of development.

4. Policies and Implementation Strategies

The following policies and implementation strategies for land use are intended to protect the biological resources of the planning area:

1. Protect significant ecological habitats.
   a) Identify the location of significant habitats, such as black cottonwood forests and high elevation prairies.
   b) Site and design development to protect these areas.

2. Protect populations of plant species of special concern.
   a) Identify potential locations of plant species of special concern.
   b) Assess whether special status species are likely to occur on a site.
   c) If special status plant populations are found, consult with resource agencies for appropriate protection measures.
   d) Contact native plant groups regarding transplant of native plants from areas proposed for development into existing parks or other areas in need of native plant revegetation.

3. Protect wetland and riparian resources.
   a) Identify wetland and riparian resource areas.
   b) Design development to protect wetland and riparian resources.
   c) Establish buffers and setbacks that protect wetland and riparian resources.
   d) Encourage enhancement and restoration of degraded wetland and riparian resources.

4. Preserve critical wildlife corridors, significant habitats (such as winter ranges), and habitat for species of special concern to maintain healthy, viable wildlife populations within the planning area.
   a) Establish setbacks from habitat areas that are adequate to mitigate impacts from development.
   b) Designate no-build areas and incorporate design standards that require significant and effective buffers to protect wildlife corridors. Size and location of buffer areas will depend on the resources impacted and should be considered on a case-by-case basis.
   c) Work with State and Federal wildlife agencies to monitor losses and regeneration of important habitat areas such as the riparian forest.
   d) Support efforts to establish wildlife crossing on roads where appropriate.

5. Minimize wildlife/human conflicts within and adjacent to wildlife habitat.
   a) Follow the "Living with Wildlife" recommendations in Appendix 4B.
   b) Require covenants in new subdivisions that address measures to minimize wildlife/human conflicts.
   c) Identify roads where frequent deer and other wildlife crossings occur and require developers to provide appropriate signage.
   d) Work with state and federal agencies to identify and develop wildlife crossings in appropriate locations on U.S. Highway 93.

6. Explore and support public acquisition of significant wildlife habitats.

7. Direct development to minimize the potential for wildland residential interface fires.
   a) Provide information to rural landowners about wildland residential interface area guidelines.
   b) Use rural wildland residential interface guidelines (Department of State Lands, 1993) in evaluation of proposed new subdivisions.
   c) Encourage development that provides adequate access for emergency vehicles and construction practices in accordance with wildland residential interface guidelines.

8. Encourage land use practices that prevent the spread of noxious weed infestations.
   a) Include provisions in Homeowners' Association Covenants for controlling noxious weeds.
   b) Continue educational efforts from Montana State University Cooperative Extension Services, County Conservation Districts, County Weed Boards and through the cooperative efforts of landowners in recognized weed districts.
   c) Require that new development successfully revegetate areas of ground disturbance with beneficial species appropriate for the site.
   d) Require developers to prepare and implement a weed control program on land accepted as parkland, common area, or open space.

Part 4D: Air

1. Air Quality Background

Improving or maintaining air quality is an important public health goal. Impacts to air quality can occur from road dust, vehicle emissions, wood burning, outdoor burning, and industrial sources. The Missoula urban area has a history of exceeding state and federal air quality standards for particulate and carbon monoxide (CO). Winter temperature inversions that trap pollution are common because of the mountain valley topography. Since the Lolo planning region is less populated and since drainage winds usually move pollution toward Missoula, the region has not had air quality problems to the same extent as the Missoula urban area**,** (with some notable exceptions, such as the fires in the summer of 2000). However, impacts to air quality still occur and may increase with more development as described below.

VMT. The amount of vehicle emissions is directly related to the number of vehicle miles traveled (VMT). VMT increases the further that residential development is located from services or jobs.

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.

2. 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). The zone is roughly defined as the 4.5 mile area around the Missoula city limits. Within the Lolo planning area, the ASZ extends south to include portions of Lolo. (See Map 4-D1 in the Map section.)

The following measures apply within the ASZ:

- All new roads and parking lots must be paved.
- Residential driveways must be paved 20’ (twenty feet) back from a paved road surface.
- New fireplaces and wood stoves cannot be installed within this zone. Only pellet stoves are approved for installation.
- 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.

The Health Department often gets complaints about dust on unpaved roads. *Missoula County Subdivision Regulations* address paving requirements for subdivisions. While Health Department regulations do not require paving of new roads outside the ASZ, the Health Department encourages paving where feasible. The Health Department also encourages the use of pellet stoves or Class I, EPA wood stoves throughout the County.

3. Policies and Implementation Strategies

1. Promote land use practices and types of development that minimize impacts to air quality.
   a) Support efforts to reduce traffic congestion and minimize vehicle miles traveled. (See Transportation Section.)
   b) Minimize and mitigate fugitive particulate dust at construction sites.
   c) Minimize high density development on hillsides. Mitigate air quality impacts from hillside development.
   d) Inform residents about air quality requirements and public health concerns through continued efforts in conjunction with the Missoula City-County Health Department.
   e) Encourage paving of all new roads where feasible throughout the planning region.
   f) Encourage use of Class 1 or wood burning pellet stoves throughout the planning region.

CHAPTER 5: DEVELOPMENT RESOURCES

Introduction

Development Resources describe the physical parameters of the built environment. They address the people (Population), the patterns of development, the places where people live (Housing) and work (Economy), and the infrastructure (Transportation, Parks, Community Facilities, etc.) that link the region with the County. This chapter describes the existing conditions, projected trends, and resulting goals, policies, and strategies of each element of Development Resources. Those elements and goals are:

5A - Population and Projected Growth

5B - Development Patterns:

- Efficiently integrate new development and infrastructure with existing land use patterns.
- Enhance the small town development pattern of the Community of Lolo Development Area in order to encourage a broad range of uses ranging from more intense uses closer to the community core and less intense uses further from the core.
- Concentrate new residential development in proximity to two focus areas identified in the North Bitterroot Valley Development Area. Decrease the intensity of development as it occurs further from the focus areas in order to retain the rural development pattern.
- Reinforce the existing rural development pattern in the Lolo Creek Valley Development Area.

5C - Housing:

- Plan housing that meets the needs of residents, provides a diverse housing stock, respects the capacities of existing or future development of public services and facilities, and recognizes the limitations of the land for development.

5D - Economy:

- Sustain and continue to develop a diverse local economy that provides employment opportunities and a level of taxable value that contributes to the vitality of the Lolo community and region. Cultivate the economic independence of the community and planning area.

5E - Transportation:

- Ensure that transportation systems are adequate to meet the present and future needs of the Lolo planning region. Provide a safe, integrated and efficient transportation system that allows people and products to travel through the region without negatively impacting adjacent uses and character.

5F - Parks, Recreational Lands, and Open Space:

- Protect open space resources. Provide recreational opportunities for community residents.

5G - Community Facilities and Services:

- Ensure that community services are adequate to meet the present and future need of the Lolo region.

Part 5A: Population and Projected Growth

1. Existing Population

Calculations of existing population are based on 2000 Census data. No U.S. Census Tract boundary exactly matches the regional boundary so most of the census data is collected at block level (smaller divisions of tracts) and then totaled. The Lolo regional planning area lies within Tracts 14 and 15. Tract 15 covers the area between the Clark Fork River and the Bitterroot River**,** to the west, extending to the Missoula County line and the Montana/Idaho border. Tract 14 covers land to the east of the Bitterroot River and extends northeast around the Missoula Urban Area. Block level information is the most specific level of population data for the Lolo region.

The area specifically encompassing the community of Lolo is considered a Census Designated Place (CDP).[1] (See Map 5A-1 in the Map section.) Current information from the 2000 Census for the Lolo CDP addresses population and housing data. The area of the Lolo CDP overlaps the Census tracts and blocks.

Table 5A-1: Existing Population

Population	1980	1990	2000	% Change between 1990 and 2000
Missoula County	76,016❶	78,687❷	95,802	21.8%
Ravalli County		25,010	36,070	44.2%
Missoula Urban Area	60,468❶	60,944❻	73,023	19.8%
Lolo Region	5,008❿	4,797❼	6,046	26.0%
Lolo CDP	N.A.	2,746❸	3,388	23.4%
Pop. below 18 years of age				
Missoula County	20,164❷	20,416❷	21,917	7.35%
Missoula Urban Area	13,387❹	14,670	14,947	1.9%
Lolo Region	1,469❾	1,592❼	1,705	7.09%
Lolo CDP	N.A.	986❸	1,060	7.5%
Pop. 65 yrs of age & older				
Missoula County	6,135❷	8,098❷	9,585	18.4%
Missoula Urban Area	5,369❺	6,798	7,275	7.0%
Lolo Region	139❾	273❼	408	49.5%
Lolo CDP	N.A.	156❸	239	53.2%

❶Technical Report for Missoula County Population Analysis, October 1983
❷Basic Demographic Trend Report, CEIC, comparison between 1980 and 1990 for Missoula County
❸1990 Census of Population and Housing, Summary Tape File 1A, for Lolo CDP
❹Technical Report for Missoula County Population Analysis, October 1983, Table 17 (age group 5 –19)
❺Ibid, Table 17 (Elderly 65+)
❻Missoula Urban Area Comprehensive Plan, page 12
❼Based on census data for relevant blocks inside the planning region
❽Census data is not yet available
❾Technical Report for Missoula County Population Analysis, October 1983, Table 17, Census Tract 15 was considered the Lolo Census Tract, yet does not correspond to the planning area
❿ Ibid, Table 17

[1] CDPs are delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located. Page A-17, U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 94-171) Summary File.

Analysis

Missoula County grew 21.8% between 1990 and 2000, approximately 2% per year. Ravalli County grew 44.1% within the same time frame, more than twice the amount per year. The Lolo region grew 26% over the same time frame. The Lolo region grew slightly faster than Missoula County and considerably faster than the Missoula Urban Area. Cross migration of residents between Ravalli and Missoula Counties is mentioned as a key contributor to population growth in the "Missoula Population and Household Projections" Report.[2] The Lolo region is likely to have experienced higher population growth than Missoula County and Missoula because it borders Ravalli County.

Changes in the age composition of the planning area reflect similar changes in the county and trends throughout the nation. The "baby boomer" age group is moving into the 40 years and older age group with the leading edge of the "baby boomers" entering the 65 years and older population.[3] Growth of the youth population (below the age of 18) is considerably lower than growth of the elderly population. Additionally, the youth population grew consistently between the County, Lolo region, and Lolo CDP. However, the elderly population in the Lolo CDP and Lolo region grew approximately twice as fast as the County. This shift in composition of age groups has implication in housing, economic development, and community services.

2. Population Projections

Two models for population projection are available. The first model is based on the analysis of population and number of household projections done by James Sylvester in 1999.[4] The second model is based on census data that highlights population trends from the past ten years – 1990 to 2000. These population estimates will be used in determining household and economic projections. The trends from past census data also help to determine potential population distribution among age groups.

The Sylvester Report took into account birth rate, death rate, and migration rates when projecting growth for Missoula County into the year 2010. It assumed employment estimates would remain constant through the projection period. According to Sylvester, "net migration is the most volatile component of population change. Local and national economic conditions as well as personal taste affect migration."[5]

The Sylvester Report was prepared before the 2000 Census data was available. That analysis predicted an average of 1.1% growth up to 2007. This model estimates 1.1% growth to 2010. The latter part of the analysis in the Sylvester Report, for years 2007 through 2010, predicted a growth rate of 1.0%. This model estimates 1.0% growth between 2010 and 2020.

[2] Missoula Population and Household Projections prepared for City of Missoula, James T. Sylvester, January 14, 1999.
[3] Missoula Population and Household Projections prepared for City of Missoula, James T. Sylvester, January 14, 1999, page 7 and 8.
[4] Ibid.
[5] Ibid.

Table 5A-2: Population Estimate (*Based on projections from Sylvester Report*)

Population	2000	2010 @ 1.1%	2020 @ 1.0%
Missoula County	95,802	106,877	118,058
Missoula Urban Area	73,023	81,464	89,986
Lolo Region	6,046	6,743	7,448
Lolo CDP	3,388	3,780	4,176

This model estimates a 788 increase in population for the Lolo CDP and 1,402 increase in population for the Lolo region over the next 20 years.

The Census trends model uses the most recent census data in comparison to past years. Missoula County grew 21.8% over ten years, equating to approximately 2.0% growth per year. Growth in the Lolo region and the Lolo CDP occurred faster than the average for the entire County. The Lolo region grew by approximately 2.3% per year compared to the County growth rate of 2% per year. The Lolo CDP grew at a rate between the two – the County and the planning region. Although the population growth rate is expected to decline over the next 20 years, it is more accurate and conservative to use the Lolo region average growth rate for the first ten years and then use the County average growth rate for the next ten years.

Table 5A-3: Population Estimate (*Based on trends from Census Data)*

Population	2000	2010 @ 2.3%	2020 @ 2.0%
Missoula County	95,802	120,262	146,597
Missoula Urban Area	73,023	91,668	111,741
Lolo Region	6,046	7,590	9,252
Lolo CDP	3,388	4,252	5,184

If the current rate of growth continues, Lolo CDP will reach a population of 5,184 (an increase of 1,798 people by 2020) and the Lolo region will reach a population of 9,252 (an increase of 3,206 people by 2020).

This Plan puts forth a range of population growth from approximately 1% to 2%. There is a need to plan for between 788 and 1,798 new people in the Lolo CDP and between 1,402 and 3,206 people in the Lolo region.

Growth in the Lolo region depends on the ability to attract more jobs both locally and county-wide. Other factors that are more unique to the Community of Lolo Development Area include current constraints and planning for the existing wastewater treatment facility and the ability to attract jobs and develop housing in the area.

An additional resource for analysis of growth in the community of Lolo is the *Lolo Treatment Facility Plan*, prepared for the Lolo RSID 901 (see Chapter 5G: Community Facilities and Services for more information on the *RSID 901 Plan*). The *RSID 901 Plan* includes projections for the residential and commercial/visiting populations to the year 2045 within the Sewer Study Area in order to estimate sewer capacity.[6] For the purpose of this section the focus will be on the residential population.[7] The Sewer

[6] The *RSID 901 Plan* used the population projection developed as part of the *Missoula City-County Transportation Plan Update* for 1996. This planning tool assumes that in some areas the population densities will not reach full build-out potential or match planning densities.

[7] The Lolo area has a significant amount of influx of people during business hours that reside out of the RSID boundary. This commercial/visiting population is important for utility service design.

Study Area covers a smaller area than the CDP, focusing primarily on the immediate development area around Lolo (see Map 5A-2 in the Map section).[8] According to the *RSID 901 Plan*, the population inside the Sewer Study Area was 3,953 in 1995. Population projections were 4,710 for 2015 and 6,018 for 2045 [9] and averaged approximately 1% growth over the 50 years from 1995 to 2045. A population projection based on Montana Department of Revenue Assessor's Data from January of 2001, for the same area as the Sewer Study Area 1% growth to the year 2045 is estimated to be 6,075. This projection is similar to the population projection used for the *RSID 901 Plan*.

The total build-out population for the Community of Lolo Development Area, based on the land use recommendations of this Plan is 10,841 (comparable to 2% growth over 50 years). This area is larger than the Sewer Study Area. The area available to accommodate population growth according to land use designations for the community of Lolo exceeds the population projections of the Sylvester Report, the Census Trends and the projections used in the *RSID 901 Plan*. This means there is land available for residential development to meet the needs of the growing population.

[8] The Sewer Study Area is an area larger than the immediately served RSID 901 district. Identifying a study area is essential for planning future needs for the Wastewater Facility. The Sewer Study Area was defined during a public process for the preparation of the *RSID 901 Plan*.

[9] *Lolo Treatment Facility Plan* (2000). Lolo RSID 901. Prepared by HDR Engineering. Missoula County.

Part 5B: Development Patterns

Introduction

A description of development patterns provides a general picture of how a combination of uses fit in the landscape. This section emphasizes describing groupings of uses and, therefore, is more than an inventory of individual existing uses. Development Patterns describe the physical setting of the area and the improvements that reflect particular uses. This section will examine the land use designations from the *1978 Lolo Land Use Plan* and the *1975 Missoula County Comprehensive Plan*, how actual development conforms to those earlier designations, and recommended development patterns.

There is no single or simple way to characterize the development pattern of the entire planning region. A majority of the land is owned by the public and managed by state and federal agencies or corporations and is characterized by recreational, agricultural and resource uses, and primarily rural development. Of the 234,870 acres that make up the planning area, only 38,768 acres are in private ownership. (See Map 4B-1, Land Ownership in the Map section.)

Table 5B-1: Land Ownership

	Area (acres)	% of the Plan Area
Lolo Regional Planning Area	234,870	100%
State of Montana	6,638	2.8%
Lolo National Forest	114,030	48.6%
Bitterroot National Forest	7,650	3.4%
Plum Creek	67,307	28.7%
Private	38,768	16.5%

The Plan focuses on three development areas where land use designations are other than Open and Resource. These are areas where, in general, some form of development has occurred or is likely to occur. The Development Areas are the Community of Lolo, the North Bitterroot Valley, and the Lolo Creek Valley.

1. Community of Lolo Development Area

General Description

The Community of Lolo Development Area includes Lolo and its immediate surrounding area covering 12,217 acres. Nine thousand and sixty-eight (9,068) acres (approximately 74%) of this development area are in private ownership. The remainder of the area is owned by the public, managed by state or federal agencies, or is in corporate ownership. A majority of the land that is in private ownership is either already developed, or is undevelopable primarily because of slopes greater than 25%, or floodplain constraints.

The Development Area extends to the northern plan boundary and past Sleeman Gulch to the west; it includes the section of land east of the Bitterroot River to the east; and extends to the section line south of Bitterroot Meadows to the south. This area approximately follows the same boundary as the *1978 Lolo Land Use Plan.*

Lolo is an unincorporated place that experienced the bulk of its development over the past 40 years. Lolo grew from a frontier town to a thriving, rural, predominantly single-family residential community offering diverse residential housing opportunities and commercial services. It offers the community services necessary for a small town to function as a place. It includes a K-8 school, a post office, a community center, and a fire station.

Lolo has long been considered a bedroom community to Missoula, which depends on the economic well-being of Missoula and Missoula County. Its development activity followed regional trends in housing needs and economic cycles, lagging in the early 1980s and increasing steadily in the late 1980s into the 1990s.

Lolo experienced major growth after a public sewer plant was developed between 1969 and 1971, enabling residential development to occur at urban densities of 4 dwelling units per acre or greater. A majority of the housing stock in the community was built in the 1970s and 1980s. Outside of the sewer district lot sizes are larger due to septic system requirements and other development constraints.

Lolo grew up around the intersection of two major roads – U.S. Highway 12 and U.S. Highway 93. Commercial ventures have historically been located near that intersection and expanded primarily along Highway 93. The commercial uses along Highway 93 serve a combination of different users, including local residents, regional residents, Missoula residents, commuters from the south, and those needing support services for regional businesses. The convenience needs of the local residents are provided at the Lolo Community Shopping Center and the adjacent commercial uses on Tyler Way and Glacier Drive near the highway.

Development in this particular area has been guided by several different planning and regulatory tools. Lolo, specifically, has been guided by land use policies adopted in the *1978 Lolo Land Use Plan*. A portion of the Development Area has been within the Building Permit Jurisdiction. (See Map 5B-1, Building Permit Jurisdiction in the Map section.) Three separate citizen initiated zoning districts have been established in the area. Development is also dependent on the availability of municipal sewer within the Sewer Study Area.

Existing Land Use Designations

The *1978 Lolo Land Use Plan* included a lengthy analysis of development constraints, categorizing the plan area into three land capability areas: those with slight limitations to development, moderate limitations, and severe limitations. Development at varying scales of intensity was anticipated in slight and moderate areas, while discouraged in severely constrained areas. The *1978LoloPlan* recommended areas for Industrial, General Commercial, Community Commercial, Residential Development ranging in density from 16 dwelling units per acre to 1 dwelling unit per 10 acres**,** Public/Quasi-Public uses, Parks and Open Space, and Open and Resource lands. **(**See Map 5B-2, Existing (1978) Land Use Designations in the Map section).

The *1978 Lolo Plan* recommended a development pattern that focused the most intense uses near the center of the community and reductions in density further from the center. The center is described as the area along the commercial corridor of Highway 93 extending from Lolo Creek to the sweeping corner at the north end of the community. It also encompassed a portion of Highway 12 near the intersection with Highway 93 and a portion of Lewis and Clark Drive east of Highway 93. Community Commercial uses were designated adjacent to Highway 93 with more intense General Commercial uses concentrated at the intersection with Highway 12. Intermixed and adjacent to the commercial uses, land was designated for 16 dwelling units per acre. Beyond the commercial center land was designated as Urban Residential, with a recommended density of six dwelling units per acre. Some land south of Lolo Creek, between the railroad

line and Highway 93, was also recommended for a variety of commercial uses. Land further from the commercial center of the community was recommended for less intense development. Where land capability was suitable, development was recommended at a density of two dwelling units per acre. Along Highway 12, other rural residential land use types were recommended.

The Highway 93 corridor has developed into a mixture of more intense general commercial uses with less-intense Community Commercial uses interspersed. The General Commercial uses are highway-oriented services, such as truck stops, major gas stations, and a motel. The Community Commercial uses include the hardware store, grocery store, medical clinic, bank, and restaurants. Residential uses are also a part of the mix along the highway corridor. (See Map 5B-3, Existing Development in the Community of Lolo in the Map section.)

Some inconsistencies have occurred between actual development and the 1978 Plan recommendations. Commercial uses have developed in areas designated as residential (16 dwelling units per acre), along U.S. Highway 93, north of Lolo Creek. South of Lolo Creek a random pattern of commercial uses and residential development has occurred in the area designated as residential (two dwelling units per acre). The area that was designated as Industrial has a mixture of commercial, residential and some industrial uses.

Existing Zoning

Three citizen-initiated zoning districts were created in the Community of Lolo Development Area. They are Zoning Districts 33, 41-A, and 41-B, and are described below. (See Map 5B-4, Existing Zoning in the Map section.)

Zoning District 33 was created in 1972 and is located in Township 12 North, Range 20 West, in the west half of Section 22, excluding Mulhauser Acres (north of Lolo, west of U.S. Highway 93, accessed by Bird Lane). The zone permits single-family dwellings, agricultural use and timber harvest with a minimum lot size of one acre. The zone prohibits commercial and industrial uses, multi-family dwellings and mobile homes. The *1978 Lolo Plan* recommended two dwelling units per acre in part of the zoning district, and Open and Resource lands on the other part.

Zoning Districts 41-A and 41-B were created in 1984 and include portions of Sections 25 and 26, Township 12 North, Range 20 West (Lakewood Estates neighborhood in Lolo). Zone 41-A lists single-family residential uses, grazing, horticulture, agriculture, timber growing activities, and public and private golf courses as permitted uses and requires a minimum lot size of 10,000 square feet. It restricts the placement of mobile homes on any lot. Zone 41-B allows single-family residential uses, grazing, horticulture, agriculture, timber growing activities, and public utility installations and restricts densities to two dwelling units per acre. Mobile homes are interpreted as single-family dwellings. The *1978 Lolo Plan* recommended six dwelling units per acre in areas outside of the floodplain and Parks and Open Space for areas in the floodplain in these zoning districts.

Existing RSID 901 (Sewer and Water District) and Sewer Study Area

Establishment of the existing wastewater treatment facility has been a significant tool in guiding the location of greater density and compact development. The existing RSID 901 is the funding mechanism for maintaining the Lolo Wastewater Treatment Facility, and it is operated by a board of directors. The facility has committed all of its capacity and is able to serve only those properties that are within the RSID 901 District. A portion of the committed capacity includes hookups for 26 undeveloped parcels that have been paying for the potential to hookup. There are still 12 undeveloped commercial-designated parcels within the RSID 901 boundary. All existing commercial uses inside the RSID 901 District are

connected to sewer. Land designated for commercial use inside the RSID 901 District could connect to sewer when a proposal is made. (See Map 5A-2, Sewer Service Area in the Map section.)

Some land outside the Sewer Study Area was designated for Urban Residential use in the *1978 Lolo Plan* which acknowledges that achieving the urban residential density was possible only by using a public community sewer system or expanding the sewer and water district. "It must be recognized that the densities indicated on the Plan reflect the anticipation that an expanded sewer and water district will be developed in Lolo during the planning period. If the sewer and water district is not expanded to serve the areas indicated for densities greater than one unit per acre, such densities will not be possible, except where private municipal systems are established."[1]

Table 5B-2 identifies the amount of land inside the existing RSID 901 District and the Sewer Study Area for the relevant land use designations from the *1978 Lolo Land Use Plan*. It also identifies the amount of land still available for development inside the Sewer Study Area. Land that is already considered developed in the Sewer Study Area may eventually be proposed for redevelopment, and a potential increase in the intensity of development is possible as those lands connect to sewer.

Table 5B-2: Land Available in Sewer Study Area (*units in acres*)

Land Use Designations (1978)	Development Area in RSID 901 District	Development Area in Sewer Study Area	Existing Development in Sewer Study Area❶	Area Available in Sewer Study Area❷
Commercial/Industrial	21.6	202.1	98.5	103.6
Urban Residential 4–6 dwelling units (du)/acre	365.8	712.4	168.1	544.7
Multi-family residential	15.7	80.8	31.8	49.0
Suburban Residential 2 du/1 acre	0	300.9	106.7	194.2
Rural Residential 1du /5 acres	0	218.1	36.4	181.7
Rural Residential 1du /10 acres	0	0	0	0
Total	**403.1**	**1514.4**	**441.5**	**1072.9**

❶ Developed land determined by analyzing parcel sizes that are within a range of the land use designation and with existing structures.

❷ This does not mean that sewer is available.

Note: Open and Resource and Parks and Open Space areas were not analyzed since they were not developed nor considered a residential development type.

Available Lands

Land available for future development can be determined by comparing the amount of area used for a particular type of development to the area of the recommended land use type. Table 5B-3 provides the comparison based on 1978 land use designations. Land is considered available if it is vacant or considered underutilized[2] for its 1978 land use designations.

[1] Land Use: Introduction, Lolo Land Use Plan, 1978.

[2] Land may be considered underutilized if it is not being used to the full intent of the land use designation and not part of an established development pattern. It may also not be utilizing available community facilities or contain a temporary use.

Table 5B-3: Land Available (*units in acres*)

Land Use Designations (1978)	Area designated according to *1978 Lolo Plan*	Area already developed❶	Area available❷	Area available inside Sewer Study Area❸
All Commercial and Industrial Land Uses	243.8	104.5❹	139.3	103.6
Urban Residential 4-6 du/acre	976.2	168.1	807.5	544.7
Multi-Family Residential	88.4	31.8	56.7	49.0
Suburban Residential 2 du/1 acre	1018.4	112.4	906.0	194.2
Rural Residential 1du/5 acres	567.3	36.4	530.9	181.2
Rural Residential 1du/10 acres	289.2	126.4	2603.1	0

❶Developed land determined by analyzing parcel sizes that are within a range of the land use designation and with existing structures.
❷Other land use constraints may exist that could limit the full development potential.
❸Repeat from Table 5B-2.
❹ Does not include residential development that has occurred in areas designated for commercial or industrial uses.
Note: Open and Resource and Parks and Open Space areas were not analyzed.

Analysis

People live in Lolo because of a desire to live and work in a rural area. The development pattern should enable growth of jobs, houses, and associated community services, while respecting the natural setting. The desired development pattern needs to strike a sensitive balance between lands that are difficult to build on, lands that are valued for their scenic qualities, and an appropriate mix of uses that reinforces the small town character. The development pattern should also consider the other aspects of community development that help integrate commercial and residential uses. Those aspects include improved infrastructure, continued investment in the community facilities such as the schools, fire stations, and community centers, and weaving the natural setting into the built environment.

The premise for development in this Plan remains the same as it was for the *1978 Lolo Plan*. Commercial uses should be concentrated within the community core. Residential uses should be high-density close to the commercial uses and reduce in intensity further from the commercial areas.

Growth of the commercial core area of Lolo is especially important in order for Lolo to continue to grow as a distinct community. The land use designations for the commercial core area acknowledge the mix of current uses and recommends general commercial development along the length of the corridor. In areas recommended for commercial use that are adjacent to residential neighborhoods, the commercial use should serve as a transition between uses.

Two hundred and forty three (243) acres of land in the development area were designated for commercial and industrial uses in 1978. Commercial development has occurred on approximately 104 of those acres. This Plan increases the number of acres of commercial and industrial uses to 265 acres, providing additional locations for commercial development. Commercial or industrial development beyond the central community core of Lolo should only occur if the uses are concentrated or clustered, avoiding strip commercial development along the major highways.

Changes to the development pattern for residential development are recommended. Many of the existing residential neighborhoods are built-out. In 1978, 976 acres of land was designated for urban residential use in the Community of Lolo Development Area. Approximately 168 acres of that area is considered

developed, leaving 808 acres available for development. This Plan decreases the amount designated as four dwelling units and six dwelling units per acre, Urban Residential, to 555 acres, leaving 387 acres available for future development. This shift in land use designations places more land available for development in suburban Residential and Rural Residential land use areas. It also recommends a decrease in the area of multi-family development and encourages reducing the density of development adjacent to Lolo Creek and the Bitterroot River. (See Table 5B-4.)

Table 5B-4: Comparison between 1978 and 2002 land use designations (*units in acres*)

Land Use Designations	Area Designated in 1978	Area Designated in 2002	Changes	Land Use Areas available in Sewer Study Area❶
All Commercial/Industrial Land Uses Combined	243.8	264.6	+20.8	212.4
Urban Residential 4 du/acre	0	162.6	+162.6	162.6
Urban Residential 6 du/acre	976.2	393	-583.2	393
Multi-Family Residential	88.4	50.6	-37.8	47.6
Suburban Residential 2 du/1 acre	1018.4	480.7	-537.7	174.6
Suburban Residential 1du/1 acre	0	313.3	+313.3	113
Rural Residential 1du /5 acres	567.3	1,114.2	+546.9	383.9
Rural Residential 1du /10 acres	289.2	323.3	+34.1	0
Public/Quasi-Public	56	67.3	+11.3	
Parks and Open Space	1,689	113	-1,576	
Floodway	N.A.	887.4	+887.4	
Open and Resource	7,288.7	8047	+758.3	

❶This does not mean that sewer is available.

Flexibility to enable a mixture of uses, especially in places where many home occupations already occur, is a community desire. This is accomplished by establishing development criteria for home industrial land uses (see Chapter 7C for more information). Another tool for achieving flexibility is to encourage the creation of special citizen-initiated zoning districts or Planned Unit Developments (PUDs) for areas that are designated at Urban Residential density or greater.

Consistency between the Wastewater Facilities Plan and this regional Plan is important. Consideration should be given to the possibility of connecting to the Lolo Wastewater Facility when making land use recommendations, especially within the Sewer Study Area. There is some flexibility in recommending land use designations that would require connection to municipal sewer adjacent to the sewer study Area, as long as those recommendations are coordinated with the County Public Works Department, the RSID 901 Board, and the Board of County Commissioners. The *Lolo Wastewater Facility Plan* would also have to be amended.

2. North Bitterroot Valley Development Area

Existing General Description

The North Bitterroot Valley Development Area includes land along the U.S. Highway 93 corridor south of Lolo covering 15,976 acres. Approximately 81% (12,950 acres) of this Development Area is in private ownership. A majority of the land is owned by the public, managed by state or federal agencies, or is in corporate ownership. Most of the land that is in private ownership is either already developed or is undevelopable primarily because of slopes greater than 25% or floodplain constraints. This Development Area includes the community of Carlton and the Mackintosh Manor subdivision, one of the oldest platted subdivisions in Missoula County.

The North Bitterroot Valley is a mix of large agricultural properties, rural residential development, some small parcels, and a few areas of commercial use. On the west side of Highway 93, the predominant development pattern is ten-acre tracts and large agricultural tracts, and on the east side the predominant pattern is large agricultural tracts with minimal residential development. Some of the residential development is within the Bitterroot River floodplain in the southeast end of the Development Area.

The densest residential pattern is concentrated near Mackintosh Manor and the old Schroeder Ranch, very near the intersection of Highway 93 and Old Highway 93. Density of housing in this area ranges from one dwelling unit per acre to one dwelling unit per 40 acres. Properties to the north and south of this area are large ranches that adjoin state, federal, and corporate lands.

Some land east of the Bitterroot River is within this Development Area. Land on the eastside of the Bitterroot River, within and beyond this Development Area, is also agricultural grazing land, although much of the Schroeder Ranch has been divided into 20-acre parcels that remain undeveloped. The upper reaches of Woodchuck Creek, east of the Bitterroot River, have been divided into 20-acre parcels. Access to the David Maclay Ranch is across the only private bridge over the Bitterroot River, accessing the eastern lands. Access to the remaining properties east of the Bitterroot River requires traveling south into Ravalli County and entering Missoula County on Eight Mile Road.

Residential uses also exist near the Carlton area. The community of Carlton primarily focuses around the existing church and fellowship hall. A home occupation and an agricultural based commercial use have also emerged nearby. Primarily, the development pattern of the area remains rural residential.

Commercial use developed at the intersection of Highway 93 and Old Highway 93 after the highway alignment moved to the east following the Bitterroot Railroad Spur. Other businesses close to the intersection of Old Highway 93 and Highway 93, as well as near Carlton, are riding arenas and equestrian parks.

Existing Land Use Designations

The *1975 County Plan* recommended limited development of the land along the valley floor, while the floodplain, hills, and remote drainages were designated for Open and Resource use. The Plan stated, "The Open and Resource designation is made to protect areas of important natural resource production and extraction (i.e. forestry and agriculture); to protect areas of natural hazard (i.e. steep slopes and floodways); and to reserve land for the future where development during the time frame of this plan would be premature and costly."[3] Some areas were designated as Residential (one dwelling unit per five acres) inside the floodplain, recognizing existing zoning.

[3] *Missoula County Comprehensive Plan* (1975). Page 39.

An Activity Circle around the community of Carlton was intended to encourage concentrated development in the *1975 County Plan*. Activity Circles helped to identify existing or emerging centers of activity. Within the Activity Circle the base land use designation was Rural Residential at varying densities or Open and Resource. Parks and Open Space was also recommended through some drainages. Residential development up to a density of two dwelling units per acre and commercial development were also possible inside the Activity Circle depending on natural resource constraints. (See Map 5B-5, Existing (1975) Land Use Designations in the Map section.)

Existing Zoning

Citizen-initiated Zoning Districts 31 and 40 were approved in the North Bitterroot Valley Development Area. (See Map 5B-4, Existing Zoning in the Map section.)

Zoning District 31 was created in 1971 and is located in portions of Sections 25 and 36, Township 11 North, Range 20 West, in the Hansens Bitterroot Tracts subdivision (southern end of Missoula County, east of U.S. Highway 93 and west of the Bitterroot River). The zone permits single-family dwellings, agricultural activities and has a minimum lot size of 4.5 acres.

Zoning District 40 was created in 1976 and is located in Section 23, the north half of Section 26 and the northeast fourth of Section 27, Township 11 North, Range 20 West (the Bitterroot Valley, west of U.S. Highway 93). The south boundary of the zoning district is Sun Valley Road, in the McClain Creek vicinity. The zone allows single-family dwellings, has a minimum lot size of five acres, and setback standards.

Available Lands

The description of land available for development in the North Bitterroot Valley Development Area is based on different assumptions than the Community of Lolo Development Area. It is based on a comparison of land use areas designated in the *1975 County Plan* to developed areas and takes areas not recommended for development, such as steep slope and floodplain, into consideration. Table 5B-5 shows how much land has been developed, how much land has limitations to development, and the amount of land that is potentially developable within each land use designation.

Table 5B-5: Land Available (*units in acres*)

Land Use Designations (1978)	Area Designated according to *1975 Plan*	Area already Developed❶	Area in Steep Slope or Floodplain❼	Area Available❷
Commercial/Industrial	N.A.❹			
Suburban Residential between 2 du and 1 du/acre	N.A.❸			
Rural Residential 1 du/5 acres	921	486.9	403.5	30.6
Rural Residential 1 du/10 acres	703	353.2	0	349.8
Open and Resource ❺	14,250	576.9	4805	8868.1
Activity Circle (could develop at 2du/1 acre or Commercial where capable)❻	Approx. 1,085	N.A.	N.A.	N.A.

❶ Developed land is determined by analyzing parcel sizes that are within a range of the land use designation and with existing structures. It does not include areas where development has occurred on steep slopes or floodplain.
❷ Area available is determined by subtracting areas where development has occurred and areas with clear site constraints, such as steep slope and floodplain, from the land use designation. Other land use constraints may also exist that could limit the full development potential.
❸ No land was designated for this density of residential development, but parcels of this size may still exist.
❹ No land was designated for this use, but parcels may still exist.
❺ Open and Resource is primarily a resource based designation but has land developed with existing residential or commercial uses.
❻ Development density within the Activity Circle could be increased from the base land use designations depending on land use constraints. The base land use designations are described at the top of page 5B-8.
❼ This calculation is the total of floodplain and slopes greater than 25%. This area is primarily considered undevelopable, although some parcels with development may exist.

Analysis

Carlton is two miles north of Florence and 5.5 miles south of Lolo, located along Old Highway 93. Access to Carlton is primarily from Carlton Creek Road or Old Highway 93 which begins approximately 2.75 miles north of Carlton. The 1975 Activity Circle around Carlton had a one mile radius where development of two dwelling units per acre and commercial use was possible. Development has not occurred at that density. Carlton is a concentration of rural residential development around the Carlton Church and Fellowship Hall.

The other area of concentrated development, Old Highway 93 and Highway 93, is two miles south of Lolo and six miles north of Florence. This area has two existing commercial businesses that front Highway 93 developed on land designated for Open and Resource use in the *1975 County Plan*. There is also a park-and-ride and a concentration of small (two to five acres) rural residential lots nearby. Natural resource constraints and the condition of existing infrastructure should also be considered in determining the future potential for this area. This Plan recommends land use designations that recognize the existing commercial uses at the Old Highway 93 and Highway 93, the park-and-ride, existing rural residential parcels, and other potential highway access points.

A Community Crossroads land use type is designated around the intersection of Old Highway 93 and Highway 93 where clustered residential development and limited, small-scale commercial uses are recommended. The commercial development in this area should be for the convenience of the adjacent neighborhoods or serving agricultural uses. Buffering between adjacent residential areas and the highway will be an important element of development. Increased traffic in these areas may require improved intersections with Highway 93. Development should decrease in density and intensity as it occurs further from the crossroads areas.

Less development has occurred on the east side of Highway 93 due to limited access and resource issues, such as high ground water and the public safety concerns of developing in the floodplain between the highway and the Bitterroot River. Due to these same concerns, land use designations for this area should recognize existing zoning but otherwise encourage minimal development.

Table 5B- 6: Comparison between 1975 and 2002 land use designations (*units in acres*)

Land Use Designation	Area Designated in 1975	Area Designated in 2002	Changes
Commercial	❶	N.A.	
Community Crossroads	N.A.	114.2	+114.2
Suburban Residential 2 du/1 acre	❶	N.A.	
Suburban Residential 1 du/1 acre	N.A.	229.4	+2294
Rural Residential 1 du/5 acres	921	2,398	+1,477
Rural Residential 1 du/10 acres	703	1,291	+588
Parks and Open Space	96	5	-91
Public Quasi/Public	6	7	+1
Open and Resource	14,250	❷ 11,931.4	-2,318.6

❶ Potential inside the Activity Circle.
❷ Includes Floodway designation.

3. Lolo Creek Valley Development Area

General Description

The Lolo Creek Valley Development Area includes approximately 17,234 acres and covers most of the developable land east of the community of Lolo. Approximately 15% (2,592 acres) of this Development Area is in private ownership. The remainder of the area is owned by the public, managed by state or federal agencies, or is in corporate ownership. A majority of the land that is in private ownership is either already developed or is undevelopable because of slopes greater than 25% or floodplain constraints. Some land ownership changed in 2001 with the purchase of some Plum Creek Timber land by the Lolo National Forest.

Development in the Lolo Creek Valley is organized around two major features: Lolo Creek and U.S. Highway 12, both of which run along the valley floor and then rise in elevation towards Lolo Pass. Private lands in the Lolo Creek Valley adjacent to tributary creeks have been divided and developed since original homesteads were filed in the 1860s. Development is predominantly located in the valley bottom, which is divided into a patchwork pattern with sizes ranging from 1 to 160 acres. Smaller ranchettes and suburban densities are evident closer to Lolo. Large private land holdings and ranches exist along the middle reaches of the Lolo Creek drainage. Larger parcels are located in upland and timbered areas. Most of the larger parcels are public or corporate lands.

Lolo Hot Springs Resort is a commercial use located 28 miles west of the community of Lolo, outside of the Development Area. The resort consists of a bar, restaurant, R.V. park, tent camping, hot pools, and retail shop serving residents and travelers. Highway 12 is traveled by valley residents, tourists, and is also a major truck route. Other commercial services on or near Highway 12 include Thistle Dew Antiques, Travelers Rest private entity (formerly Bad Bubba's BBQ), the Lolo Square Dance Center (which also provides recreational vehicle spaces), a horse arena, and the Lumberjack Saloon (also outside the Development Area).

Other forms of commercial and home industrial uses exist in the area. Many home businesses exist that are larger operations than typically considered home occupations.[4] These are businesses that are run from a residential property but are more workshop in nature. Because they occur outside of the building code jurisdiction, compliance with the *Comprehensive Plan* are not triggered. They are a part of the development pattern and a part of the way of life for the citizens in the area.

Existing Land Use Designations

This Plan's land use designations for this Development Area closely follow the recommendations of the *1975 County Plan* which recommended Rural Residential land use along the valley floor while the hills and remote drainages were designated for Open and Resource uses. Lolo Creek was designated for Parks and Open Space. Some 1975 land use designations reflected existing development of approximately one dwelling unit per acre.

Available Land

Lands available for development were identified in the *1975 County Plan*. Much of the land is still constrained from development due to steep slopes and floodplain. Table 5B-7 shows how much land has been developed and how much land has limitations to development as well as the amount of land that is potentially available for the recommended land use.

[4] *Missoula County Zoning Resolution* (2000), Section 1.05, Definitions. "Home Occupation is any activity involving the sale of goods or services conducted entirely within the primary residential structure which is clearly incidental to the use of the primary residential structure and does not change the character thereof. The use is typically limited to 25% of the dwelling floor space. There are limitations on signage displays and advertising and there should not be any increased parking demands."

Table 5B-7: Land Available (*units in acres*)

Land Use Designation (1975)	Area Designated according to the 1975 Plan	Area already Developed❶	Area in Steep Slope or Floodplain❻	Area Available❷
Commercial/Industrial	N.A.❹			
Suburban Residential between 1 and 2 du/acre	58	58	0	0
Rural Residential 1 du/ 5 acres	1,895	193.4	62.9	1,638.7
Rural Residential 1 du/ 10 acres	N.A. ❸		0	
Open & Resource ❺	14,856	219.7	5,845.3	8,794.2

❶Developed land determined by analyzing parcel sizes that are within a range of the land use designation and with existing structures. It does not include areas where development has occurred on steep slopes or floodplain.

❷Area available is determined by subtracting areas where development has occurred and areas with clear site constraints, such as steep slope and floodplain, from the land use designation. Other land use constraints may also exist that could limit the full development potential.

❸No land was designated for this density of residential development, but parcels of this size may still exist.

❹No land was designated for this use but parcels may still exist.

❺Open and Resource is primarily a resource based designation but has land developed with existing residential or commercial uses.

❻This calculation is the total of floodplain and slopes greater than 25%. This area is primarily considered undevelopable, although some parcels with development may exist.

Analysis

This Plan recommends continuing with the development pattern as it generally exists, with the additional intent of reducing density further from Lolo. Consideration has been given to reducing development density from the recommendations of the *1975 County Plan* in areas where access by emergency services, development in potential wildland residential interface areas, and increased distance to services are concerns. The land use descriptions also recognize the existing pattern of home industry.

Table 5B-8: Comparison between 1975 and 2002 land use designations (*units in acres*)

Land Use Designation	Area Designated in 1975	Area Designated in 2002	Changes
Suburban Residential 2 du/1 acre	58	N.A.	-58
Suburban Residential 1 du/1 acre	N.A.	70	+70
Rural Residential 1 du/5 acres	1,895	1,159	-736
Rural Residential 1 du/10 acres	N.A.	701.4	+701.4
Public Quasi/Public	N.A.	2	+2
Parks and Open Space	361	207.4	-153.6
Open and Resource	14,855	❶15,094.2	+239.2

❶ Includes Floodway Designation.

4. Policies and Strategies

GOALS 5B

- Efficiently integrate new development and infrastructure with existing land use patterns.
- Enhance the small town development pattern of the Community of Lolo Development Area in order to encourage a broad range of uses ranging from more intense uses closer to the community core and less intense uses further from the core.
- Concentrate new residential development in proximity to two focus areas identified in the North Bitterroot Valley Development Area. Decrease the intensity of development as it occurs further from the focus areas in order to retain the rural development pattern.
- Reinforce the existing rural development pattern in the Lolo Creek Valley Development Area.

Policies and Strategies

1) Encourage the adjacent planning areas to coordinate their efforts with the Lolo planning region.

   a) Continue to support the Lolo Community Council as a forum to discuss proposed projects and other new development as well as issues of local and regional interest.

2) Establish areas where development would be encouraged in order to reinforce small-town qualities, maximize efficient use of public infrastructure and community services, and prepare for future growth in the Community of Lolo Development Area.

   a) Identify the extent of the commercial corridor.
   b) Decrease the intensity of development as it occurs further from the center of Lolo.
   c) Identify other potential locations for industrial development.
   d) Coordinate land use recommendations with the final *Wastewater Treatment Facility Plan*.
   e) Encourage the extension of public infrastructure to support existing and future commercial needs.

3) Focus Community Crossroads in the North Bitterroot Valley around the intersection of Old Highway 93 and Highway 93.

4) Reduce the density of development in the North Bitterroot Valley further from the highway and closer to the hillsides.

   a) As parcels are developed higher in elevation (up the western hillside), lot size should increase to reflect existing parcels.
   b) Density should range from one dwelling unit per one acre to one dwelling unit per five acres closer to the highway, and reduce to one dwelling unit per ten acres in the Mackintosh Manor subdivision and other areas further from the highway.
   c) Parcels west of the Rural Residential areas should decrease in density.
   d) Development should be sited to preserve wildlife corridors and address wildland residential interface and water quality concerns.

5. Land use in the Lolo Creek Valley should reflect existing uses while recognizing potential increases in tourist activity due to the Lewis and Clark Bicentennial .

   a) Recognize that home industrial uses exist and can continue to be developed.
   b) Recognize existing commercial sites.
   c) Development should be sited to preserve wildlife corridors, and address wildland/residential interface and water quality concerns.

Part 5C: Housing

Introduction

Housing is an essential component of planning in this region. This section describes housing demographics, housing stock, housing types, and housing costs. Existing conditions, trends, and community qualities are part of the analysis.

1. Housing Demographics

Housing information is available for two geographic areas: the Lolo region which encompasses the planning area, and the Lolo census designated place (CDP) in the immediate area around Lolo. (See Map 5A-1 in the Map section for CDP boundaries.) The Lolo CDP does not include portions of the Community of Lolo Development Area south of Lolo Creek nor the area west of Lolo including Sleeman Gulch.

Households

In 1990, the Lolo CDP had 913 households, and the Lolo region had 1,923 households. The 2000 Census data indicates there are 1,218 households in the Lolo CDP and 2,196 households in the Lolo region. In 1999, a study was conducted[1] to predict the growth patterns of different household types in Missoula County through the year 2010. Assuming the same rate of growth of the various household types as described in the Sylvester Report and applying them to the 2000 Census Data, the conclusion is that there will be an 18% increase in the total households in Missoula County between 2000 and 2010.

Table 5C-1 indicates the projected need for housing until 2020. This table highlights housing projections for the Lolo region and Lolo CDP in context of the larger Missoula Urban Area and Missoula County. Table 5B-6 (in section 5B) takes a more specific look at the household and housing unit projections for the Lolo CDP and Lolo region and estimates the range of housing needs depending on the two models of population projected (from section 5A).

[1] Missoula Population and Household Projections, prepared for City of Missoula, referred to as the "Sylvester Report." James T. Sylvester. January 14, 1999.

Table 5C-1: Household and Housing Unit Projections❺

		1990❻	2000	2020❷
Missoula County	Population	78,687	95,802	118,058
	Households	31,018	38,439❶	53522❸
	Housing Units	33,466	41,319❶	
	No./household	2.53	2.49	
Missoula Urban Area	Population	60,944	73,023❶	89,986
	Households	24,695		
	Housing Units	35,747	33,336❹	
	No./household	2.63		
Lolo Region	Population	4,797	6,046❶	7,448
	Households	Not Available	2,196	3,057
	Housing Units	1,736❼	2,278❶	3,210
	No./household	Not Available	2.75	2.44
Lolo CDP	Population	2,746	3,388❶	4,176
	Households	913	1,218❶	1,696❸
	Housing Units	953	1,263❶	1,781
	No./household	3.01	2.78	2.46

❶Based on 2000 Census data.
❷Based on Sylvester Report (Table 2, Chapter 5A).
❸The Sylvester Report estimate of 18% increase in households between 2000 and 2010 is used as a constant to determine the number of households for 2000 and 2020.
❹According to the City of Missoula building permits from 1999 (page 24, *Consolidated Plan*).
❺Households are occupied housing units. There are typically more housing units than households, because some housing units are vacant.
❻Based on 1990 Census data.
❼Based on 1990 Census block group data of the specific planning region.

Persons per household

According to the Sylvester Report in the "Population" section, population is estimated to grow approximately 1.1% per year for the next ten years and 1.0% for the years after that. Meanwhile, the average household is expected to decrease in size. The number of households are estimated to grow approximately 1.8% per year for the next ten years. This means that the number of households is expected to grow faster than the population.

Census data provides a breakdown of household types. The following table highlights key household types that typically require consideration of special services within the community. The change in the number of household types indicates the trend toward providing for specific housing needs. This table focuses on single person households, households providing for the youth and elderly, and female householders with children. Data is available from the 1990 and 2000 Census for the Lolo CDP. Data is not available for evaluating the change in household types for the entire Lolo planning region.

Table 5C-2: Types of Households

Type of household		1990	2000	Percent Change
One-person	Lolo CDP	122	211	+73%
One or more persons over 65	Lolo CDP	113	168	+49%
Households where elderly persons live with others	Lolo CDP	79	113	+43%
Households where the elderly live alone	Lolo CDP	34	55	+62%
Female householder living alone over 65	Lolo CDP	23	29	+26%
Households with individuals under 18 years	Lolo CDP	475	554	+17%
Female householders with kids	Lolo CDP	67	91	+36%

Table 5C-2 indicates a greater increase in households for the elderly population than the youth population. It also indicates a 73% increase in one-person households. The Sylvester Report recognized that the percentage of seniors living alone was increasing while the percentage of children per household was decreasing over time. The report predicted that there would be a greater number of over 65 females living alone than over 65 males.[2]

2. Housing Stock

Number Of Dwelling Units

In 1990**,** the Lolo CDP had approximately 953 dwelling units and the Lolo region had approximately 1,736 dwelling units. In ten years**,** the number of units in the Lolo CDP increased by 32.5% while the number of dwelling units in the Lolo region increased by 31.2%. By the year 2020, between 1,700 and 2,200 dwelling units are projected in the Lolo CDP and between 3,200 and 4,000 dwelling units are projected in the Lolo region. (See Table 5C-6.)

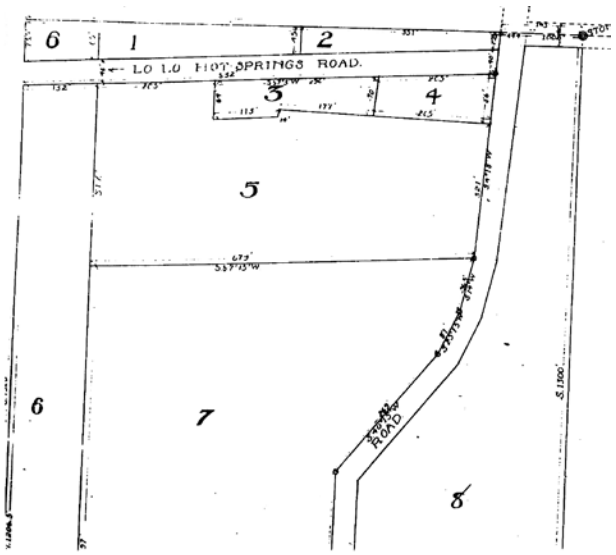
Subdivision Activity

A review of subdivision activity helps to provide a general picture of where and when development occurred in the past. It does not, however, distinguish between uses (either commercial or residential) or the number of dwellings that are built on a lot. One lot does not always equate to one dwelling unit. Furthermore, because a subdivision has been approved does not necessarily mean development has occurred on that subdivision.

Seven subdivisions were filed in the Plan area before the 1940s. One of the earliest subdivisions was Mackintosh Manor, recorded in 1913 which established mostly ten-acre tracts at the base of the Bitterroot Mountains, west of U.S. Highway 93 in the North Bitterroot Valley. Residential development in this subdivision did not occur until the 1980s.

[2] "A recent Census Bureau publication (Poverty in the United States: 1997) looks at poverty rates for Americans. Several groups are identified as being at risk for poverty. Female headed households had a poverty rate of 31% compared to 5.2% of married couple households. Elderly households were more likely to have incomes just over the poverty threshold. Similar numbers are not available for Montana. . . ." "Many of these women will be in need of assistance sometime in their lifetime." Sylvester Report, page 10.

The Delaney subdivision, recorded in 1910, established the commercial crossroads concept at the intersection of Highway 12 and Highway 93 in Lolo. A main street was established and commercial development occurred. Lolo became more than a cluster of housing.



Delaney Subdivision Plat recorded in 1910

The Allomont subdivision, also recorded in 1910, established Lolo's rural heritage by splitting land into orchard tracts. The Allomont subdivision was located east of the Delaney subdivision, spanning between the railroad tracks and the Bitterroot River.

The focus of development in the 1950s and 1960s was along Highway 12 in an area south of Lolo Creek along Mormon Creek Road; and the area in Lolo, east of Highway 93, west of the River and north of Lolo Creek. Some urban scale subdivisions occurred in anticipation of the Lolo Wastewater Treatment Facility becoming available. Some subdivisions were also filed on land near Carlton.

The hillside west of Highway 93, referred to as Westview, in the Community of Lolo Development Area developed during the 1970s. During the 1980s, 18 new subdivisions were approved including Bitterroot Meadows and the Lolo Shopping Center. In the 1990s, subdivisions in the Community of Lolo Development Area included Rossignol's Orchard Tracts, creating 118 lots, and Orchard Park Phase 1 and 2, creating 47 lots.

Table 5C-3 shows the breakdown of subdivision activity over time and identifies some of the larger or more significant subdivisions.

Table 5C-3: Subdivision Activity in the Region

Years Platted	Number of Subdivisions	Number of Lots	Significant Subdivisions
Prior to 1939	7	152	▪ Mackintosh Manor ▪ Delaney ▪ Allomont
1940 to 1969	25	388	▪ Loloview Acres ▪ Van Ostrand ▪ Lolo Peak Vista ▪ Valley Grove ▪ Hanson's Bitterroot Tracts ▪ Mormon Creek Estates ▪ Lake View
1970 to 1979	14	410	▪ West View ▪ Mormon Creek Meadows ▪ Lakewood Estates ▪ Lolo Center
1980 to 1989	18	190	▪ Shelby ▪ Lakewood Estates Ph. 2A ▪ Lakewood Estates Ph. 2B ▪ Bitterroot Meadows ▪ Lolo Shopping Center
1990 to 2000	30	273	▪ Bitterroot Meadows #2 ▪ Rossignol Orchard Tracts ▪ Rossignol Orchard Tracts #2 ▪ Orchard Park Ph. 1 & 2
Total		**1413**	

Certificates of Survey are filed for parcels that were created through exemptions to subdivision review. The definition of subdivision requiring review according to State law changed in 1993, from all division less than 20 acres to divisions less than 160 acres. Table 5C-4 compares the number and location of subdivisions and Certificates of Survey.

Table 5C-4: Subdivision Activity Compared to Certificate of Surveys

	Certificate of Surveys❶		Subdivisions	
	Number of Lots	Percent	Number of Lots Created ❷	Percent
Community of Lolo Development Area	815	41%	1190	59%
North Bitterroot Valley Development Area	358	68%	169	32%
Lolo Creek Valley Development Area	144	73%	54	27%

❶ This information is based on County Surveyor base maps and is considered 95% accurate. The analysis was completed in May 2000.

❷ Based on subdivision activity. This does not take subsequent subdivisions of already divided land into account, therefore some redundancy should be expected and the number of parcels on the ground will be fewer.

In the Community of Lolo Development Area, more than half the lot splits occurred through subdivision review. In the other development areas most of the lots were created through exemptions to subdivision review.

Housing Stock Availability

One way to determine the availability of housing is to compare the number of acres designated for residential development compared with units developed. The "Development Pattern" section of this Plan analyzes land availability of all land use designations. This section focuses specifically on the availability of residential lands based on the information from the "Development Patterns" section. (See Chapter 5B.)

Table 5C-5: Available Residential Lands

	Area designated as residential according to past comprehensive plans		**Area already developed or considered undevelopable as residential❶**		**Area Available❷**	
	Area	***Units***	***Area***	***Units***	***Area***	***Units***
Community of Lolo Development Area	2,939.5	7,225	475.1	1,263	2464.4	5962
Lolo Region	6,516.5	7,987❸	2,033❹	2,278	4,483.5	5,709

❶For the purposes of this table, land is considered undevelopable if on a steep slope or floodplain.
❷Other land use constraints may exist that limit the full development potential.
❸This calculation does not take increased development within the existing 1978 Activity Circle into consideration.
❹May include some units within the Open and Resource designation.

The Need for Housing

As earlier described, the number of households is projected to grow faster than the total population, meaning households are typically decreasing in size.

Table 5C-6: Need for Housing

		Lolo CDP	Lolo Region
Current (2000)	Population	3,388	6,046
	Households	1,218	2,196
	Housing Units	1,263	2,278
Growth Projection to 2020 based on Sylvester Model ❶	Population	4,176	7,448
	Households	1,696	3,087
	Housing Units	1,781	3,210
Growth Projection to 2020 based on Census Trends Model ❷	Population	5,184	9,252
	Households	2,107	3,823
	Housing Units	2,212	4,014
Need for Additional Housing			
▪ *Over 20 years*	Sylvester Model ❶	518 housing units	932 housing units
	Census Trends Model ❷	949 housing units	1,736 housing units
▪ *Annually*	Sylvester Model ❶	26 units/year	47 units/year
	Census Trends Model ❷	47 units/year	87 units/year

❶ See Table 5A-2 of Chapter 5A: Population and Projected Growth.
❷ See Table 5A-3 of Chapter 5A: Population and Projected Growth.

Approximately 26 units per year have been built in the Lolo CDP over the past ten years. A range of 26 to 47 new residential units per year are needed in the Lolo CDP and between 47 to 87 units per year are needed in the Lolo Region between 2000 and 2020 in order to keep up with the population projected.

Table 5C-7 compares the number of existing housing units (*from Table 5C-5*) to the housing units possible based on the revised land uses of this Plan. These numbers are compared to the total housing units needed to meet the expected population projected to 2020.

Table 5C-7: Comparison of Existing Housing Units to Proposed Housing Units

	Residential already developed	Potential residential based on 2002 Land Use	Total housing units needed over 20 yrs.❶
	Units	***Units***	***Units***
Community of Lolo Development Area ❷	1,217	4,407	2,212
Lolo Region	2,197	5,730	4,014

❶ Based on current census data, see Table 5C-6 in this section.
❷ Refers to the Lolo CDP

The projected need for housing can be met within the land use areas designated for residential within this Plan. According to the "Population" section, there is land available for an estimated population of approximately 7,350 inside or directly adjacent to the Sewer Study Area. This estimated population equates to approximately 2,988 dwelling units. According to the 2000 Census data for the Lolo CDP, 1,217 units are already available so 1,771 new dwelling units are possible. There is a need for approximately 949 housing units (considering the higher growth rate from the current Census model) in the next 20 years.

Age of Housing

According to the 1990 Census, the median year of structures built in the Lolo CDP is 1979. Five hundred twenty-six (526) structures were built between 1970 and 1979. Between 1985 and 1990, 120 structures were built. In the 1990s, Rossignol Orchard Tracts and Orchard Park were approved and built-out. Combined, these subdivisions resulted in 165 new housing units.

3. Housing Types

Diverse Types

The Lolo region offers a variety of housing types. It is important to plan for diverse housing types to accommodate different age groups, household size, and economic levels. The diversity is accomplished through a combination of varied residential land use types and policies in this Plan. The majority of the residential units are conventional single-family homes. One hundred and fifty-two (152) multi-family units are located in the plan area, a majority of them in the Lolo CDP.

Within the Community of Lolo Development Area, multi-family residential development is recommended close to the employment areas and other community services. The Lolo Regional Plan recommends removing the 1978 designation of multi-family residential from land along Highway 93. This area is better suited for commercial use and can support the commercial corridor within the community.

The most common housing type in the planning region is single-family residential. Mobile home parks also provide a form of single-family housing. Eighteen state-registered and licensed mobile home courts, offering a total of 416 spaces**,** are located in the Lolo region with 210 units in the Lolo CDP area. Many of the mobile home parks have been in place for a very long time, with mature landscaping and existing infrastructure. (See Map 5B-3, Existing Development in the Community of Lolo, for identification of the existing multi-family and mobile home parks in the Community of Lolo Development Area.)

Table 5C-8 indicates that the distribution of housing types has remained relatively constant over the past ten years and it is likely to stay that way for the next 20 years. The percent of single-family compared to multi-family residential is higher in Lolo than Missoula. Multi-family housing is often located in areas where many community services exist including public transit.

Table 5C-8: Housing Type Distribution

	Housing Type	1990	2000
Lolo CDP	Single Family	666 (69.9%)	875 (71.9%)
	Multi-family	85 (8.9%)	132 (10.8%)
	Mobile Home	194 (20.4%)	210 (17.2%)
	Other	8 (.8%)	
Lolo Region	Single family		1,629❶
	Multi-family		152❶
	Mobile Home		416❶
Missoula Urban Area	Single Family	57%	N.A.
	Duplex	9%	N.A.
	Multi-family	23%	N.A.
	Mobile Home	11%	N.A.

❶The breakdown of housing types is based on Montana Department of Revenue Assessor's Data from January 2001. The total of housing units from this data is different from the 2000 Census for the Lolo Region.

Land use designations are distinguished based on density of residential development and do not directly correlate to the housing type distribution. For example, a four-plex could be built on four acres in a one dwelling unit per acre suburban residential designation. Similarly, single-family housing is often built in multi-family land use areas. Many areas designated for multi-family residential in the *1978 Lolo Land Use Plan* have developed as single-family, duplex, or mobile home park.

Developing alternatives to the single-family home on a single lot is going to become more important as the population ages and shifts in demographics occur. The housing market should be planning for the specific needs of an increasing elderly population, increasing single person households, and the increasing need for some form of housing assistance by the householders. Development of "long term adult care" could serve to fill the needs of the aging population, keep the aging population in the community, and provide a specialty market for Lolo.

The land designated solely for multi-family development is decreased on the Land Use Map. The decrease occurred mostly in areas that are better suited for commercial development. Many options still exist for continuing to develop multi-family residential, including the ability to place multi-family development within commercial areas and multiple dwellings in the urban residential areas as long as they comply with the recommended land use designations. This change should not be construed as an indication that Lolo is not appropriate for multi-family but that its location is determined based upon encouraging affordable housing, expanding the customer base for the local economy, and other policies and strategies of this Plan.

Density

Existing density, especially in the Community of Lolo Development Area, indicates that 1978 land use density recommendations were not achieved. The average density of all the residential neighborhoods in Lolo is one dwelling unit per 1.5 acres. This density accounts for many open space amenities and a varied residential development pattern. (See Appendix 5C-1, Existing Residential Density for the Community of Lolo.)

A typical land use designation for single-family development in the Community of Lolo was six dwelling units per acre. Only the Rossignol Orchard Tracts subdivision, located within Lolo, meets that density. Other residential subdivisions, such as Westview and Lakeview, have average lot sizes of .36 and .39 acres (approximately three dwelling units per acre). An urban residential density of three dwelling units per acre within the RSID 901 District is more prevalent. (See Appendix 5C-1, Existing Residential Density for the Community of Lolo.)

Many of the multi-family and mobile home parks accommodate higher densities. The average density of those areas combined is 2.4 dwelling units per acre, but the range of density goes from 1.43 dwelling units per acre to 12.40 dwelling units per acre.

Actual suburban residential densities of between one and two dwelling units per acre can be found in the area adjacent to the RSID 901 District. This density is best suited for areas near the sewer district but unable to connect to public infrastructure at the time of development. It is also suitable for an area of development that is adjacent to the Sewer Study Area, and where there are minimal development constraints. Planning with flexibility for potential future connections to community infrastructure is important in these areas.

Some areas of existing suburban residential density are also located in the North Bitterroot Valley and Lolo Creek Valley Development Areas. One dwelling unit per acre is the minimum acreage needed according to State law to accommodate a single septic system and water well. Some land was designated

as two dwelling unit per acre, according to the *1975 County Plan***,** along Highway 12 in the Lolo Creek Valley Development Area in order to recognize the ability to develop within health regulations at that time. This Plan also recognizes the existing development patterns and recommends minimal changes to the suburban residential densities in that area. The *1975 County Plan* recognized the ability to develop at two dwelling units per acre within the Carlton Activity Circle. This Plan refines the concept of suburban residential development by decreasing the potential area of it around Carlton and recognizes the potential near the intersection of Old Highway 93 and Highway 93. (More information of the land use recommendations can be found in *Chapter 5B: Development Patterns*.)

Rural residential densities of larger than one dwelling unit per five acres exist in areas distant from crossroads, yet with direct access to major transportation corridors, and in areas where development constraints can be mitigated. This designation is recommended in various areas throughout the region and helps to forward rural character.

The recommendation for a variety of housing densities in each Development Area allows for the diversity of housing types needed to accommodate the changing demographics.

Analysis

A key factor that supports the urban levels of residential development within the Community of Lolo is the availability of public infrastructure. As infrastructure is improved, development in the Community of Lolo will become more desirable for urban residential uses. Other factors in determining the recommended levels of residential development are transitions between uses, relationships to important natural resource areas, and community input. If public infrastructure is extended, additional dwellings at urban densities can be accommodated within the Community of Lolo Development Area (as shown on the Land Use Map).

Flexible design development that offers a range of lot sizes and housing types can be accomplished in character with the area through clustering. Varied building lots**,** with structures set close together makes efficient use of infrastructure and typically increases open space, which helps to reinforce the rural character. (See *Chapter 6: Community Character* for more information.)

4. Housing Costs

Owner and Rental Occupancies

Table 5C-9 indicates the changes in owner and rental occupied housing units compared to vacant housing units. In order to maintain a normal turnover of residential units and not create a shortage that would in turn raise the cost of homes, a vacancy rate between 5% and 6% is desirable.[3]

[3] *Missoula Urban Area Comprehensive Plan.* "Even in tight rental markets, a small percentage of units will be temporarily vacant while managers clean and paint between occupants. Normal turnover of people moving out and others moving in lead to a fully-rented vacancy rate of 5%. Vacancy rates below 5% indicate unmet demand for rental housing. This can lead to increased cost of rental units." Pages 16 - 17.

Table 5C-9: Occupancy of Housing Units

		1990	2000
Missoula County	Owner Occupied	18,514 (55%)	23,795 (58%)
	Renter Occupied	12,268 (37%)	14,644 (35%)
	Vacant	2,684 (8%)	2,880 (7%)
Missoula Urban Area	Owner Occupied	15,541 (55%)	16,145 (53%)
	Renter Occupied	10,646 (38%)	13,105 (43%)
	Vacant	2,023 (7%)	1,253 (4%)
Lolo Region	Owner Occupied	1,322 (76.1)	1,813 (80%)
	Renter Occupied	310 (17.9%)	383 (17%)
	Vacant	104 (6%)	82 (3%)
Lolo CDP	Owner Occupied	718 (75%)	976 (77.3%)
	Renter Occupied	195 (21%)	242 (19.2)
	Vacant	41 (4%)	45 (3.5%)

Little change in vacant compared to occupied housing has occurred in the Lolo CDP between 1990 and 2000. The Lolo region decreased in the amount of vacant housing units, while the percentage of rental and owner occupied housing remained similar. There is more rental occupied housing units in the Missoula Urban Area and Missoula County than in Lolo. Rental housing is more typically developed in areas close to urban services. However, there will be an increased need to house the population of shifting demographics including the aging population. Rental occupancy can be available in any form of housing type – single-family, duplex, mobile home, or multi-family.

Price of Housing

Historically, the cost of a home in Lolo has been lower than the cost of a home in Missoula. Recently, according to the City of Missoula Housing Coordinator, the price of homes in the Lolo region has been increasing at a similar rate to Missoula. According to statistics from the Missoula County Association of Realtors, housing is still less expensive in the Lolo region than in the Missoula Urban Area. Median family income is higher in the Lolo CDP than the average, and the percentage of people below the poverty level was lower than the average for the Missoula Urban Area and Missoula County.

Table 5C-10: Current Income and Cost of Housing

		1990❶	1998	1999	2000
Median Value of Home/Median Price of Home	Missoula County	$65,500			
	Missoula Urban Area	$65,000	$118,000❷	$125,000❷	$132,000❷
	Lolo Region	42,092	$109,500❷	$116,000❷	$120,400❷
	Lolo CDP	$61,000			
Median Household Income	Missoula County	$23,388		$32,999❹	
	Missoula Urban Area	$22,502	$24,523❸	$29,658❹	
	Lolo Region	N.A.			
	Lolo CDP	$29,280	$35,965❸		

❶Census Data
❷Based on information from the Missoula County Association of Realtors
❸Community Profile Information from Leland and Associates
❹Effective Buying Income from information gathered by the Missoula Area Economic Development Corporation

Housing Assistance

According to the 1990 Census data, there were 79 families in the Lolo CDP that had income below the poverty level. This equates to 10.2% of the total families in the area. 1990 Census data for Missoula County and the Missoula Urban Area indicated between 12.4% and 12.6% of the total families had income below the poverty level. The poverty level for the Lolo CDP was below the average compared to the Missoula County and the Missoula Urban Area. Data from the 2000 Census is not yet available.

As of 1998, 16 households received some type of housing assistance from either the Missoula Housing Authority or the District XI Human Resource Council. This number is expected to rise as the population of single, elderly female households increase.

Affordability Standards

The federal government has set up guidelines to determine housing affordability.[4] Federal standards also indicate who can qualify for various types of housing assistance. [5] The Lolo planning region will continue to be a desirable place to build affordable housing because of lower land costs. The region will be faced with the same demographic shifts as the rest of the County -- increasing elderly households, many with single female householders. Accommodating the shift is important for maintaining a population of all age groups. Housing needs to accommodate the young families as well as older residents. It is important for a healthy community to have available housing types for a lifetime.

A balance between the amount of rental and owner-occupied housing is necessary. Rental housing may be affordable, but may have high turnover. Owner-occupied housing provides stability to the population of the area. A mix of housing types is also crucial to the balance of population in the area.

5. Policies and Strategies

Goal 5C

Plan housing that meets the needs of residents, provides a diverse housing stock, respects the capacities of existing or future development of public services and facilities, and recognizes the limitations of the land for development.

Policies and Strategies

1. Provide an adequate supply and variety of housing types and density within the region.
    a) Identify current housing supply and needs.
    b) Locate urban residential development within proximity to services such as the school, parks, and convenience shopping; where connection to public water and sewer is expected and where development constraints are not identified.
    c) Develop a mix of housing types and densities throughout the planning area.
    d) Locate suburban residential development near areas where concentrated commercial activities are anticipated yet public water or sewer may not available.
    e) Locate rural residential development (as described in *Chapter 7B*) in areas that are not proximal to services.

[4] According to HUD guidelines, housing is considered "affordable" if no more than 30% of gross monthly household income is required to meet housing costs.

[5] Low-income households are defined as those earning 50% or less of the area's median household income. Moderate-income households are those that earn less than 80% of the area's median household income.

2. Encourage a mix of housing types to meet the needs of all ages and incomes.

    a) Determine the housing needs of the special needs population.
    b) Support development that accommodates a mix of target markets.
    c) Support development that accommodates special accessibility needs.
    d) Support programs that assist with first-time homeownership and improvements for low and moderate income households.
    e) Support efforts to promote affordable and diverse housing construction and innovative neighborhood design in areas appropriate for development.
    f) Support development that expands the customer base for the local economy.

3. Development should be designed with flexibility so that it can adapt to infrastructure changes and connect to future adjacent uses.

    a) Development that may in the future connect to the Lolo Wastewater Treatment Facility, should be designed for the potential to be re-subdivided into smaller lots in the future.

Part 5D: Economy

Introduction

The Lolo planning area is close to both Missoula and Ravalli County's economic centers, with Lolo being one of the largest communities along the Bitterroot Valley between Hamilton and Missoula. Missoula is considered the regional center for the five valleys area that includes Missoula, Ravalli, Mineral, Lake, Sanders, and Granite Counties. Ravalli County is the fastest growing county in the State, according to 2000 Census data. The Lolo area has also experienced a higher than average amount of growth, compared to Missoula County, and is likely capturing some of the growth potential from its neighboring county. Household income, employment, and business opportunities in the planning area are affected by the economic health of Ravalli County, Missoula County, and Missoula (only eight miles away) because of the proximity to the planning region.

1. Economic Characteristics

Economic characteristics are described by looking at census data for Census Tract 15, which includes parts of the planning region; Lolo Census Designated Place (CDP), which specifically focuses on Lolo; Missoula; and Missoula County. In order to gain an understanding of employment trends, it is important to look at income and job distribution.

Table 5D-1: Comparison of Median Household Income

	1990❶	1998	1999	2000❹
Median Household Income				
Missoula County	$23,388		$32,999❸	
Missoula Urban Area	$22,502	$24,523❷	$29,658❸	
Lolo Region, Census Tract 15	$30,088			
Lolo CDP	$29,280	$35,965❷		

❶Census data.
❷Community Profile Information from Leland and Associates.
❸Effective Buying Income from information gathered by the Missoula Area Economic Development Corporation.
❹Census data is not yet available for 2000.

According to the 1990 Census, the median household income for the Lolo CDP was $29,280.[1] The median household income in 1990 was actually higher in both the Lolo region and the Lolo CDP than in the Missoula Urban Area or Missoula County. Although the new census data is not yet available, it is expected that median income levels in Lolo have remained above Missoula County and Missoula Urban Area levels.

[1] 2000 Census data is not yet available for economic conditions.

Table 5D-2: Employment Categories (*based on 1990 Census data*)

	Missoula County	Missoula Urban Area	Lolo Planning Region *(Census Tract 15)*	Lolo CDP
Employment by Industry				
Services	39.5%	44.7%	36.0%	31.7%
Retail Trades	21.2%	21.3%	22.0%	28.4%
Manufacturing – Durable	7.1%	4.9%	8.5%	9.6%
Agriculture/Forest/Fishery	4.4%	2.5%	3.5%	3.6%
Others❶	27.8%	26.6%	30.0%	26.7%
Employment by Occupation				
Managerial/Prof. Specialty	27.3%	31.3%	22.6%	19.7%
Technical/Sales/ Admin. Support	30.9%	32.4%	35.5%	39.7%
Service Occupations	16.6%	17.2%	13.7%	13.1%
Farming/Forestry/Fishing	2.6%	1.7%	2.8%	1.3%
Other❷	22.6%	17.5%	25.3%	26.2%

❶Other industries include construction, transportation, communications, wholesale trade, finance, insurance and real estate, and public administration.

❷Other occupations include precision production, craft, repair, operator, fabricator, laborer, inspector, and transportation and material mover.

Data from Table 5D-2 describes employment of residents in these geographic areas by industry and by occupation. However, the employment statistics for a geographic area do not indicate whether the employer or associated business is located in that same geographic area. For example, the Lolo CDP respondents with occupations in the service industry do not necessarily work in businesses located in the Lolo CDP. Major employers that are located within the Lolo area include:

- Lolo School, which employs 90 people permanently and 14 substitute teachers;
- Hayloft Equipment, which employs 16 people in its equipment business and 29 in KT's Hayloft restaurant;
- Bitterroot Valley Bank, which employs up to 30 people in the Lolo branch;
- Lolo Harvest Foods, which employs approximately 70 people; and
- Days Inn, which employs approximately 10 people.

According to the 1990 Census data, approximately 60% of the employment in the Lolo CDP area was in services and trade type jobs. (See Table 5D-2.) This percentage is comparable to Missoula County at 60.7%. The remaining 40% of employment types are spread over ten census categories including manufacturing, professional and management jobs, and agriculture/forest/fisheries. Key distinctions between Lolo and Missoula include approximately twice the amount of employment in manufacturing of durable goods and 13% less employment in service type industries in the Lolo CDP as compared to Missoula.

The highest percentage of employment by occupation in the Lolo CDP was within the technical, sales, and administrative support jobs. This is similar to Missoula and Missoula County. There is a smaller percentage of residents of the Lolo region and Lolo CDP employed in managerial and professional occupations than in Missoula County and Missoula Urban Area. Over one quarter of the jobs in the Lolo CDP area are in the "other" category of occupations, which includes a wide range of employment types.

According to a report by Dr. Larry Swanson, "services and retail trades are expected to account for over 85% of the employment growth in the County. This is largely consistent with trends nationwide and also reflects Missoula County's growing role as a service provider and center of trade, commerce, and employment for a large and growing multi-county region. Employment in the wholesale trade sector, which has begun to grow in the county, is projected to rise by nearly 16%. Wages for service sector employment are expected to increase at about 1.4% a year above inflation. Wages for wholesale trade employment are also expected to increase to approximately the same percent above inflation. Wages for retail sector employment, however, are expected to decrease over time. Much of this decline is the result of the steady increase in part-time employment in the retail sector." [2] Land use should accommodate a broad range of commercial land uses to allow for growth in service and retail sectors.

As stated earlier, the population is aging. Positioning economic development in the planning region for needs of the elderly is another way of recognizing and working with economic trends.

2. Economic Trends

In 2001 an economic profile for the Bitterroot Valley was prepared by Dr. Larry Swanson. It is important to note that the report focused on Ravalli County, but some of the points made in the report are worth acknowledging for the Lolo region to plan effectively. This report considers two key factors that may play a part in the changing economy. One factor is the proximity to Missoula of eight miles. The other factor is the presence of a large amount of public forest lands. These factors could also influence economic growth in the Lolo region.

The Lolo economy will continue to be influenced by Missoula due to its proximity, of eight miles, and the variety of businesses and employment. Most office and professional uses will continue to be accessory to Missoula. For example, the main health care facilities remain in Missoula while Lolo provides the family medical clinic or dental clinic. The main post-secondary educational facilities are in Missoula, yet Lolo could attract regional classrooms for the University. However, Lolo should be encouraged to find its own specialty niche and cultivate its own identity. It is important to develop businesses in the area that will capture the overflow services offered in Missoula without necessarily competing with those in the regional center. Commercial and retail uses may continue to be convenience-oriented with some specialty areas, such as recreation and historic-related businesses.

Rather than turning its back on the Missoula economy, Lolo should work towards positioning itself for working with the Missoula economy, creating specialty niches and capturing overflow uses. Lolo can turn the fact that Missoula is only eight miles away into an asset and not a constraint.

In addition to the two key factors that Swanson identifies, understanding demographic shifts, and wage and employment trends also play a part in planning for economic growth in the area. There are other significant features specific to this plan area that have had or could have a role in the regional economic development. These other features are the visual amenities of the region, recreational opportunities, commemoration of major historical events, and Lolo's location at the crossroads of two Montana highways.

[2] *Executive Summary: Population, Employment and Wage Trends in Missoula County*, prepared by Dr. Larry Swanson, Associate Director. O'Connor Center for the Rocky Mountain West, University of Montana. Missoula, Montana. December, 1998. p 2.

3. Economic Patterns

Identifying the special features of the region allows for the development of economic strategies that are specific to the needs and capabilities of the Lolo region. Strategies that take advantage of the special features will be most effective for stimulating sustained economic growth. In Lolo, the sectors that have grown out of the special features are the resource-based economy, tourism, the local needs-based economy, and the commuter-based economy.

Resource-Based Economy

The extensive natural resources in the Lolo region provide a desirable setting within which to live, work, and recreate. As Swanson notes in his profile of the Bitterroot Valley, "the amenities of this picturesque mountain valley with its surrounding forests appear to be the primary attraction for many of the valley's recent migrants."[3] Agricultural lands and forests that are under either private, corporate, or federal timber management consume a large proportion of the Plan area. Their importance is significant, even though employment data identify the agricultural and forestry industries as the categories with the lowest employment percentages at all geographic levels. The value of these lands extends beyond their production levels; the maintenance of natural lands is an important asset to the regional economy.

Agriculture

An analysis of the 1997 Agricultural Census data revealed 129 farms in the Lolo and North Bitterroot Valley region (59833 or 59847 zip codes). However, the same census showed the market value of agricultural products was less than $10,000 for 107 of these 129 farms. The 1997 Agricultural Census also found that 47 people with zip codes of 59833 or 59847 claim farming as their principal occupation. Of the 129 farms with these zip codes, 57 operators said they work 200 days or more outside the farm.

The Farm Services Agency (FSA) of Missoula and Mineral Counties lists four farms as certified producers in a region that approximately coincides with the planning region. To meet this definition, farms must be greater than 20 acres and be active participants in the programs that the agency offers. Agricultural production on these farms is intense and continuous.

Agricultural use is most intense along the valley floor, decreasing in intensity as slope increases. The primary products in the region are small grains such as wheat, barley, oats, and several types of hay for forage and grazing.[4] Canola has also been cultivated in the area in the past. The FSA has no record of specialty crops grown in the planning region; however, the 1997 Agricultural Census data revealed at least five nursery farms and one orchard with 59847 or 59833 zip codes. Livestock and both irrigated and dry land pastureland are important aspects of agriculture in the planning region as well.

Pressures on the agricultural sector in the region have increased in recent years. Market conditions for the products have become less favorable. Population growth in the area has increased the pressure to subdivide large tracts of land. There is often little financial assistance for maintaining land as open space, which makes it difficult for farmers to continue operations.

This Plan encourages continuing the rural landscape of the planning region and not detracting from the operations of existing farms. Agricultural lands are primarily a component of the Open and Resource and Rural Residential land use designations in the Plan. Beyond their productive value, farms help to maintain the rural landscape and aesthetic beauty of an area which may draw tourists and new residents. When good farming practices are utilized, agriculture is a low impact and sustainable land use. Farmland

[3] *The Bitterroot Valley of Western Montana Area Economic Profile.* Swanson, op cit, p 3.
[4] County Executive Director of Missoula and Mineral County Farm Service Agency. July 12, 2001 phone interview.

preservation can occur through several techniques. Among these are agricultural conservation easements, deed restrictions or covenants, cluster subdivisions, rural clusters, planned unit developments, and transfer of development rights. The FSA is a valuable resource to farmers; it can assist local farmers in mapping, disaster relief, farm loans, price support and marketing, conservation, and commodity operations.

Timber Resources

As discussed in Swanson's Bitterroot Valley Regional Economic Profile, the presence and proximity of large amounts of public forest lands have historically influenced the settlement patterns and economic development of the Bitterroot Valley. Although this profile focuses on Ravalli County, many of the concepts are also relevant to the portion of the Bitterroot Valley within Missoula County. The presence of such abundant timber resources has influenced past economic development and facilitated the development of the timber industry in the Bitterroot Valley. Timber management is not a major source of employment in the Lolo region. The visual and recreational value of the public forest lands, along with timber management, are integral parts of the description of timber as an economic resource. Timberlands in the planning region are primarily designated Open and Resource lands in the Plan.

United States Forest Service (USFS) Timber harvesting occurs on both federally owned lands and privately owned corporate lands in the planning region. The planning region contains portions of two national forests: the Lolo National Forest and the Bitterroot National Forest. The Lolo National Forest manages approximately 114,030 acres of land in the planning region, which is 48.6% of the total planning region; the Bitterroot National Forest manages 7,650 acres, which is 3.4% of the planning region.

The USFS allows private companies to selectively harvest timber on federal lands as part of its management plan. The USFS states in its resource report that "wood production is one of many important uses of nonreserved forest land in the Lolo National Forest."[5] The USFS outlines its timber management policies for Lolo National Forest in the *Lolo National Forest Plan*. A goal of the *Lolo National Forest Plan's* forest-wide management direction is to "provide a sustained yield of timber and other outputs at a level that will help support the economic structure of local communities and provide for regional and national needs."[6]

Plum Creek Timber Plum Creek Timber is the primary corporate landowner in the planning region. The company owns approximately 67,000, which is 28.7% of total land area in the planning area. These lands supply wood fiber to Plum Creek Mills in Pablo, Evergreen, Columbia Falls, and Eureka. Plum Creek also has historically provided some supply to the Stimpson Mill in Bonner. Plum Creek operates under the Sustainable Forestry Initiative Program.[7]

Factors that will influence the cost of the timber harvest include competition, changes in local and national timber market conditions, the general state of the economy, adoption of new harvesting technology by purchasers, policy changes, and changes in budget and staffing within the USFS.

Natural/Visual Resources

Many people have chosen to reside in the planning region because of its natural beauty. This quality has the ability to draw economic growth through tourism, recreation, and people migrating into the area. Development and natural resource management should consider the importance of preserving the natural beauty of the planning region.

[5] *Forest Resources of the Lolo National Forest* (2000), prepared by Larry T. DeBlander. p. 9.
[6] *The Lolo National Forest Plan*. United States Department of Agriculture. February 1986. p II-1.
[7] *Sustainable Forestry Initiative Program* (2000), published by the American Forest and Paper Association.

Tourism Based Economy

The planning region's assets create a great potential for drawing tourism to the area. The assets that are particularly favorable for tourism are the extensive natural resources in the area, which provide many recreational opportunities and the significance of the history of the region. Lolo can position itself for economic growth by offering additional commercial and retail services for tourists and entice people to stay longer, explore other features in the area, and encourage return visitors.

Recreational Tourism Many types of recreation are possible within the planning region. Hiking, fishing, horseback riding, swimming, and camping are among the most popular activities in the region. These uses are mainly possible on federal forest service land, state land, Plum Creek land, or county parks. A standard in the *Lolo National Forest Plan* is to "provide for a wide spectrum of forest-related dispersed recreation activities and a range of skill levels available to forest visitors including the elderly and handicapped."[8] Fort Fizzle Historic Site Picnic Area is located within the planning region. Fishing opportunities also exist along the Bitterroot River and Lolo Creek, although access is under the Fish, Wildlife, and Parks regulation. Recreation is also possible on Plum Creek land since the company maintains an open land policy, which is described in *Chapter 5F: Parks, Recreational Lands, and Open Space*.

Lolo is considered a gateway to recreational opportunities to the east in the Lolo Creek drainage and to the south in the Bitterroot Valley. It is in a position to provide services to travelers through the planning region. Businesses that accommodate recreational needs will benefit from increases in tourism. These businesses should be located primarily within the community core of Lolo, with some exceptions for recreational commercial use. (See *Chapter 7C.*)

Heritage Tourism U.S. Highway 12 approximately follows a portion of the Lewis and Clark Trail. Many tourists are expected to travel along the area of this trail within the next five years. One of Lewis and Clark's campsites, Travelers' Rest, is located near the intersection of Highway 93 and Highway 12. This spot may become a popular destination for tourists drawn to the region by heritage tourism.

Economic development in the Lolo planning region has recently been linked to the Lewis and Clark Bicentennial. In June of 1999, the Montana Community Development Corporation, a regional non-profit organization designed to assist small communities and individuals, in collaboration with Missoula County, submitted a grant application to the Department of Housing and Urban Development. They received $199,000 to assist economic development in Lolo. Three key elements were identified as part of the grant:

- Establish a local community development corporation that is charged with encouraging business development in the area;
- Develop a Lolo Area Economic Development Plan in cooperation with the Travelers' Rest Preservation and Historical Association (TRPHA) or a subsequent local community development entity and the community of Lolo; and
- Develop the Travelers' Rest Project, with emphasis on securing the potential site of Travelers' Rest.

[8] *The Lolo National Forest Plan*. op cit. p II-9.

Local Needs-Based Economy

Another way to build the economic base of the area is to adequately serve the needs of the residents within the area. Additional local commercial needs could be developed in the Community of Lolo and at crossroad locations in the region. Currently, most all of the commercial uses in the area are designed for easy automobile access but lack connections for pedestrian uses. Multiple commercial uses in the same place could attract residents and commuters to a variety of convenient services. Establishing a more pedestrian friendly environment will also encourage more use of the area. Vitality in the local needs-based sector could also help develop community identity. Growth in this sector could provide more residents of the planning region with jobs in their own communities. Fewer residents would have to commute to Missoula for work.

Commuter-Based Economy

The Community of Lolo is located at the intersection of two major highways. This intersection has developed into a convenient vehicular service hub, yet it is also the travel corridor for commuters and tourists that are passing through the area. The community can continue to take advantage of its location by providing additional services for those driving through Lolo. Many of these travelers have destinations other than Lolo, but they may have needs during their journey that can be met in Lolo. Commuters pass through on a routine basis and businesses can regularly draw customers. The types of businesses that could benefit from commuter traffic are service and gas stations, restaurants, cafes, and coffee bars. Businesses that are visible along Highway 93 and Highway 12 and have convenient vehicle access will most easily capture commuter traffic.

4. Business and Commerce

The Lolo region is home to a diverse range of businesses. The Community of Lolo Development Area offers a mixture of small-scale commercial, retail, highway commercial, and light industrial businesses. Businesses in the North Bitterroot Valley Development Area are primarily made up of agricultural operations with some commercial businesses focused around the intersection of Old Highway 93 and Highway 93. The primary business activities in the Lolo Creek Valley Development Area focus on resource-based industries including agriculture, timber management, and small tourist services along U.S. Highway 12.

Home businesses take place throughout the planning region. (See Table 5D-3 located in section 5D.) These businesses are typically run from a person's home, often serving the needs of the entire region, even extending into Missoula and Ravalli County. They are typically larger operations than a home occupation,[9] but the residence is still the primary use. Home businesses are often not easily recognizable from the road so they manage to blend in with their environment. They typically include storage of machinery and additional shop buildings. Encouraging this form of business development collectively helps to build the number of businesses in the area, and contributes to the population that local retail services can serve. The person that operates a business locally is more likely to stop at the local cafe, use the local hardware, and shop at the local grocery store.

[9] *Missoula County Zoning Resolution* (2000). "Home Occupation is any activity involving the sale of goods or services conducted entirely within the primary residential structure which is clearly incidental to the use of the primary residential structure and does not change the character thereof. The use is typically limited to 25% of the dwelling floor space. There are limitations on signage displays and advertising and there should not be any increased parking demands." Section 1.05, Definitions.

Limited amounts of recreational commercial uses also exist within the plan area, especially along Highway 12 and within the community of Lolo. These include Travelers' Rest private entity (formerly Bad Bubba's BBQ), Lolo Hot Springs, Fort Fizzle Picnic Area, the Square Dance Center, and campgrounds operated by the USFS. Additional development of recreational commercial uses is anticipated to accommodate the high number of tourists during the Lewis and Clark Bicentennial. The potential for additional recreational commercial uses is addressed in this Plan (see *Chapter 7C*).

Community of Lolo Development Area

Lolo has approximately 100 businesses within the area including at least 30 home occupations and home industrial businesses. The types of businesses range between professional offices to light industrial. Some industrial uses may also be considered commercial businesses that serve the region.

Table 5D-3: Businesses in the Community of Lolo by Type

Type	Approximate Total
Office/Professional	27
Highway-oriented	14
Retail/Commercial serving regional needs	18
Retail/Commercial serving community needs	34
Industrial	22

Many of these businesses are operated out of a residence, including construction businesses. While there is an advantage for businesses starting up to locate at home and home-based businesses contribute to the local economy, it is also important to encourage businesses to locate within the commercial core area of Lolo in order to enhance an identifiable center to Lolo and provide shared services for customers and suppliers.

- Approximately half of the light industrial uses operate as home businesses**,** where the residence is the primary use.
- Only seven of the professional offices operate within the core of Lolo.
- Eleven of the retail/commercial businesses serving community needs are home occupations located outside of the community core.

The highway-oriented commercial uses are the most visible when traveling through the community. They typically take up more space along the travel corridor and require more impervious surface. They are convenient uses to the local residents and easily accessible by automobiles but not pedestrians.

Additional professional offices and retail/commercial uses should be established within the commercial core in order to attract use by the local residents. Currently, they are mostly home occupations that are dispersed throughout and are not easy to identify. Encouraging the location of these services within the commercial core would also help to attract pedestrians to the area and link services to each other.

The *1978 Lolo Land Use Plan* designated 244 acres for commercial and industrial uses. The commercial uses were General and Community. Within the designated areas for commercial and industrial uses, 105 acres have been developed and 139 acres remain available for development. Of the 139 acres available for commercial or industrial development, 104 acres are within the RSID 901 boundary. In order to provide additional opportunity for commercial and industrial development, an additional 20.8 acres of commercial and industrial area are proposed on the Land Use Map; however, this area is still available for appropriate multi-family use.

Many parcels within the commercial core of Lolo are being used by businesses that require minimal setup, no structures, and no connections to services. These sites could be redeveloped with commercial uses that establish permanent structures, thus contributing to the streetscape and taking advantage of being located within the sewer improvement district.

Economic Constraints

Lolo has traditionally been considered a bedroom community to Missoula, where the majority of development is residential. Lolo's struggle with the image of bedroom community while needing to attract new businesses was described in the "Economic Technical Report" that was prepared in advance of the *1978 Lolo Land Use Plan*. That report described the concern over the leakage of economic potential and the major export of labor to Missoula. It also described the difficulty of attracting new jobs in Lolo because of Missoula's competitive retail prices. The continuing dependence on Missoula for jobs, goods, and personal services severely inhibits certain types of commercial growth in Lolo. An important objective for development in Lolo is to continue to encourage a full range of commercial uses that help reinforce Lolo as a community.

Essential elements for creating a sustainable community include providing a broad range of business opportunities, as well as a balance of residential uses and community facilities. The backbone of the community facilities is in place with local school districts and the wastewater treatment facility. These facilities need a steady, if not growing, funding source. The residential population within Lolo demands the full spectrum of community services, yet if those services are not in Lolo, they are not contributing to the local tax base. Encouraging a diverse range of commercial uses is important to building the tax base and reinforcing the sense of community.

Time Saver's Standards [10] provides data on the recommended population base necessary to support education, institutional, employment, transportation, and commercial facilities.[11] According to *Time Saver's Standards*, employment service complexes, light industrial businesses, or local "neighborhood" industrial may be feasible with a population base of between 5,000 and 8,000. The Lolo region already accommodates that population and the Community of Lolo Development Area is projected to accommodate close to that population within the next 20 years. Lolo's proximity to Missoula as a regional center may allow for it to accommodate a higher threshold of uses than an isolated town of comparable size. (See *Appendix 5D.*)

Another constraint to economic development is the limited capacity of the sewer treatment plant. Construction of new commercial or residential structures is affected by the limitations of the sewer system. Plans are underway for upgrades to the existing plant. The upgrades will occur in phases with the first two phases addressing health standards. Only a slight increase in capacity is anticipated with these improvements. Development is encouraged to connect to the sewer facility when connection becomes feasible, but development will have to pay its proportionate share of the cost of sewer extension and possible sewer treatment plant expansion.

[10] *Time Saver's Standards for Housing and* Development (1995). Chiara, Panero, and Zelnik (eds.). p 10.

[11] Time Saver's Standards is a helpful theoretical guide for population thresholds for community development but does not take proximity to other communities into consideration.

During past planning meetings, lack of community identity and community spirit was identified as another constraint to economic development. The places along U.S. Highway 93 and U.S. Highway 12 contribute the most to how people perceive Lolo. Along Highway 93, asphalt extends across parking lots on both sides with very few visual breaks. Signs clutter the travel corridor without a consistent architectural theme. Although the speed limit encourages slowing traffic, people seldom drive the speed limit. Community design guidelines will also help to establish a common identity. Youth-oriented uses will also help to encourage community spirit.

Economic Potential

The commercial core of Lolo should include a variety of commercial land use designations. The area should portray vitality and activity by offering employment opportunities and providing needed services. It should be developed in such a way that the uses contribute to the community's identity and help build community pride.

This Plan consolidates the past commercial land use designations into a General Commercial designated area that includes a broad range of opportunities. This reflects the existing mix of commercial development. Distinguishing among different intensities of commercial land use is less critical, although it is still important to reduce the intensity of development as it occurs closer to residential areas. Existing commercial development along Highway 93 should be encouraged to meet community design guidelines. Different funding techniques should be explored for encouraging aesthetic improvements along the main travel corridors.

Community Commercial is designated for places in Lolo that provide opportunity for additional pedestrian-scale retail and commercial uses. One of those areas is along Lewis and Clark Drive, which could re-establish the main street characteristics that once existed in the same area**,** and encourage small-scale commercial development closer to the residential neighborhoods. The other area designated for Community Commercial is along Lolo Creek to connect tourist activity along Highway 93 to Travelers' Rest near the creek. The creek can serve as a scenic amenity to visitors and residents and is one of those special features that makes Lolo unique.

The area that is recommended for Light Industrial use is located west of the community along U.S. Highway 12. This area currently serves as the site for a light manufacturing business. It is also located on a major travel corridor. The area is large enough to function as a business park without retail outlets and still be buffered from the highway. Uses in the area should also be buffered from potential residential development. Development in this area should be concentrated to prevent the creation of strip commercial development along Highway 12 and keep the emphasis of retail and commercial uses in the core of Lolo.

Citizens of the community identified uses that would contribute to the balanced needs of the area. Those uses included:

- Opportunities for children
- Tourism-based businesses
- Entertainment
- Low impact industry
- Small businesses
- Businesses that are sensitive to the natural resources including ridgetops, wetlands, and agricultural lands
- Landscape nursery

North Bitterroot Valley Development Area

Two areas have developed with concentrated uses in the North Bitterroot Valley: one at the intersections of Old Highway 93 and Highway 93, and the other at Carlton. A few commercial uses, along with a riding stable and a park-and-ride facility located near the Old Highway 93 and Highway 93 intersection, while the Carlton area has focused around the community church complex. Other commercial uses include home occupations, home industrial uses, or agricultural-based businesses, such as stables. These are dispersed throughout the development area.

Carlton was designated in the *1975 County Plan* as an activity circle, meaning that a concentration of residential and commercial activities was possible there. The concentration of uses in the area includes a plumbing operation, the church, fellowship hall, and a cemetery (making up the community church complex), and residences. Carlton's location, not directly on a major highway, has essentially buffered it from intense commercial development.

Two primarily highway oriented commercial uses exist near the Old Highway and Highway 93 intersection. This commercial activity is located approximately two miles south of Lolo and one mile north of Carlton in an area that was designated as Open and Resource in the *1975 County Plan*. These commercial uses are located at a key intersection that connects an existing residential neighborhood to the two highways and a park-and-ride facility.

During the planning process, concerns were raised regarding the appropriateness of identifying areas for commercial use outside of Lolo and Florence. Community and General types of commercial uses should be focused in the existing communities. Commercial development in North Bitterroot Valley should serve local and rural/agricultural needs. It is not recommended to serve the needs of commuter or tourist traffic. Some commercial is designated as part of the Community Crossroads around the Old Highway 93 and Highway 93 intersection. Commercial uses in this designated area should be concentrated near main intersections and buffered from residential areas.

Time Saver's Standards[12] provides some guidance on the population levels needed to support local neighborhood commercial services. Based on the population that could develop in the area, these types of uses may be economically feasible: corner store, convenience grocery store, delicatessen and bakery, drug store, snack bar, liquor store, beauty parlor, bank office, hardware store, and barber shop. (See *Appendix 5D*.)

Lolo Creek Valley Development Area

The Lolo Creek Development Area currently has some small retail establishments along U.S. Highway 12, numerous home businesses, and a few places where larger commercial operations exist. This area is also heavily forested and has a lot of land owned by Plum Creek Timber.

Lolo Hot Springs is 30 miles west of the community of Lolo, at the base of Lolo Pass. This business consists of swimming pools, R.V. park, motel, and restaurant. It hosts numerous snowmobilers and cross-country skiers in the winter, hikers and tourists in the summer and hunters in the fall. New commercial uses should remain concentrated in that area.

Other existing commercial operations are Travelers' Rest private entity (also referred to as Bad Bubba's BBQ or Pineywoods), and the Lumberjack Saloon off of Highway 12. Travelers' Rest private entity includes an R.V. park, two cabins, a motel, bar, restaurant, and convenience store. This Plan acknowledges these uses.

[12] *Time Saver's Standard*. op cit. p 10.

Pressure for additional commercial uses will continue to grow as traffic increases with Lewis and Clark Bicentennial visitors. Due to many site constraints, new locations for commercial activities are not anticipated. Highway 12 is currently a very scenic and highly vegetated corridor with Lolo Creek winding along it. Extending commercial uses along the travel corridor is not encouraged.
Home industrial uses in the area have typically managed to fit within the landscape and retain the residence as the primary use. Existing home industrial operations are encouraged to continue. Additional home industrial uses are also recommended in areas where rural residential land uses occur. It is important that this area remain primarily residential with an emphasis on resource-based management.

5. Policies and Implementation Strategies

Goal 5D

Sustain and continue to develop a diverse local economy that provides employment opportunities and a level of taxable value that contributes to the vitality of the Lolo community and region. Cultivate the economic independence of the community and the planning area.

Policies and Strategies

1. Support the creation of a comprehensive economic development strategy for the Lolo region.
    a) Inventory existing businesses and identify needs for new businesses.
    b) Identify the area's unique scenic features, historic sites, and recreational opportunities as attributes to preserve, yet leverage, for economic development.
    c) Explore funding mechanisms to support economic development strategies, including grants, tax increment financing districts, and other mechanisms.
    d) Work collaboratively with existing economic development agencies in Missoula and Ravalli County for commercial marketing and development opportunities.
    e) Integrate architectural design and community themes in the development of commercial centers.
    f) Support economic development initiatives or projects that are consistent with the *Lolo Regional Plan* objectives.
    g) Support businesses that contribute to the area's economic sustainability.
    h) Support development that takes advantage of Lolo's proximity to Missoula and its gateway to recreation.

2. Encourage diversification of the regional economy.
    a) Design new business development to complement the character of the surrounding area in terms of scale, lighting, traffic impacts, and other design elements.
    b) Encourage home occupations that blend with residential areas and ensure neighborhood character is maintained.
    c) Encourage the development of clean, non-polluting businesses that will provide increased employment opportunities for residents.
    d) Develop sites within the commercial centers that offer office space.
    e) Support businesses that provide tourist-based services yet do not diminish the scenic, historic, and recreational values of the area.
    f) Support development of a variety of convenience services for area residents.

3. Encourage entrepreneurship, reinvestment, redevelopment and new business construction.
   a) Recommend commercial development along U.S. Highway 93 only in designated commercial areas.
   b) Recognize existing commercial uses.

4. Accommodate the market for commuter and tourist traffic within the commercial core area of the Lolo community.
   a) Design development on the U.S. Highway 93 corridor that slows traffic through the business area and encourages use of services.
   b) Provide opportunities for development of the Travelers' Rest project and related activities connected with the Lewis and Clark Bicentennial.

5. Expand commercial development in the community of Lolo as sewer and other infrastructure becomes available.
   a) Encourage development of appropriate infrastructure (sewer, water, electrical, fiber optic, telephone and cable) that will support new businesses.
   b) Encourage connection of existing businesses to the public sewer system, when connections become available.

6. Support continued sustainable forestry and agricultural use.
   a) Develop strategies for farmland preservation.

Part 5E: Transportation

1. Road Network

History

The Lolo area is a natural transportation hub**,** located at the confluence of Lolo Creek and the Bitterroot River a crossroad for travelers up Lolo Creek or between Missoula and Hamilton. The Salish and Nez Perce Indians traveled over the Lolo Trail on foot or by horseback.

In 1805 the Lewis and Clark Expedition followed the Lolo Trail through the Bitterroot Mountains to Wieepe, Idaho. Congress designated the route of the Lewis and Clark Expedition a National Historic Trail in 1978, and the Montana Department of Transportation (MDT**)** has designated U.S. Highway 12 a part of the Lewis and Clark Trail. Rectangular signs depicting the two explorers are located along the historic route adjacent to the highway. Interpretive signs and kiosks are located off of Highway 12 on United States Forest Service (USFS) sites.

The trail was difficult and primitive in 1805, and while the trail itself is more accessible today, the area traversed by the trail remains primitive. The eastern part of the Lolo Trail from Travelers' Rest in Lolo to the Powell Ranger Station in Idaho can generally be followed by Highway 12. The trail itself does not follow the creek as closely as the highway does, but major campsites and points of interest on the westward route are all easily accessible.[1]

Other historical roads within the region include stagecoach lines and roads to mines and lumber camps. A stagecoach road was constructed from Missoula to the Bitterroot Valley in 1857. The original road followed the east side of the Bitterroot River from Miller Creek to Davis Creek where a "ford" crossing the Bitterroot River was established. Stagecoaches continued south on the west side of the Bitterroot River. That route eventually moved entirely to the west side of the river continuing south of Lolo. The route was improved in 1866 to make passage from the gold fields in Montana and Idaho easier. The road was known as the Missoula to Fort Owen Road until 1931 when it was paved and named U.S. Highway 93.

In 1885 Dan Woodman, the first sheriff of Missoula County, moved his family into Lolo Creek Canyon and homesteaded at the base of what is known as Woodman Creek. When the road was upgraded, a stagecoach run was established to Lolo Hot Springs—a two-day journey from Missoula. Woodman had a post office and a rest stop for the stagecoach to take on fresh horses and supplies**,** before completing the journey the following day. The road was rugged to Lolo Hot Springs until it was improved with a gravel surface in 1935.

Existing

Roads in the planning region are subject to a variety of governmental jurisdictions, varying from claimed rights-of-way that may have never been improved or improved roads whose jurisdiction has never been definitively established. Maintenance policies vary with each jurisdiction. This section discusses the major roadways by jurisdiction.

[1] The Lolo Trail Today at http://www.lolo.k12.mt.us/LewisandClark/. August, 2001.

Federal and State Highways

The two highways that currently cross the planning region are historic travel routes. Highway 93 and Highway 12 are U.S. highways, administered and maintained by the Montana Department of Transportation (MDT).

U.S. Highway 93 Highway 93 is a part of the National Highway System and is the major north-south route in western Montana linking the Port of Roosville in northwestern Montana on the Canadian border to Lost Trail Pass on the Idaho-Montana border. It is a "highway of national significance" in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Highway 93 is also the only arterial for commuter traffic through the planning region from Missoula through Lolo to the Bitterroot Valley. In 2000 the average daily traffic counts from Missoula to Lolo were 21,551 vehicle trips per day, an increase of over 7,000 trips per day since 1990. South of Florence, there were 11,712 vehicle trips per day, up from 8040 in 1990. The MDT reported that the Florence to Lolo portion of this highway carried more traffic on its two lanes than any other two lane road serving a suburban/rural area.[2] The road was upgraded between Lolo and Florence between the fall of 1999 and 2000.

Historically, the predominant cause of highway accidents along this stretch of road are from animal collisions and turning movements at busy intersections. A study by MDT concluded that 500 deer per year are killed on Highway 93 in the Bitterroot Valley causing property damage in excess of $700,000 annually. Most of these collisions occur during the nighttime and early morning hours which coincides with commuting time. Expansion of the highway provides greater reaction time for drivers to avoid animal collisions providing some relief to the problem. As described in Chapter 4, the USFS is working on a wildlife connectivity study of Highway 93, which can then be used to identify suitable locations for wildlife crossings along Highway 93.

Prior to improvement of the highway, many collisions were related to turning movements where busy roads, or roads serving more dense developments, intersect with the highway. Accidents occurred at these intersections at approximately double the rate of accidents in other areas in the corridor. The improvements to the highway include a limitation on future access points. Between Lolo and the Missoula County and Ravalli County line, 53 access points were granted; 9 of these are public, 41 are private, and 3 are for access to farms and fields. Additional accesses, or changing the status of an access on a limited access highway from private to public, requires the approval of the Montana Highway Commission after a public hearing. Future development should be designed to make use of the approved accesses.

Other recent improvements include sidewalks and trails from the bridge across Lolo Creek south to Delarka Drive. The trails are concrete or asphalt and are lighted by pedestrian scale street lighting. Additional asphalt trails continue south to the county line.

A walkway project for one side of Highway 93 within the highway right-of-way through Lolo is in the design phase, and it will be funded through the Community Transportation Enhancement Program (CTEP).[3] It is expected to be built in the spring of 2002. Additional pedestrian access, such as a pedestrian overpass, to commercial areas and to the Lolo Elementary School is needed.

U.S. Highway 12 The Civilian Conservation Corps built the first road over Lolo Pass to Powell, Idaho in 1935. Highway 12 is a major truck and auto route between Montana and Idaho. It links the

[2] Final Environmental Impact Statement. U.S. Highway 93, Hamilton to Lolo, Montana. April 1997.
[3] A Federal fund administered by the County.

southwestern portions of Montana to Lewiston, Idaho and eastern Washington. The current roadway was completed in 1962. Right-of-way for the road is a mixture of county road right-of-way and deeded right-of-way under the jurisdiction of MDT.

Highway 12 provides access to rural residences, ranch land, forest service land and Plum Creek land. The road serves residential, commercial, and recreational users. Additional access points are available by requesting a permit from the Montana Highway Department. Permits are granted administratively based upon "Approach Standards for Montana Highways," Montana Department of Highways, 1983. Traffic counts for Highway 12 at the USFS boundary (mile post 16) were 1,559 in 2000, an increase of 105 Average Daily Trips (ADT) since 1990. Capacity appears to exist for some increased traffic from tourists and future residential development.

Intersection of U.S. Highway 12 and U.S. Highway 93 The intersection of Highway 12 and Highway 93 was recently improved, replacing a yellow blinking light with a traffic signal and adding pedestrian-activated crosswalk signals. MDT is proposing the installation of a portable weigh station at the corner to monitor truck weights and compliance with other truck permit regulations. The design of the improvements should reflect the goals of this Plan providing landscaping and orientation consistent with highway beautification.

County Roads

County roads provide much of the access through the planning region. Most often, the basis for County jurisdiction is found in the public record – either a dedication to the public or the grant of a petition by the governing body. Other roads are shown as County roads on maps or have historically been maintained by County road crews, but no official record exists as to how they became a County road. Some of these road rights-of-way are claimed because they were shown on maps completed by the Government Land Office (GLO) in the late 1800s. These maps are relevant evidence as to the status of a road. The way in which the road, referred to as GLO roads, is shown is evidence that the road was used by the public, over a particular course, over some period of time, perhaps prior to the land being homesteaded, granted to the railroad**,** or becoming lands reserved to the public for forests or parks. This evidence may result in a finding that a GLO road is open to the public and is under the jurisdiction of the County. A GLO road is not, however, a County road automatically.

Levels of Improvement County roads are characterized by the level of improvements and the amount of traffic on the road. County road right-of-way is 60' unless specifically designated at a different width or is a road created by prescriptive use. Table 5-E lists the major County roads by Development Area and indicates whether a road is paved or gravel, whether the road is publicly or privately maintained, and the width of the right-of-way, if known. The table is useful in establishing the existence of legal and physical access and in determining maintenance responsibilities since not all County roads are County maintained.

Many of these roads were not built as the result of subdivision review. County subdivision standards require that roads be built to specified widths and with sufficient base material, be paved, and include pedestrian facilities. It is also necessary to establish that every subdivision has legal and physical access.

Not all County roads are maintained at the same level. Maintenance decisions are based upon the safety of the people who use the road, the safety of road crews, and the resources available. Roads that are built to County standards and serve large numbers of people and high risk traffic, such as school buses, are likely to be accepted for County road maintenance. The maintenance of public roads is the responsibility of the Missoula County Public Works Department.

The following County roads are significant because they serve a purpose beyond accessing residences and neighborhoods.

Table 5-E Key County Roads by Development Area

Road Name	Length (Mi.)	Responsibility	Road Number	ROW (Ft.)
Community Of Lolo				
Balsam Root Rd.	-	Private	P 0547	-
Farm Lane	.486 G	County	N 0602	60'
Glacier Dr.	.375 P	County	L 0580	60'
Lewis and Clark Dr.	1.592 P/G	County	L 0590	60'
Morman Crk. Rd.	10.3 G	USFS	#612	-
Mormon Crk. Rd.	.816P/.884 G	County	L 0540	60'
Ridgeway Dr.	1.063	County	L 0565	60'
Sleeman Crk. Rd.	3.0+	County	N 0546	60'
Lolo Creek Valley				
Elk Meadows Rd.	-	USFS	#451	-
Graves Crk. Rd.	4.115 G	County	L 0002	60'
Mill Creek Rd.	.663 G	County	L 0545	Variable
North Bitterroot Valley				
E. Carlton Creek Rd.	.940P/.460 G	County	L 0510	60'
W. Carlton Creek Rd.	.159P/.125 G	County	L 0505	60'
E. County Line Rd.	.904 P	County	L 0500	60'
W. County Line Rd.	.611 G	County	L 0501	60'
Jones Rd.	1.009 G	County	L 0511	60'
Leo Hanson Rd.	1.497 G	County	L 0509	60'
Old Hwy 93 (South)	3.74 P	County	L 0520	80' min.
Rowan Rd.	.125 G	County	N 0527	60'
Sun Valley Rd.	.710 G	County	L 0512	variable

G = Gravel P = Paved
L = Local N = Not Maintained P = Private # = Road Number

United States Forest Service (USFS)

Roads that cross federal forest lands are managed by the (USFS) and are known as Forest Development Roads. Congress adopted the Federal Land Policy and Management Act in 1976 which said that the creation of rights-of-way through the public domain was solely within the discretion of the Secretary of the Interior and the Secretary of Agriculture. The right-of-way may be restricted by covenants, conditions and reservations deemed necessary to insure a proper use of the land and to protect the public interest.

A criterion for granting access to private land across forest land includes an analysis of the most reasonable access identified after an Environmental Impact Statement and a review process. Permits are temporary, usually for a limited term of years. Access across federal land to private land for development purposes is not considered legal access as required by subdivision review.

Plum Creek Roads

Plum Creek Timber Company has a policy of permitting access to its land and use of its roads by the public for recreational purposes. The access is subject to Plum Creek restrictions designed to protect wildlife, prevent sedimentation of streams, reduce the spread of noxious weeds, and to protect Plum Creek property. Restrictions were implemented through a Montana Cooperative Road Management Program between Plum Creek and other major forest landowners, primarily for environmental protection. Road use restrictions are evidenced by gates, barricades, earthen barriers, or signs. If a sign identifies a road as a cooperatively maintained road, the restriction may apply to types of vehicles permitted or whether year round access is available. The USFS travel plan map identifies Plum Creek Roads as either open or closed. If the map does not show a road as open, regardless of whether there is a sign, it is closed and any activity beyond the gate of the road is not authorized. Unless a gated road indicates by a sign that the road is open, it is closed. Unmarked earthen berms also close roads to motorized vehicles, except snowmobiles, between December 1 and April 1 of each year.

It is unlikely that new roads would be established to access developable land beyond Plum Creek land. If Plum Creek develops any of its land for residential or recreational purposes, a network of roads currently exists throughout its ownership.

Private Roads

The roads in the Macintosh Manor area, located in the North Bitterroot Valley Development Area, are a mixture of private and public roads. The problem of such a mixture of public and private access for rural residential developments and ranch land is establishing legal access to subdivisions. For example, Rowan Road is a County road where it connects with Old Highway 93, but it becomes a private road after .125 miles. Further south, the County assumes jurisdiction of the road and the accompanying road network established with the Macintosh Manor plats.

County Subdivision Regulations

Missoula County adopted revisions to the *Missoula County Subdivision Regulations* in December 2000. As before, developers are required to provide paved roads and improved walkways or pedestrian trails as part of a subdivision. The new regulations also emphasize a multi-modal circulation system, providing connections between neighborhoods and from neighborhoods to schools, parks, community facilities, bus stops, and businesses. Lolo does not have an integrated system of pedestrian and/or bicycle circulation, and one must be provided on a project by project basis. The requirements depend upon the amount of traffic generated by the subdivision measured by ADT. Each project needs to consider how it fits into the overall system of transportation, both motorized and non-motorized, and design the development so that the goals of the Plan are met.

Analysis

Congestion

Traffic congestion is a serious problem on U.S. Highway 93, especially in peak hours. The Missoula Ravalli Transportation Management Agency (MR TMA) is a not-for-profit organization**,** established specifically for the residents of Missoula and Ravalli counties to provide transportation alternatives for commuters between the two counties. MR TMA provides vanpools for commuters, matches riders to carpool, provides a guaranteed ride home, park-and-ride sites, and coordinates an employee trip network and a zero-interest bike loan program.

Meeting places for vanpools will be needed as new development occurs. Additional equipment may become necessary to handle increased traffic caused by more development. Park-and-ride areas are available along the Highway 93 corridor at Rowan Road and near Carlton Creek. As development occurs, provision should be made to accommodate the kinds of infrastructure necessary to encourage shared rides and non-motorized transportation.

Subdivision design has an impact upon the likelihood of whether residents will take advantage of non-motorized or pedestrian infrastructure. For example, narrower streets with more frequent intersections and convenient, well-designed street crossings within a mixed use neighborhood is a design that accommodates pedestrians and reduces the potential for additional motorized traffic. Pedestrians should not have to walk more than 150 feet to reach crossings or wait more than 30 seconds to cross intersections. Residential areas should include within walking distance of .5 mile (with the majority within .25 mile) – 40% of the services and products needed by residents on a daily or weekly basis, including a small grocery store, pharmacy, hardware store, bank, medical services, day care, dry cleaning, and other essential services.[4]

Connections and Safety

The volume of traffic on U.S. Highways 93 and U.S. Highway 12 and the speed at which it travels divides each Development Area into informal transportation sectors. This seems most pronounced in the Community of Lolo Development Area. The Lolo Elementary School and some residential neighborhoods are located west of Highway 93 in the center of the community. Other residential areas and major commercial services are located east of Highway 93. Getting children to and from school across Highway 93 is a challenge and a limitation of the use of the school grounds by neighborhood children after school hours. The community center and athletic fields are located further to the south and across Highway 12 from the Lolo School. The transportation system acts to isolate this community in significant ways. Residents expressed concerns about the speed of traffic through Lolo, the need for safe crossings, and the desirability of bicycle and pedestrian trails outside of the Highway 93 roadway. (See Map 5G-3 in the Map section.)

Within neighborhoods**,** many roads are dead end or end in a cul-de-sac. Connections are needed between different neighborhoods and between neighborhoods and schools, parks, and stores. New development should provide connections**,** and opportunities should be explored for creating connections in areas already developed by use of RSIDs or other combinations of public and private funding.

Highway Beautification

The residents of Lolo (on both the north and south end) identified gateways to the Lolo community on U.S. Highway 93. Marking those gateways could bring recognition to Lolo as a community which could in turn reduce the speed of motorized vehicles through the community. Landscaping the gateways and the highway corridor, establishing setback standards, and incorporating boulevard sidewalks along the highway are ways to improve the view from the highway.

The Montana Department of Transportation **(**MDT**)** is planning construction of a weigh station near the intersection of Highways 93 and 12. While the State is not bound by local land use regulations or planning documents, cooperative planning is needed to ensure that the station does not further detract from the view of the scenic backdrop of the area.

[4] "Ten Keys To Walkable/Livable Communities" by Dan Burden, Director of Walkable Communities. Published by the Local Government Commission at http://www.lgc.org/freepub/land_use/articles/ten_keys.html.

Truck stops and travel plazas are a relatively new combination of uses prevalent in the Community of Lolo Development area. The *Missoula County Zoning Resolution* does not provide design standards or landscaping requirements for this use. Design standards should be developed for these highly visible uses that include paving, landscaping and sign requirements that reflect the range of businesses conducted within these uses. (See Community Design Guidelines in Appendix 6A.)

Residents are interested in seeking scenic byway designations for U.S. Highway 93 and U.S. Highway 12. Designation by the state requires a showing of the intrinsic scenic, historic, recreational, cultural, archaeological, educational, or natural qualities of the road nominated for inclusion in the Scenic-Historic Byways Program. State legislation was passed in 1999 to establish this program and rules have not yet been promulgated for participation in the program.

Designation as a National Scenic Byway requires a nomination through the Scenic-Historic Byway Program for a road which, in most cases, would have previously been a State designated scenic byway. The nomination must include submission of a corridor management plan designed to preserve and enhance the unique qualities of the byway. Once a designation is made, access to federal funding is available. A restriction of this designation is that outdoor advertising is prohibited along that portion of the designated byway.

Recent Projects

When U.S. Highway 93 South was expanded, a trail system was included along the west side of the highway. Construction included a paved surface and street level lighting along the meandering trail in the vicinity of Lolo.

2. Bridges

Bridges in the planning region are under the jurisdiction of either the Federal, State, or County government or are privately owned and require a permit from the Missoula Conservation District under the Streambed Management Act. Bridges are considered adequate for the weight of emergency vehicles and other large trucks, such as those used for garbage disposal, by the issuance of an HS20-44 certification from an engineer. Bridges with this certification are deemed adequate to access new residential development. If there is no certification on file with the Missoula Rural Fire District, service will not be provided.

Existing

Public

Missoula County is responsible for the maintenance and upkeep of two bridges within the planning region: the Squaw Creek Bridge and the Mill Creek Road Bridge across Lolo Creek accessing the Mill Creek subdivision. The Squaw Creek Bridge, built in 1985, is constructed of concrete to a width of 28 feet. The Mill Creek Road Bridge was built in 1983 and is also a 28 foot wide concrete bridge. It required additional riprap in 2000 as the result of high water damage. Both bridges are rated HS20-44.

The bridge across Lolo Creek on Highway 93 is maintained by the Montana Department of Highways. The U. S. Forest Service has 11 bridges in the planning region, all with HS20-44 certification except for one.

Private

Private bridges in the planning region are tracked only by the issuance of a "310 Permit" by the Missoula County Conservation District in order to regulate the extent to which the bed and bank of the stream is disturbed. The Conservation District reports that 44 "310 Permits" for bridges have been issued in the planning region. The load assessment for these bridges is not documented and applications for a permit may be accompanied only by a hand drawn sketch. Many of these bridges are approximately 40 to 65 feet in length and some consist of a flat railcar.

The Conservation District has detailed records of where each of the permitted private bridges are located. It provides technical assistance for placing bridges. The District also sponsors a cost share program for projects that improve the natural resource.

In 1996 and 1997, high water damaged many private bridges. Many older bridges have been improved since the flooding.

Analysis

Future bridges should follow the standards of the Missoula Conservation District to protect riparian areas. Improper design or construction of bridges can constrict the flow of streams and rivers resulting in flood damage upstream. Bridges can require riprap to protect them from weakening as the result of bank erosion. Armoring the bank with riprap has consequences downstream by narrowing the channel and thereby increasing the flow of the stream. Erosion not only increases the threat of flooding but also adds sediments to the stream, decreasing the value of the stream to fisheries. Development which relies upon additional bridging of Lolo Creek should be carefully considered.

3. Trails

Existing

Access to and through the Lolo planning region began with historic trails along Lolo Creek between Missoula and Lolo and south through the Bitterroot Valley. The trails along Lolo Creek, extending into Idaho, have historic significance that should be preserved.

As stated earlier, MDT constructed a separated multi-use path between Lolo and Florence along U.S. Highway 93. Other "unofficial" trails exist, especially routes to school and recreational facilities both within and outside of public right-of-way. The steps and retaining wall on the hill behind the school provide access to school from adjoining neighborhoods.

Analysis

Continuing U.S. Highway 93 paths south to provide connections between communities is a good idea. An ADA accessible trail or walkway accessing the schools should be considered in future planning, and easements should be acquired as development occurs.

Currently there is no pedestrian/bicycle link between the planning region and Missoula. Residents have expressed interest in a pedestrian connection between Lolo and Missoula and between the planning region and other recreation sites, such as the Blue Mountain Recreation Area, outlying neighborhoods, and the non-motorized trail system south of Lolo. If the Bitterroot Railroad Line is ever abandoned, converting the line into a non-motorized trial should be explored to meet a portion of this need.

4. Railroad

Existing

The Bitterroot Branch Line is operated by Montana Rail Link (MRL**)** on an infrequent basis, consisting of one to three trips per week. The tracks are located on the west side of the Bitterroot River, crossing the river five and a half miles south of the Missoula County line at the Lee Metcalf Wildlife Refuge.

Analysis

Adapting the Bitterroot Branch Line for passenger service, presumably by use of light rail cars, is an idea raised by residents. However, it is unlikely that such a project would be feasible. Light rail has been introduced in many metropolitan areas, often to the detriment of the existing transit system. Building and operating light rail is expensive, requiring high densities of housing and large numbers of commuters to sustain it. It would require improvement of the existing rail to meet high speed passenger standards.[5]

5. Policies and Strategies

Goal 5E

Ensure that transportation systems are adequate to meet the present and future needs of the Lolo planning region. Provide a safe, integrated, and efficient transportation system that allows people and products to travel through the region without negatively impacting adjacent uses and character.

1. Reduce traffic congestion and vehicle miles traveled (VMT) by such measures as encouraging opportunities for commuting and improving traffic flow.
   a) Mitigate transportation impacts of new development by supporting organizations such as the Missoula Ravalli Transportation Management Association (MR TMA) and Missoula in Motion (MIM).
   b) Review projects for their impact on traffic congestion at the intersection of U.S. Highway 12 and U.S. Highway 93 and within the commercial corridor of Lolo.

2. Encourage transportation connections between neighborhoods.
   a) Incorporate walkways and bikeways within and between existing and developing neighborhoods, especially in urban/suburban neighborhoods.
   b) When reviewing a new development, consider connection to sidewalks and walkways in nearby developed areas.
   c) Whenever possible, discourage cul-de-sacs and dead end roads; establish new connections to existing dead ends.
   d) Consider trail easements and linear parkways in new developments.
   e) Create connections in areas already developed by use of RSIDs or other combinations of public and private funding.

3. Link parks, public facilities, and open space with a network of trails or sidewalks for non-motorized circulation.
   a) Develop non-motorized connections within the community of Lolo to places such as the Community Center, the Lolo School, public parks, commercial areas, and the Travelers' Rest Historic Landmark.

[5] "The Transportation Land Use Connection" (1994) by Terry Moore and Paul Thorsnes. American Planning Association, PAS No. 448/449.

b) Develop non-motorized connections within the region to places such as the Blue Mountain Recreation Area, outlying neighborhoods, and the non-motorized trail system south of Lolo adjacent to U.S. Highway 93.
c) Incorporate the recommendations of the "Guidelines for Creating a Non-Motorized Travel Network in the Greater Missoula Area" and the current *Non-Motorized Transportation Plan* into new development.
d) Extend a north-south pathway linking communities along U.S. Highway 93, and extend secondary pathways to nearby communities and to the Bitterroot River.
e) Create non-motorized transportation connections to Missoula and up Lolo Creek Canyon within the U.S. Highway 12 right-of-way in order to link Lolo to other regional recreation areas and outlying neighborhoods.
f) Utilize edges of the public road rights-of-way for non-motorized transportation.
g) If the Bitterroot Branch is abandoned for railroad use, explore development of a non-motorized trail and greenway (Rails to Trails) linking the Bitterroot and Missoula Valleys.
h) Create a greenway along U.S. Highway 93 through the community of Lolo, incorporating planted medians, boulevard sidewalks, landscaping and other pedestrian elements such as lighting and thematic banners.
i) Extend the concrete sidewalks north of Lolo Creek adjacent to U.S. Highway 93.

4. Develop transportation systems which do not result in an adverse impact to sensitive natural resource areas.
   a) Design new bridges across Lolo Creek that do not alter the width of the creek, require bank armoring, increase the rate of stream flow, or increase the potential for flooding.
   b) Build bridge structures so that they do not significantly alter drainage or riparian areas associated with major water bodies such as Lolo Creek or the Bitterroot River.

5. Reduce the speed of automobile traffic on U.S. Highway 93 and U.S. Highway 12 within the community of Lolo.
   a) Establish setback and landscaping standards for that portion of U.S. Highway 93 and U.S. Highway 12 within the community of Lolo.
   b) Pursue measures to implement "highway beautification guidelines."
   c) Create entrance "gateways" to the community of Lolo.
   d) Incorporate pedestrian elements such as boulevard sidewalks, pedestrian-scale lighting and landscaped medians along the highway through Lolo.

6. Develop improved pedestrian crossings along U.S. Highway 93 and U.S. Highway 12, within the community of Lolo.
   a) Consider the safety of pedestrians crossing U.S. Highway 93 and U.S. Highway 12 when reviewing development proposals.
   b) Improve existing pedestrian crossings.

7. Consider future growth when designing the transportation system.
   a) Incorporate into development approval, roads and trails that will accommodate current and potential development as anticipated by this Plan.

8. Recognize the desire of the community to achieve designation for U.S. Highway 93 and U.S. Highway 12 as Official State of Montana Scenic Byways and National Scenic Byways.

9. Work with state and federal agencies to identify and develop wildlife crossings in appropriate locations on U.S. Highway 93. Support efforts to establish wildlife crossings on other roads where appropriate.

Part 5F: Parks, Recreational Lands, and Open Space

Introduction

Outdoor recreation and open space contributes to the mental and physical well being of the community's residents. The opportunity to enjoy outdoor recreational experiences is a central component of a desirable quality of life to county residents, and a wide variety of recreational amenities are available in the planning region. Recreation features are attractive to non-residents, as well, and help support related businesses such as motels, restaurants, sporting good supplies, and outfitting and guide services.[1]

Developed parklands provide areas for active recreation, entertainment, and education. Undeveloped parklands and open space can provide passive recreational opportunities. Both developed and undeveloped parks provide transition and separation from other developed land uses. Open space lands also protect natural resources, wildlife habitat, views, and the natural beauty of an area. This section describes open space lands, large areas of recreational lands, and parks in the planning region.

1. Existing Conditions

Open Space

Open space protection is an important consideration in both regional planning efforts and development design. Linking open spaces through functional connections for wildlife movement, agricultural operation, river and stream corridor protection and maintenance, or protection of a significant view is important to maintain a sense of regional character.

The *Inventory of Conservation Resources* refers to open space as those 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, or which provides a visual buffer around important open space features. Visual, not physical access, may be sufficient for the public to appreciate such values, however open space should be integrated within developing communities. These lands may have open space functions beyond scenic value, such as floodplain or drainage retention, wildlife habitat, and recreation.

Montana State Law defines Open Space as any land that is provided or preserved for:

(a) Park or recreational purposes;
(b) Conservation of land or other natural resources;
(c) Historic or scenic purposes; or
(d) Assisting in the shaping of the character, direction, and timing of community development.

More specific types of open space include buffers, recreational lands, unique natural lands, view corridors, and access lands that provide trailheads or public access to natural areas.

Many of the resource areas described in Chapter 4 provide open space for the region and its neighborhoods and communities. The *Inventory of Conservation Resources* identifies lands along the Bitterroot River and river valley and along Lolo Creek and its major tributaries as having open space value. The community may identify additional lands as having open space value.

[1] *Inventory of Conservation Resources* (1992).

One of the challenges in open space protection is the utilization of the most appropriate protection mechanisms. These need to satisfy both the community's open space interests and the property owners' desires for their property. A variety of protection mechanisms are available**,** such as partnerships with government and non-governmental organizations, conservation easements, access easements, transfer of development density, or acquisition through donation, land exchange, or purchase. Various funding sources are available.

Open space areas should be managed in a way that protects natural areas, minimizes individual and cumulative impacts to natural ecosystems, provides for aesthetic enjoyment, reduces conflicts among users, and considers user safety. Some open space areas can be managed for passive recreational uses in accordance with property specific management plans.

Recreational Lands

Hikers, equestrians, and mountain bikers use trails and existing logging road networks in the planning region for recreational activity. The opportunities offered by such a vast resource include hunting, fishing, berry picking, wildlife viewing, wood gathering, backpacking, rock and ice climbing, and photography within the planning region.

The majority of the land within the Lolo planning region (234,870 acres, 78% of the planning region) is comprised of either public or privately owned land that is open to public access. Primarily the United States Forest Service (USFS), State of Montana, and Plum Creek Timber Company own these lands.

Federal Land

Currently, approximately 116,176 acres within the Lolo planning region are federally owned. The USFS lands within the Lolo Creek watershed have considerable recreation opportunities including managed campsites at the Lee Creek and Lewis and Clark campgrounds that provide 39 developed campsites. The Lolo Workstation, located approximately .5 miles east of Howard Creek and south of U.S. Highway 12, is scheduled for campsite development in 2001. The USFS also manages day-use areas at the Howard Creek and Fort Fizzle interpretive areas. In addition, the USFS has acquired access rights to the Lolo Trail from Howard Creek to Lolo Pass. They intend to maintain the trail in its natural condition with no additional development planned. The USFS also maintains one backcountry cabin in the region

At the headwaters of the Lolo Creek watershed, an upgraded USFS Lolo Pass Visitors Center and warming hut with a groomed ski trail network are major winter destinations for cross-country skiers and winter recreation enthusiasts. Snowmobiling in the area has grown in popularity in recent years.

In 1988 a downhill ski area was proposed for an area north of Lolo Peak. However, it was found unfeasible because of limited snowfall. If such a proposal were ever to be revisited, the *Lolo Regional Plan* and the *Missoula County Growth Policy* would be utilized to determine if the proposal would comply with regional and County goals. Projects of this magnitude require several separate public review processes, including Environmental Assessments or Environmental Impact Statements.

State Land

There are currently approximately 7,251 acres of State owned land within the Lolo planning region. Public access to state lands is permitted in most cases, as long as a Montana State Lands recreational use license is acquired. Currently, Fish Wildlife and Parks (FWP) and Department of Natural Resources (DNRC) both manage State land within the planning region.

FWP provides management for state lands set aside for conservation, including state parks and fishing access areas. Currently, FWP manages 66 acres of land within the planning region--the Lolo Fishing Access Area, Chief Looking Glass Campground, and Traveler's Rest. This land is designated either as Parks and Open Space or Open and Resource.

DNRC manages approximately 7,185 acres of State land within the planning region that is under state mandate to provide revenue for school funding, and therefore is managed more like private or corporate land. If possible, future development and use of these lands should be coordinated with other uses and offer recreational opportunities to the region. Adjacent land ownership should consider uses on DNRC parcels when developing an overall management and use plan. Trust land is designated either as Open and Resource or Rural Residential – one dwelling unit per ten acres in this Plan.

Corporate Land - Plum Creek Timber Company

Plum Creek currently owns approximately 67,000 acres within the Lolo planning region (see Maps 4C-1A, B, and C in the Maps section). Corporate timberlands in the region have been recreational assets to residents in all seasons. The current corporate owner, the Plum Creek Timber Company, has an open land policy allowing access. State and Federal regulations must be adhered to while on their lands, as well as any company policies for the area. Many access roads have voluntarily been gated or kelly-humped (bermed to discourage motorized access) to limit motorized access into wildlife wintering areas.

Private Recreation Facilities

Private recreational camping facilities are available at three locations along U.S. Highway 12. The private recreation vehicle campgrounds provide approximately 60 tent sites and 137 RV sites. The potential for future commercial recreational facilities and sites is more fully discussed in Chapter 7C.

Parks

The Lolo region has 29 public parks and private common areas, including the Lolo School lands, encompassing nearly 150.3 acres. For more specific information on County park land policy and recommendations, see the *1997 Missoula County Parks and Conservation Lands Plan*.

There are several types of parks, including community, pocket, conservation, and common area. Parks can be divided into these types on the basis of area, existence and type of structures within the park and the general uses. (See Map 5F-1 in the Map section for the location of parks in the Lolo area.)

Community Parks

Community parks can range in size from 2 to 40 acres, depending on the size of the community, and typically contain structures and facilities that can hold large groups. They are generally destinations that should be linked to other areas by sidewalks or pathways. Three sites in the planning region serve as community parks due to their size, location, or particular characteristics, such as access to water.

Lolo Community Center: The Community Center is a primary gathering place for dances and meetings; the ten acres of grounds are used for Little League, soccer and general recreation. Improvements, including the irrigation of additional play fields, are ongoing. Located just south of U.S. Highway 12 on U.S. Highway 93 in Lolo, the Center is owned and managed by the community through the Community Center Board of the Lolo Community Club.

Lolo Beach: Lolo Beach, also known as Riverside Park, is an 11-acre County park with approximately 1,900 feet of Bitterroot River frontage. It is an important gathering place for the community. Lolo residents primarily use the park for swimming, fishing, walking, and picnicking. It is also often used for boating and tubing access to the river. Use of Lolo Beach is hindered by two factors: difficult access to the river via steep embankments, and difficult access to the main beach across a small side channel, or slough. Recently, access has been improved with the addition of steps and reworking the bank. Furthermore, the park is gated and locked at night. Access to the park is possible by contacting the Sewer District.

Lolo Elementary School: The elementary school grounds have numerous play structures and fields for football, soccer, and baseball. This is an important play area through the year. In addition, the Lolo School District owns a 20-acre parcel accessed from Farm Lane on the east side of U.S. Highway 93. This site was originally purchased for building a high school facility for the district, although it may now be appropriate for recreation.

Pocket Parks

Pocket parks are publicly dedicated and are generally small and integrated into the surrounding neighborhood. Size and level of improvements are intended to support the nearby residents. A connection via sidewalks and pathways to the park from streets and other neighborhoods is very important.

There are 19 existing pocket parks in the Lolo region. Most are located within the community of Lolo, having been dedicated as part of subdivision requirements. The sites range in size from 0.1 acres to 4.5 acres. They are often located within neighborhoods or serve as linkages and linear parks (walkways) providing transition areas between neighborhoods.

Conservation Parks

Conservation parks are publicly dedicated and are characterized as being primarily in a natural state and protecting sensitive habitat or important natural features. There are no structures, a low number of active uses, and few encounters with other users.

Six sites within the Lolo planning region qualify as conservation parks, including Leo Hansen, Allen, Lewis and Clark, Thayer Memorial, and the Missoula County parcels near the upper water reservoir above the Scattered Pines subdivision. They range in size from 1.7 acres to 7.5 acres. These sites comprise of 26 acres and are generally located in more rural areas or at transitions between resource-sensitive areas and more developable sites.

Common Areas

Common areas are owned by a homeowner's association. Often, homeowner associations are incorporated for the purpose of owning and maintaining the common area within a subdivision. Subdivision covenants may provide restrictions on the use of the common area and the assessment of dues for maintenance. Use is usually restricted to those within the dues paying subdivision.

There are 12 common areas within the planning region. These sites range in size from 0.3 to 5.9 acres. These areas are typically provided for recreation within the particular subdivision and are owned by a homeowner's association. There are two additional areas that were originally designated as parkland that have since reverted to private ownership.

Travelers' Rest State Park

The Travelers' Rest site is located west of the intersection of U.S. Highway 12 and U.S. Highway 93 along Lolo Creek. Preservation and interpretation of the area around Travelers' Rest is underway, including archeological studies to identify the site's extent. The project has received funds from Federal, State, county, non-profit, and private sources for establishing and developing the 15-acre State Park. An additional four acres adjacent to the park has been set aside by private owners to be included in the future. Adjacent lands and land north of Lolo Creek may also be acquired to buffer adjacent land uses or provide parking and service areas for the public.

The local and national heritage associated with Travelers' Rest and the Lewis and Clark Trail will play an important role in the future of the region. The site represents an area of historical significance both for Native American and Euro-American culture. The new park will increase exposure to the actual location of the landmark and generate increased tourism in the area.

2. Analysis and Park Needs

Need for Additional Parks

According to the *Missoula County Parks and Conservation Lands Plan*, the amount of community parkland in Lolo will soon be inadequate to meet the needs of the growing population. The community needs more parks for active recreation, conservation and historic preservation, and interpretation. The 20 acres of school district lands on the east side of U.S. Highway 93 is recommended for use as an active recreation area. Acreage along Lolo Creek or the Bitterroot River could provide a conservation-based community park.

The *County Parks Plan* also states that most areas in the Lolo region have an adequate number of pocket parks. However, as lands are subdivided into urban neighborhoods, pocket parks should be dedicated to serve the needs of future residents.

Land dedication requirements for new subdivisions are set forth in Section 3-8 of the *Missoula County Subdivision Regulations*. The regulations allow the governing body, in consultation with a subdivider, to determine whether the dedication of park land required by subdivision review will be land, cash-in-lieu, or a combination of the two. The amount of cash required from the subdivider amounts to the fair market value of the unsubdivided, unimproved land that would have been dedicated. The cash-in-lieu funds may be utilized to improve or maintain existing parks or acquire new parkland in the area.

Parklands between neighborhoods on the hill serve as linear parks and pathways for residents. Children utilize these corridors to walk and ride bicycles to Lolo School. Citizens identified a need for additional connections between neighborhood parklands and important community sites such as the school or the Community Center. The opportunity exists to create these links by developing non-motorized pathways or pedestrian walkways and sidewalks. The new pathways should connect with and complement proposed pathways and sidewalks within the U.S. Highway 93 right-of-way.

The public has identified access to Lolo Creek and the Bitterroot River for fishing and recreation opportunities as desired goals. Currently, public access to these areas is restricted to public bridge crossings on Lolo Creek, at Chief Looking Glass, and Riverside Park (Lolo Beach) on the Bitterroot River.

Public acquisition of additional parklands could be considered in areas that are in need of recreation sites and cultural preservation, such as the Travelers' Rest National Historic Landmark. If appropriate, Missoula County could consider land trades or accepting donated lands if community needs and opportunities are considered and public process supports park land sales, future acquisitions or land exchanges.

Community Garden

Residents identified a desire for public community garden sites in Lolo. A similar program was initiated in the City of Missoula and in East Missoula with efforts coordinated by the Garden City Harvest Project. No specific location was identified, but it may be possible to develop some of the smaller pocket parks or portions of the larger sites to include garden areas. In order for a garden site to operate, irrigation and fencing will likely be required on the parcel. Future developments could also provide garden space in satisfaction of parkland dedication or install improvements to support a garden and landscaping as a subdivision amenity or in an effort to mitigate adverse impacts of a subdivision.

Florence-Carlton Park District

There has been interest shown for the establishment of a Rural Special Improvement District (RSID) to serve parks in the Florence-Carlton area. The proposal includes the purchase and maintenance of a ten-acre tract with the possibility of incorporating an additional ten acres in the future.

Park Maintenance

Maintenance of the region's parklands has been discussed in the planning process. Currently, Missoula County has limited funds to maintain county parklands. Often neighborhoods "adopt" adjacent park facilities, but this does not secure permanent maintenance and operation.

A small local park district in the Community of Lolo Development Area was established for maintenance of Willow Park in 1984. The RSID 907 (Willow Park Maintenance RSID) was petitioned by the adjacent homeowners to ensure continuing care for the park. Currently, Willow Park is the only empowered RSID dealing with parkland in the district and requires 17 households to remit a flat annual fee to cover the maintenance costs.

Aside from the Willow Park Maintenance RSID 907, residents have discussed the creation of a comprehensive Park District that would levy an assessment for maintenance of public parks and, if possible, highway rights-of-way and other beautification projects.

Decisions regarding park needs, maintenance needs, and improvement plans should consider the comprehensive park needs of both the Community of Lolo and the planning region. For instance, as subdivisions are added on the east side of U.S. Highway 93 and on the hill in Lolo, those areas will become "self-contained" neighborhoods. These neighborhoods will need areas for organized sports. If no parklands are dedicated**,** then connections (sidewalks, pathways or trails) to developed playing fields serving the community and neighborhoods should be established within and between these areas. Weed control is also an important aspect of park maintenance.

3. Policies and Implementation Strategies

Goal 5F

Protect open space resources. Provide recreational opportunities for community residents.

1. Conserve significant open space resources.
   a) Identify open space resources.
   b) Develop appropriate setbacks from roads, ridgelines, and rivers to protect open space resources and historic or culturally significant viewsheds.
   c) Implement incentives for clustering residential units on parcels so that significant portions of the area remains as open space.
   d) Support the creation of a Bitterroot Riverfront Corridor for conservation purposes.

2. Improve access to water resources and public areas where appropriate.
   a) Explore the need for additional fishing access points on Lolo Creek and the Bitterroot River.

3. Develop a program for use, improvement, and management of existing parklands and recreation facilities in Lolo as needed or required.
   a) Encourage expanded recreational facilities (indoor and outdoor) for youth. Explore improvements to the Lolo Community Center, such as a running track, basketball and tennis courts, a swimming pool, additional play equipment, and overall landscaping.
   b) Explore the creation of public community garden sites.
   c) Provide financial assistance and maintenance to schools, parks, and the community center as development occurs.
   d) Develop acceptable weed management strategies for public parks.
   e) Create and facilitate funding mechanisms for county park maintenance (e.g. local maintenance RSID or Park District).

4. Include areas of cultural resource and linear connections into a parks system through land acquisition, lease, donation, or in partnership with federal and state agencies, private individuals, or organizations.
   a) Establish linear parkways that connect important cultural and natural resources.

5. Consider public acquisition of parkland.

Part 5G: Community Facilities and Services

Goal 5G

Ensure that community services are adequate to meet the present and future needs of the Lolo region.

Introduction

This section addresses community services and facilities that support the planning area. Included are current needs for utilities, schools, emergency services, and other community services.

During the planning process, residents of the area raised some key issues regarding community services.

- Developers should contribute money for improvements.
- Costs are too high for the services citizens are receiving presently.
- New development should pay its own way**,** yet not be expected to take care of current needs of other developments.
- Keep fees for development (impacts and cash-in-lieu) in Lolo.
- New infrastructure must be well constructed and compatible with existing systems.

Community service needs were identified and current levels of service, capacity for increased development, and resulting levels of service were considered in this Plan. In general, service providers reported available capacity and a willingness to supply additional services. Service providers and owners of major infrastructure in the Lolo region include:

Table 5G-1: Utility and Public Service Providers List

Infrastructure Providers	Service
NORTHWESTERN ENERGY	Natural Gas And Electricity
MISSOULA ELECTRIC COOPERATIVE	Electricity
COUNTY OF MISSOULA	Sewer, Municipal Water, Road Maintenance, Bridges, Public Parks
CHARTER COMMUNICATIONS	Cable Television
MONTANA DEPARTMENT OF NATURAL RESOURCES and CONSERVATION (DNRC)	Water Rights (surface and sub-surface), Timber, Mining, Wildland Fire Protection
BROWNING FERRIS INDUSTRIES (BFI)	Garbage Service
QWEST and various other providers	Telephone and Fiberoptic
MISSOULA COUNTY SHERIFF	Law Enforcement protection
MONTANA HIGHWAY PATROL	Law Enforcement protection
MISSOULA RURAL FIRE	Fire protection
MISSOULA EMERGENCY SERVICES INC.	Ground Transportation for Medical Emergencies
LIFE FLIGHT	Helicopter ambulance for remote or difficult locations, or high speed needs
SCHOOL DISTRICTS 7, 18, 15-6 and MISSOULA COUNTY PUBLIC SCHOOLS	Lolo, Woodman, and Florence–Carlton Schools

1. Utilities

Availability of utilities vary widely throughout the planning region. Within the Community of Lolo Development Area and the Sewer Service Area, some development is connected to municipal sewer and water, and some is not; development outside of the Sewer Service Area uses either individual or community septic systems or water systems. Beyond the Community of Lolo Development Area residents rely exclusively on individual or community septic and water systems.

Other utilities, including electrical, cable, natural gas, and telephone**,** are available within the planning region and are available upon request.

Power and Gas

Northwestern Energy operates an eight-inch underground high-pressure natural gas line in the foothills east of the Bitterroot River. It provides service to and from the Bitterroot Valley. A gas gate station is located within the Community of Lolo providing local distribution. Future development may require locating an additional gate station within the planning region.

Northwestern Energy also operates numerous overhead power lines that link Missoula operations to the Bitterroot Valley. Two parallel 161 kilovolts (kV) overhead power lines run along the hillside east of the Bitterroot River uninterrupted all the way to Hamilton. A couple 69 kV overhead power lines are used primarily to provide local service to the Community of Lolo and goes to approximately .5 miles west of Guy's Steakhouse Restaurant. A power substation is located within the community serving power to the local area. Northwestern Energy also provides service to users within the direct vicinity of the overhead power lines in the North Bitterroot.

Other power companies operating in the area are Missoula Electric Cooperative and Bonneville Power Administration (BPA). Missoula Electric Cooperative (MEC) serves most of North Bitterroot Valley and the Lolo Creek Valley extending to the Idaho border. An MEC substation exists south of Lolo Creek to serve the Bitterroot Meadows Subdivision area. BPA operates a high voltage 500 kV that crosses through the north portion of the planning region.

Concern about potential human health effects resulting from exposure to overhead power lines has been expressed. Research and data regarding this subject are not conclusive. Visual and proximal buffers should be considered when development occurs near utility corridors. Northwestern Energy does not have specific recommendations regarding how far residences should be from power lines, but there is no measurable electromagnetic field 50 feet away from a 100 kV line.[1] BPA does not have specific recommendations regarding how far residences should be from power lines. According to BPA publications, the typical electric field level 300 feet away from a 230 kV line is 0.01 kilovolts/meter (kV/m) and the mean magnetic field level is 0.8 milligauss (mG). Ambient magnetic field levels are generally considered to be one mG or below.[2]

Both Northwestern Energy and the Missoula Electric Cooperative will be able to serve the growing planning region. The four Northwestern Energy distribution lines running north-south in the Plan area are adequate without any plans to bring any physical new transmission lines at this time.

[1] According to Northwestern Energy.
[2] According to BPA Publications.

Sewer and Water

Lolo Sewer and Water Districts - RSID 901

The combined Lolo Sewer and Water District was established in 1968 with the creation of the Rural Special Improvement District (RSID) 181. In addition to RSID tax revenue, a U.S. Environmental Protection Agency grant and money from the Riverside Development Company of Lolo funded the water and sewer facilities. RSID 901 was established in 1973 to operate and maintain the sewer plant and the public water system encompassing approximately 640 acres. Two full-time employees and additional part-time employees staff the district. The district is guided by a five-member citizen advisory board appointed by the Missoula Board of County Commissioners from residents living within the district boundary. The Citizen Advisory Board approves all policies, major decisions, and actions taken by the district.

Sanitary Sewer RSID 901 funds the operation of the sanitary sewer system and wastewater treatment plant that is located in the northeast end of the community adjacent to the Bitterroot River (see Map 5A-1 in the Map section.) The Wastewater Treatment Plant provides secondary treatment of domestic and commercial wastewater collected within the sewer service area through treatment and settling ponds. Effluent is treated and discharged into the Bitterroot River. Portions of the Lolo Wastewater Treatment Plant are close to the 100-year floodplain and floodway fringe of the Bitterroot River.

There are 851 available connections to the municipal sewer system.[3] The current RSID 901 customer-base consists of 825 residential and commercial connections and committed capacity for 26 undeveloped parcels that have been paying for the potential to hook-up. All existing commercial uses inside the RSID 901 District are connected to sewer.

Sewer Study Plan In 1997 Missoula County initiated a study of the existing sewer and water service area that considered basic sanitation system improvements, technical advancements to improve the level of treatment, and district expansion to areas currently not served or in need of sanitary sewer. Additional connections beyond the 851 will require expansion of the treatment facility. Improvements to the facility may also be required to comply with stricter federal standards for treated effluent discharge into the Bitterroot River. The *Lolo Wastewater Facility Plan* for Lolo RSID 901 was finalized and adopted by the Commissioners in January of 2000.

The *Lolo Wastewater Facility Plan* outlines a number of scenarios to be considered for upgrade and expansion of the existing system and includes a revised Sewer Study Area boundary. This Sewer Study Area describes the area that the facility should be sized for and guides the majority of areas of urban residential density and commercial development. Some areas outside the Sewer Study Area are designated for Urban Residential density or Light Industrial use, and development will need to be coordinated with the *Lolo Wastewater Facility Plan*. The Sewer Study Area encompasses areas south of Mormon Creek Road to the Bitterroot Meadows subdivision, west along U.S. Highway 12, north to Ridgeway Drive, and east to the Bitterroot River. (See Map 5A-1 in the Map section.) The *Lolo Wastewater Facility Plan* may be amended to include land outside of the Sewer Study Area established in this Plan.

Municipal Water The Lolo Municipal Water System is comprised of four water wells located within the aquifers of the Bitterroot River and Lolo Creek. The wells are located close to the Montana Rail Link Bitterroot Branch line and existing County roads. Three storage reservoirs, holding 750,000 gallons of water, are located on the hill in Lolo and provide gravity flow to the community.

[3] According to the Supervisor of the Lolo Wastewater Treatment Facility, as of August, 2000.

Excessive water usage occurs in Lolo during the summer months. The District has established days and times for domestic irrigation. In addition, the Commissioners approved a district requirement that all new owners of existing homes or newly constructed homes install water meters at the time of sale.

Sewer Extension It is more expensive to extend sewer and water to developed one-acre tracts currently served by septic systems and on-site wells than to plan for sewer extension in the early stages of development. The cost of installation of long trunk lines is spread over fewer residents and service lines on large lots are expensive. If subdivisions are served by community septic systems these community systems can be designed to be compatible with municipal sewer connections.

2. Schools

There are four school districts within the Lolo planning region: Missoula County Public Schools, Lolo School District, Woodman School District, and Florence-Carlton School District. The focus of this Plan will be on the three school districts that are most directly affected by the Plan: Lolo, Woodman, and Florence-Carlton. (See Map 5G-1 in the Map section.)

The planning region is experiencing varied enrollment changes in each district. State funding of schools is tied to enrollment. Local funding is tied to the property tax base. Increased development may provide additional funding for schools. All three districts rely upon residential property tax due to the lack of a commercial or industrial tax base. In addition, shifts in population demographics and population growth rate make estimating student enrollment very difficult. An increase in student population may not be adequate to substantially increase funding for the respective districts.

Lolo School District

There are approximately 11,250 acres in the elementary School District # 7 serving the community of Lolo's kindergarten through eighth grade. Students in grades 9-12 attend Big Sky High School in Missoula. Students are bussed or drive to school. The original Lolo School was constructed in the 1880s and burned down in the late 1890s. The replacement, a one-room schoolhouse, was built in the early 1900s and is still in use today as the middle school office. The historic Lolo School is one of the last remaining and oldest standing structures in Lolo. The Lolo School campus has expanded as enrollment increased with major additions occurring in every decade since the 1950s, including a new building in 1995.

In 1978 a 20-acre school site east of U.S. Highway 93, accessed from Farm Lane, was acquired for the intended location of a middle school or high school. The Missoula County High School District built Big Sky High School in 1980, and the 20-acre parcel remains vacant and leased as pasture. The school has also used the land as a track and field training area and a recreation site.

Enrollment at Lolo School increased steadily with the general population in the district. In 1958, 42 students were enrolled in the district; in 1995 enrollment was 663 students. The facility has expanded to accommodate student population. Enrollment has leveled at approximately 600 students. The Lolo School is not at capacity and can accommodate additional students. Development of commercial uses would provide a more stable source of funding for the district.

The school is located along U.S. Highway 93 in the center of the community. Students who are walking to and from school from east of Highway 93 cross the major arterial during peak commuting hours with the help of a signalized intersection, a crossing guard, and posted speed limit signs that reduce traffic from 35 mph to 25 mph. Recommendations for an improved pedestrian crossing design are included in the "Community Design Guidelines" (see Appendix 6-A).

Woodman School District

There are approximately 160,871 acres in School District # 18 serving kindergarten through eighth grade. Students in grades 9-12 attend Big Sky High School in Missoula. Students are bussed or drive to school.

A log schoolhouse was constructed in 1890 very near the existing school site to serve the families of the Woodman community. The original school was replaced with a one-room structure in 1902. That structure still stands but is incorporated into the current Woodman School which now serves the Lolo Creek Canyon area, west of the Lolo School District boundary.

School enrollment has followed the development pattern of Lolo Canyon. In 1955 enrollment was 17 students and in 1960 the student population had grown to 37. Enrollment peaked in the 1970s with 76 students. The 2000-2001 school year student population was 54 students. The district has capacity for additional students.

Florence-Carlton School District

School District #15-6 serves residents in both Missoula and Ravalli Counties' grades K-12. There are 27,220 acres in the Missoula County portion of the Florence-Carlton School District serving the North Bitterroot Valley to within .5 miles south of Lolo (see Map 5G-1 in the Map section).

In 1876 all the area west of the Bitterroot River between Lolo Creek and Bass Creek comprised the Florence School District #13. The consolidated district #15-6 was established in 1915 after several shifts in the district boundaries. The present school site in Florence was opened in 1906 and the first class graduated in 1918.

Enrollment at the Florence-Carlton School was 150 students in 1956, 608 students in 1987 and 948 students for the 2001-2002 school year. The Florence-Carlton school district is currently at capacity and voters rejected a mill levy in 2001 to build a new school.

3. Emergency Services

Fire

Two rural fire districts serve the study area: Missoula Rural Fire (Lolo Station) and Florence Rural Fire. The Missoula Rural Fire District serves approximately 8,115 acres while the Florence District includes approximately 4,281 acres within Missoula County (see Map 5G-2 in the Map section).

Missoula Rural Fire – Lolo Station

The Missoula Rural Fire Lolo Station is located adjacent to the Lolo Community Center on the west side of U.S. Highway 93 between the intersection of U.S. Highway 12 and Lolo Creek. Missoula Rural Fire has provided this service since 1973. The fire district has a mutual response relationship with the Florence Rural Fire Department for calls in the North Bitterroot Valley and Lolo Creek. It receives backup from the Rural Fire District station located at the South Avenue and Reserve Street intersection in Missoula. The Lolo Station is staffed by two professional rural firefighters. One firefighter is on duty 24 hours a day, and a second firefighter is on duty between the hours of 8:00 a.m. through 5:00 p.m. with

additional support from a trained volunteer force, providing structure and wildland fire suppression as well as emergency medical technician (EMT) services. Currently, emergency patient transport services are furnished by Missoula Emergency Services and Life Flight.

Wildland fire suppression is provided in conjunction with the Lolo National Forest and the State of Montana Department of Natural Resources and Conservation (DNRC). The Lolo Station also responds to calls outside of the district, up to Lolo Hot Springs and Lolo Pass. In addition to fire fighting and EMT support, the rural fire staff provides public assists, public education, and inspects businesses and commercial buildings.

The Lolo Fire Station is considering expanding to add a storage bay for vehicles, possibly adding another full-time firefighter and an ambulance.

Florence Fire District

The Florence Rural Fire Station is located in the community of Florence within Ravalli County and is staffed by volunteers. The district has a mutual aid agreement with the Missoula Rural Fire District. Some of the areas served are remote locations with increased response times, and some are located in areas of Wildland Residential Interface. Development needs to incorporate defensible space around dwellings and provide roadways adequate to accommodate emergency services.

Parts of the planning region are considered to be within Wildland Residential Interface areas. Fire Departments access whether a property is within or out of a Wildland Residential Interface area. Properties that are within such areas should have driveways that are designed to offer a viable escape route, allow for two vehicles side by side, and include a turnaround at any dead end. They should also provide a source of firefighting water. A resource for information on protecting structures from wildfire is a video developed by Jack Cohen titled "*Protecting Your Home from Wildfire*." It is available for rent at video stores and the local fire departments. (See Chapter 4C for more information on "Wildland Residential Interface.")

Sheriff

The Missoula County Sheriff's Department currently has 45 sworn officers. The nationally accepted state average is 1.5 officers per thousand people. At the present rate, the Sheriff's Department is funded to protect a population of 30,000. Missoula County outside the city limits is estimated at over 38,000, which leaves the department at least 12 deputies short of providing basic law enforcement services. The Sheriff's Department has been under increased pressure just to maintain basic services. Missoula County is participating in an "impact fee" study that could result in impact fees assessed for Sheriff Department needs to meet growth. With this in mind, the Missoula County Sheriff's Department provides law enforcement services to the best of its ability.

The Sheriff's Department coordinates with other law enforcement personnel in the region**,** including United States Forest Service (USFS), Montana Department of Fish, Wildlife and Parks (FWP), Highway Patrol, Ravalli and Beaverhead County Sheriff's Departments, and Missoula City Police. These other agencies function as back-up to the Sheriff's Department. Of the five county patrol zones, one patrol is assigned to cover Lolo except when needed elsewhere.

In cooperation with the USFS, the Missoula County Sheriff patrols forest lands and campgrounds. The Sheriff's Department, two other Montana counties**, (**Ravalli and Beaverhead**)**, five Idaho counties, and the USFS have created a public safety plan for handling the increased visitors during the Lewis and Clark Bicentennial. The effort is funded by a grant and the law enforcement agencies have also requested Congressional funding.

Ambulance

Ambulance service is provided by Missoula Emergency Services (MES) in cooperation with other emergency service providers in a tiered response system. MES currently receives less than one call per day for ambulance service in the planning area, including portions of Ravalli County. In 1998 MES determined that locating an ambulance in Lolo was not warranted until there were at least two calls per day.

4. Other Services

Medical

Local medical services are available at the Lolo-Florence Family Practice, including two dental offices (Birdsong and Lolo Dental Clinic), Old Tyme Chiropractic, and the Lolo Physical Therapy office. Additional services are provided in Missoula at Community Medical Center and Saint Patrick Hospital. Given the fact that the population is aging, the need for facilities for special care of elderly and disabled will be increasing.

Community Facilities

Other community facilities that exist in the Plan area include the community center and the post office. The Lolo Community Center is described in the "Parks, Recreation, and Open Space" section of the Plan. The opportunity for non-motorized connection between these facilities and others mentioned in this chapter, especially the school, is very important. Linking the facilities helps to unite the facilities with common features and communicates to the community the importance of these places (see Map 5G-3 in the Map section).

Carlton Cemetery District

The Carlton Cemetery was established in the late 1880s next to the Carlton Community Church, a non-denominational place of worship established in 1884. The cemetery district was formed in 1945 to fund the operation and maintenance of the cemetery. Both the cemetery and the church continue to serve the residents of the North Bitterroot and Lolo. (See Map 5G-4 in the Map section.)

Lolo Mosquito Abatement District

The unexpected consequence of creating the Lolo Lakes and the residential subdivisions that were developed on their banks was an increase in the number of mosquitoes. Montana's only Mosquito Abatement District was created in 1978. Board members are appointed by the Board of County Commissioners and serve three-year terms. Board activities are coordinated through the Missoula County Extension Office. A tax is levied to fund the control measures which have included biological control of mosquito larvae with fish, limited application of bio-cide mists, and community education.

5. Policies and strategies

Goal 5G

Ensure that community services are adequate to meet the present and future needs of the Lolo region.

Policies and Strategies

1. Accommodate development without placing undue financial burden on existing property owners for infrastructure and other needs.
   a) Design cost sharing formulas and plans for infrastructure in cooperation with area property owners prior to the construction of each project that will distribute costs equitably among existing users and future users.

2. Install infrastructure and development amenities concurrently with new development (sewer, water, roads, trails, parks, drainage).
   a) Create Rural Special Improvement Districts (RSIDs) and seek enhancement grants to assist with infrastructure extension and retrofitting.

3. Coordinate sewer and water infrastructure planning in conjunction with this Plan, growth projections for the community of Lolo, and nutrient reduction goals of the Voluntary Nutrient Reduction Program (VNRP).

4. Provide sanitary sewer service to existing developed areas close to sanitary sewer lines and areas proposed for development within the Sewer Service Area in this Regional Plan.

5. Amend the *Final Wastewater Facility Plan, Lolo RSID 901* as needed to serve development directly adjacent to the Sewer Study Area, as described in the facilities plan.

6. Consider flood hazards to the Lolo Wastewater Facility, private landowners, and water quality when approving facility upgrades and extension.

7. Implement residential water conservation measures to protect the RSID 901 water supply.

8. Maintain adequate police and fire protection in the area.
   a) Mitigate the impact of development on the providers of emergency services.

9. Encourage a land use pattern that facilitates provision of emergency services.
   a) Concentrate the location of urban residential development and commercial uses to facilitate the provision of fire and police protection at an urban level of service as determined by the emergency service agencies.
   b) Consider response times for emergency services when determining appropriate densities and locations of development.

10. Accommodate development at a pace that is in keeping with the capacity of schools.
    a) Coordinate facility planning that supports development with school districts facility plans.
    b) New development should address the impact of development on the school districts.

11. Design development in the Wildland Residential Interface area with standards that will make residences more defensible from wildland fire.

CHAPTER 6: COMMUNITY CHARACTER

Introduction

While previous chapters described and evaluated the planning region by its natural setting and built development, this chapter considers how the combination of those characteristics make desirable places. This chapter describes the existing character of each Development Area, the desired character that the residents wish to maintain or enhance, and recommended land use policies and implementation to achieve that character.

Part 6A: Community of Lolo Development Area

1. Existing Character

A description of Lolo's character is drawn from information gathered at numerous community meetings, including three community design workshops held in April 1997, May 1997, and April 1999. At each workshop citizens were asked to describe the qualities and issues of Lolo. A summary of Lolo's qualities and issues are described in the following paragraphs.

Lolo Community Center

Generally, residents of Lolo consider it a small community nestled within a rural area with incredible views and natural amenities. The people, history, wildlife, river, creek and views make this place unique. They indicated that this is a place that people care deeply about and wish to see it develop with its own unique identity. They consider the local school to be a great community asset as an educational facility, a meeting place, a major employer, a piece of local history, and host to many local activities. Lolo is a gateway to many nearby features: the Bitterroot Valley to the south; historical trails and recreational opportunities to the west; and Missoula to the north.

Lolo School

Residents identified some issues that detract from the positive character of the area including the lack of a town center, lack of public landscaping, lack of sidewalks, poorly maintained parks, and the lack of consistency for residential and commercial structures. A major detraction from the character of Lolo is the visual chaos created by the variety of signs, light poles, power lines, and asphalt. These features tend to distract from the view of otherwise enticing uses beyond.

Existing development on U.S. Highway 93 in Lolo

Residents stated their concerns over commercial development along U.S. Highway 93 becoming too much like strip development and the nature of the highway as it splits the community into two. They described concerns over excessive speed along the highways and considered planning as a way to encourage people to slow down, stop, and shop. Because so many families live in Lolo, encouraging more youth oriented programs and community gathering areas is considered an important issue. Rather than promote additional vehicular trips to Missoula, more community and recreational facilities could be planned in Lolo.

Lolo School workshop sketch

At the May 1997 workshop, fifth and eighth grade Lolo School students identified what they considered to be the five most popular qualities of the community.

- Trails for bikes and horses
- Good water
- Lewis and Clark History
- Hiking – Lolo Peak
- Clean air

Grade school students considered the look of commercial development along U.S. Highway 93 to be a major planning issue and suggested making the highway nice and planting more trees and flowers as a way to improve the aesthetics.

2. Vision

Past community design workshops identified opportunities for change in the area and established ideas on how the community might develop in the future. A common point raised in the April 1997 workshop was the desire to establish a community identity that welcomes tourists, commuters, and local residents. Three key qualities that contribute to the character of the area are development aesthetics, preservation of natural areas, and the balance between the built environment and natural setting. By continuing to improve on those qualities, the community will be able to welcome growth while still preserving its small community character. Many residents expressed positive hopes for enhancement of community character because they do not consider the area to be spoiled yet.

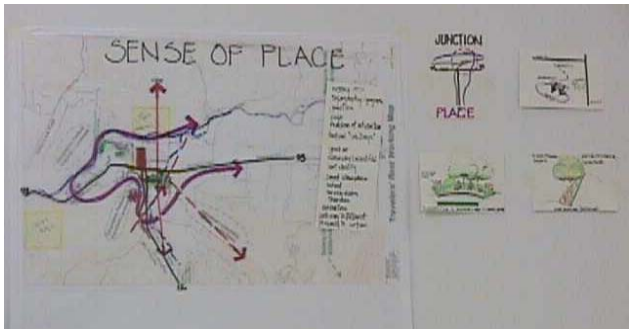
Travelers' Rest panorama

The April 1999 community design workshop (Travelers' Rest Design Charrette) was coordinated by the Planning Office and the Montana and Idaho Chapters of the American Society of Landscape Architects (ASLA). This workshop built on input gained from past community meetings and further described a vision for the community of Lolo. It generated ideas on linking the significance of the Lewis and Clark Bicentennial with community development in Lolo. The preservation of the Travelers' Rest site is integral to the image that Lolo puts forward during the Lewis and Clark Bicentennial and could ultimately benefit the economic growth of the area.

The workshop brought together over a hundred individuals to help the community of Lolo focus on improvements that would give the town a "sense of place" and also serve as a destination for Lewis and Clark Bicentennial visitors. Those attending the event included landscape architecture students, architecture students, landscape design students, and faculty from the University of Idaho and Montana State University, Lolo residents (including several key land owners), local fifth grade students, design professionals (mostly ASLA members), Lewis and Clark experts, and other interested parties.

Over the course of the two-day charrette, groups toured the community, discussed potential concepts for linking "Travelers' Rest" tourism with other key areas of the community and focused planning efforts into seven main themes listed below:

- Development of a town center
- Overlook with views of town
- Limited development and interpretive facilities at the historic campsite
- Gateways
- Non-motorized connections throughout the community
- Safe and attractive crossings of U.S. Highway 93
- Lolo "sense of place"



Travelers' Rest Design Charrette, April 1999

Many aspects of those themes are furthered through land use recommendations, design guidelines, and implementation strategies throughout the Plan. However, other aspects are more project-specific, such as the development of interpretive facilities for Travelers' Rest, and are beyond the scope of this Plan. Key themes that are described in this chapter are the development of a town center, gateways, safe and attractive crossings of U.S. Highway 93, and "sense of place."

Key to developing the Lolo "sense of place" is the use of these strategies. A "sense of place" may emerge by enhancing the assets of the community and addressing the constraints. History, views from the community to key landmarks, surrounding natural vegetation, and the main waterways are assets that can be reinforced through community development. Increased natural vegetation can be encouraged with individual site development. Structures can be placed to enhance views, and history can play a common uniting role throughout.

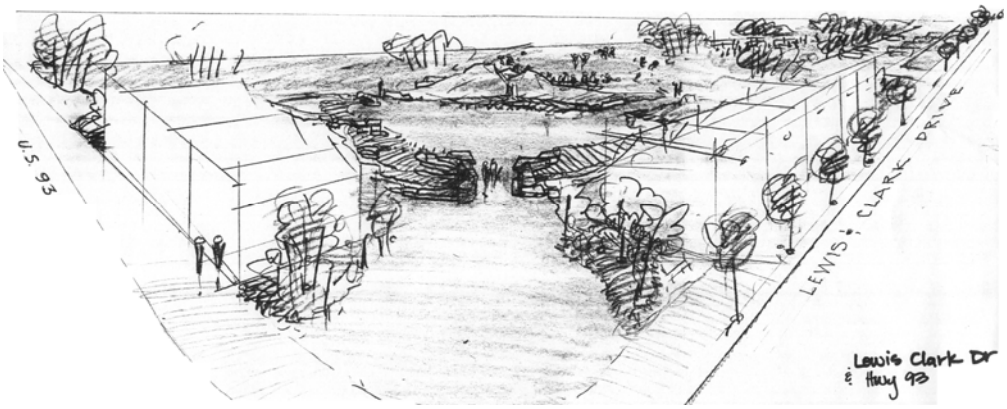
3. Focus Areas

Focus areas are those general development activities that can contribute to the character of the area. They include the town center and gateway themes, as well as streetscape design and highway beautification. Safe and attractive crossings of Highway 93 are addressed as part of highway beautification.

Town Center

When the town-site of Lolo was first platted, the commercial corridor was oriented east-west along Lewis and Clark Drive and north-south along the Bitterroot Highway (U.S. Highway 93). The community layout has altered with changing road re-alignments and overall commercial orientation changes, including building fires, renovations, and new uses. Commercial activity has become highway oriented facing Highway 93 and lacking pedestrian connections. The Lolo Shopping Center, constructed in the late 1970s, serves as the core commercial area for Lolo. It too is oriented to Highway 93 with accesses

from both Tyler Way and Glacier Drive. This Plan includes design recommendations for other accesses and infill within the shopping center that will enclose the parking lot and provide an edge for development and the streetscape creating a courtyard.

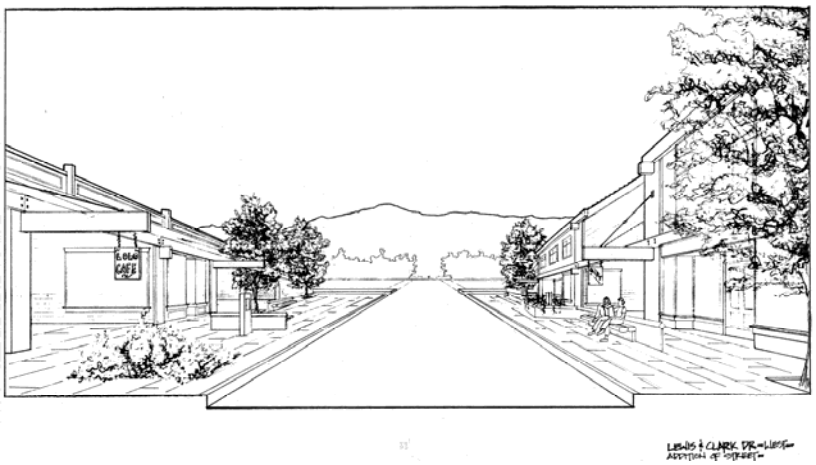


Perspective of potential "Town Center" at corner of U.S. Highway 93 and Lewis and Clark Drive[1]

Reinforcing the concept of town center helps to provide a focus for the town and an identifiable place for visitors to gather. The intersection of Highway 93 and Lewis and Clark Drive is a potential area where a town center could emerge again – recalling the past "main street" along Lewis and Clark Drive. This location would have highway accessibility yet be located on a local street. It could include a central plaza, visitor information area, and a farmers market. Development of a town center complements economic objectives of locating services close to each other.

Existing Lewis and Clark Drive looking West

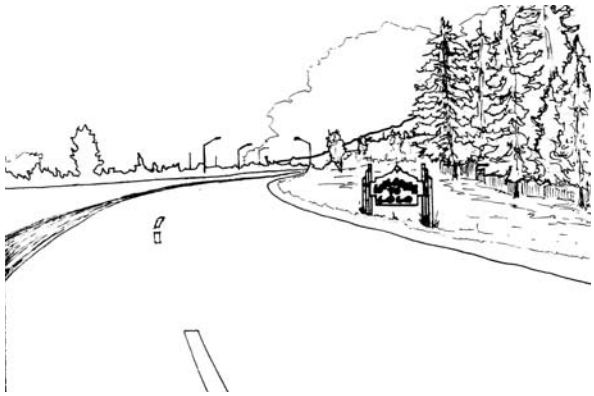
[1] This drawing, as well as the two drawings on the next page, by Jennifer Clarey, Intern, was the result of the Travelers' Rest Design Charette in 1999 with the Planning Office.



Potential town center on Lewis and Clark Drive

Gateways

Entrances to communities set the initial impression for visitors and residents alike. Lolo does not have a definitive beginning and end, although certain features such as hillsides, wetlands, rivers, creeks and railroad tracks define the general constraints of where the community starts and ends. A defined entrance or gateway would make travelers aware that they have entered a community with local traffic, community activities, shopping, and residents. An entrance is intended to deliver a message that Lolo is a gateway into the Bitterroot Valley or Missoula Valley (depending on the direction of travel) and entice travelers to stop, shop, and learn about the people of Lolo. Gateways can be accomplished through public signage, landscaping, art, and welcome signs.



Potential gateway signage on U.S. Highway 93

Streetscape

Concerns over an abundance of asphalt, impersonal and varied street lights, a lack of landscaping, and a chaotic order to signs along the main travel corridors were expressed through the planning process. This Plan recommends development techniques for a consistent streetscape along key travel corridors that address the concerns and contribute to a recognizable identity for the area, such as Highway 93, Lewis and Clark Drive, Tyler Way and Glacier Drive. Guidelines for streetscape improvement are included in this Plan and are part of the "Community Design Guidelines" (see Appendix 6-A).

Consistent streetscape development should begin at the entrance to the community with signage. Increased landscaping should carry on through the community combining with other beautification and pedestrian projects outlined in this and other plans for the center of Lolo. Contribution to the streetscape comes with each site development project, as well as the community desire to improve public areas. Parking, building placement, location of entries, signage, buffering between dissimilar uses, lighting, and landscaping are key components of site design that play a part in streetscape development. In an effort to develop a sense of entering a community with a "main street" feel, thematic building frontages could also be developed.

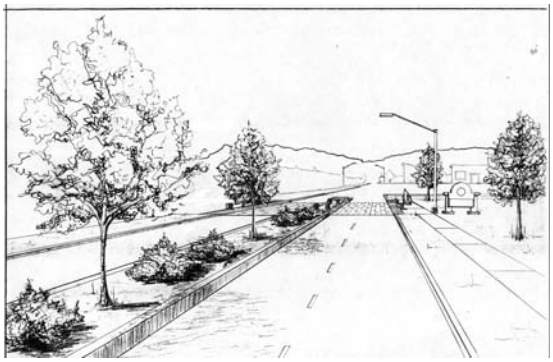
Another component of streetscape is establishing consistent connections between places. Concern regarding a lack of community elements such as sidewalks, curbs and gutters on streets has led to recommendations for retrofitting and planning for future sidewalk, pathways, and drainage control features in this Plan.

Highway Beautification

U.S. Highway 93 is designed to move commuter and local traffic efficiently through Lolo. The community needs to balance the accommodation of high volumes of traffic through the town with the maintenance and revitalization of a unified small community.

Buildings are set back due to the highway right-of-way, and parking areas located in front of these businesses add to the asphalt. Very few businesses have landscaping, and what is in place is not consistent. Wide shoulder lanes consume much of the right-of-way. Long distances between storefronts also contribute to the sense of isolation. This openness "encourages" Highway 93 drivers to drive quickly through the community rather than stop and participate in Lolo.

Existing U.S. Highway 93 Median



Potential U.S. Highway 93 Median [2]

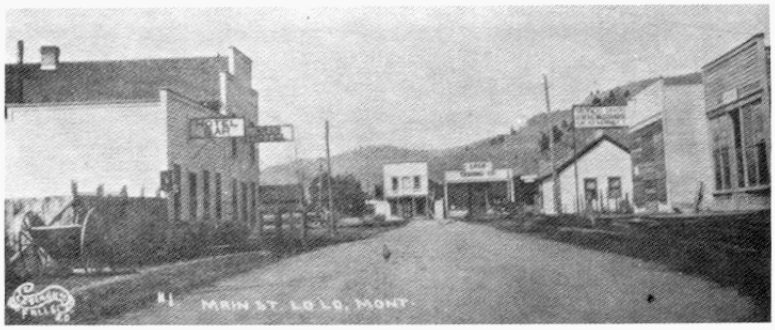
Landscaping and corridor improvements can also result in slower traffic and safer roads. Consistent development along the street, landscaping the areas between the buildings and the street, and placing the parking to the side or rear of the structures are just a few techniques that can be employed to help create a sense of community for Lolo on Highway 93. Landscaped turning medians also help to control traffic speed and provide safe pedestrian crossing zones. Another technique is to limit vehicular curb cuts, thereby clarifying for pedestrians and drivers where vehicles are expected to enter and exit a site.

[2] This drawing by Jennifer Clarey, Intern, was the result of the Travelers' Rest Design Charette in 1999 with the Planning Office.

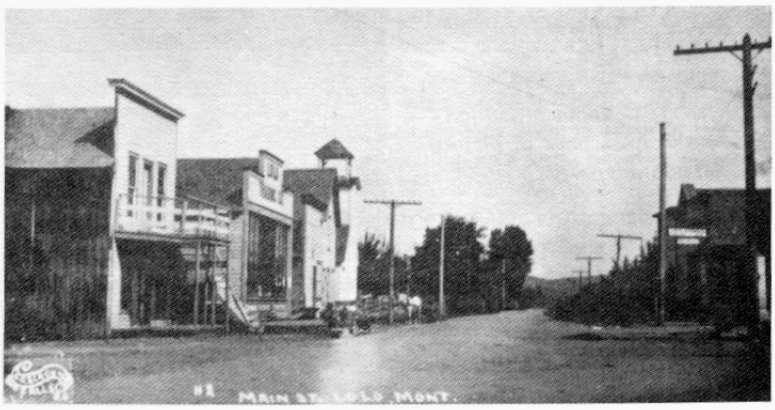
Developing separate bicycle-pedestrian paths on each side of Highway 93 and on the north side of Highway 12 right-of-way is another technique.

4. Community Aesthetics

Old photos and memories of Lolo from long-time residents indicate that Lolo was a classic western town, compact in its utilization of space, with false front single-story buildings and two-story structures. The streetscape included porches and boardwalks in front of each business. Future commercial construction and reconstruction could reflect historic images through a "Lolo Design Theme" reminiscent of the agriculture, mining and small town history of Lolo.



Street to the depot in Lolo 1910



Lolo's mainstreet looking North 1910 [3]

Historic structures within Lolo should be recognized for their value as part of the community character. The Lolo Schoolhouse, located along U.S. Highway 93 behind a school parking area, is a historic structure which should be visible as a focal point to the community and an anchor to Lolo's historic character.

[3] *Lolo Creek Reflections* (1999). Edited by Mary Carpenter by Lolo Women's Club. Stoneydale Press Publishing Company. Stevensville, Montana. p 41.

First frame schoolhouse in Lolo circa 1900

The Lolo one-room schoolhouse remains today, shrouded by landscaping and hidden behind parking for employees and visitors. [4]

Community design guidelines have been developed as guides for new construction and reconstruction of existing commercial and multiple-family developments. These guidelines summarize development techniques. Parking, landscaping, buffering between dissimilar uses, building placement and development, lighting, and signage are addressed in the guidelines. (See Appendix 6-A.)

5. Goals, Policies, and Strategies

Goals 6A

- Maintain the integrity of the Community of Lolo apart from the Missoula Urban Area and adjacent Development Areas.
- Enhance the small town characteristics of Lolo, with streets and neighborhoods linked to commercial areas and community facilities.

Policies and Implementation Strategies

1. Develop a "town center" (commercial core area) to serve community residents at a scale that is pedestrian-friendly and inviting.
   a) Support the establishment of a new east-west orientation for community commercial development along Lewis and Clark Drive, Tyler Way and Glacier Drive.
   b) Encourage tourist facilities, such as a visitor information center and retail businesses, in the commercial core area of Lolo.
   c) Support the establishment of community commercial uses between Lolo Community Center and Lolo Creek as an area that connects commercial uses to potential Travelers' Rest activities.
   d) Encourage in-fill of commercial sites on vacant lots and underused parking lots along the commercial corridors. Additional commercial development could surround the current parking area of the Lolo Shopping Center with an urban park-square serving the commercial center.

[4] *Lolo Creek Reflections* (1999). Edited by Mary Carpenter for the Lolo Women's Club. Stoneydale Press Publishing Company. Stevensville, Montana. p 22.

e) Encourage the development of parking areas for tourists and visitors to the historic attractions. Dual purpose parking facilities could be developed to serve visiting tourists and Lolo School in the center of Lolo. For example, a parking lot near the Lolo School could be used during the school year for school uses. During the summer (tourist season) it would be available for other uses.

2. Develop standards for commercial development that lead to cohesiveness of the Lolo community character.
   a) Encourage the development of pedestrian-friendly areas for local residents and tourists that are away from the auto-dominant U.S. Highway 93 corridor.
   b) Encourage incorporating community design guidelines and streetscape development techniques as community projects or development occurs.
   c) Develop a "Lolo Design Theme" that is reminiscent of the agriculture, mining, and small town history of Lolo.
   d) Encourage the development of a highway beautification plan incorporating such things as landscape, signage, parking, and lighting guidelines.
   e) Provide incentives to developers and owners for setting up standards such as zoning, performance standards, or a County Resolution to implement the highway beautification plan and other streetscape guidelines.
   f) Encourage the relocation of outside storage facilities that front the main arterials to areas less visible by the public as development occurs.

3. Preserve the natural features that distinguish Lolo from Missoula.
   a) Preserve scenic vistas that serve as backdrops for the community of Lolo (such as the Miller Creek "Big Hill," the Sapphire Mountains, and prominent ridges) and upper slopes and ridges in the Bitterroot and Lolo Creek Valleys.
   b) Consider using cluster design techniques and conservation design guidelines in order to preserve open space and vistas (see Appendix 7A).

4. Maintain rural identity and character by clearly identifying the beginning and end of the Lolo community.
   a) Establish a distinct beginning and end to the community of Lolo outlined by the extent of the commercial corridor and distinguished by developing community gateways.

5. Encourage the preservation and restoration of historic structures and sites in the community.
   a) Work with the interested owners of potential historic structures and sites in order to seek historic register nomination.

Part 6B: North Bitterroot Valley Development Area

1. Existing Character

The North Bitterroot Valley is framed by the Sapphire Range to the east and the Bitterroot Mountains to the west. The Bitterroot River meanders between the mountain ranges. The floodplain of the Bitterroot River is part of the agricultural land base. The hillsides, active agricultural lands, and river and creek corridors remain relatively undeveloped. The landscape remains the dominant focus of the area even with increased development activity over the past 20 years.

North Bitterroot Valley

This Development Area appeals to those looking to get away from the city and larger communities but still staying close to a main highway leading to all the essential services that they offer. Privacy, room between structures, and open space for wildlife to roam between developments are important qualities of the area.

Development has occurred in certain areas along the valley floor, leaving other areas to remain in agriculture, hillside, and floodplain. This development is evident around Carlton and Mackintosh Manor where groupings of subdivisions are either hidden in the trees or unfold along the gentle sloping hillsides. The parcel sizes in these areas range from one acres to ten acres.

Carlton Creek Road

View of Mackintosh Manor Subdivision

The Carlton Community consists of the remaining historic structures from the Robert Carlton Homestead and a cluster of homes anchored by the Carlton Community Church and Cemetery, located at the intersection of East and West Carlton Creek Roads. The community is oriented along Old Highway 93 (north-south) with the side roads providing access to large lot residential sites. The *1975 County Plan* recommended the Carlton area as an "Activity Center."

Carlton Community

Development activities north of Carlton have emerged around the Mackintosh Manor subdivision. This subdivision was platted in 1913, primarily intended as ten-acre orchard tracts. The land stayed in a single ownership with only a few homesteads in the vicinity until approximately the 1980s. At that time, individual parcels within Mackintosh Manor were sold and building development became visible. Meanwhile the new U.S. Highway 93 was established, and Old Highway 93 became a secondary route. The re-alignment of the highway in 1973-74 created a new intersection. Land in the vicinity of the intersection has developed with two commercial uses (a restaurant/bar and mercantile-type supply store) accessed off of Old Highway 93, an equestrian arena, and a park-and-ride facility.

Historic residences, such as the Conlon Homestead just south of the eastern edge of Mormon Ridge and the Carlton Homestead just south of Carlton Creek Road on Old Highway 93, are still standing. The Pellens Homestead, the only residence originally constructed in Mackintosh Manor, is also still in use. These structures, clustered with agricultural outbuildings, provide a framework for regional character in the valley. The site-layout serves as a model for new development in character with this Development Area.

2. Analysis

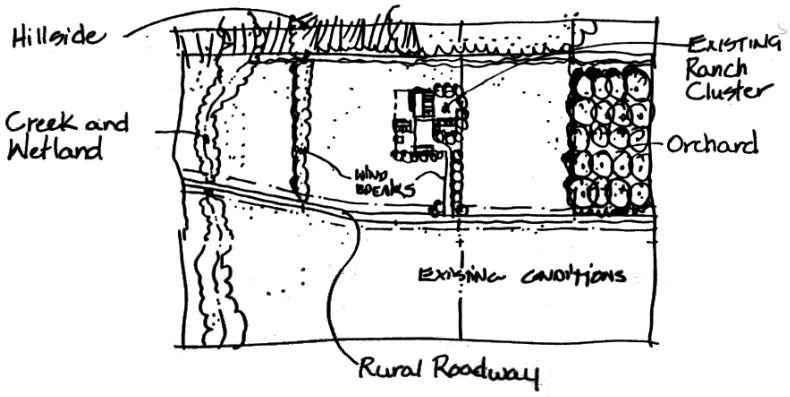
A series of six planning meetings were held in the Development Area between July and September of 1998. Discussions evolved over the course of those meetings from identifying the qualities and concerns in the area to possible planning opportunities, implementation strategies, and design development recommendations. The meetings focused on land use concerns, natural resource issues, agricultural land preservation, development pressures, and transportation issues.

Residents of the area consider the natural resources of the area to be important qualities. They described the wildlife habitat (especially the elk corridors), agricultural areas, riparian areas, views, and the clean environment as things to value.

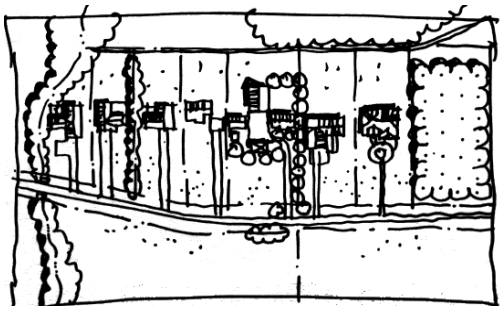
Concerns raised by the residents of the area included preventing strip development that appeared to continue from Lolo to Hamilton, limiting commercial development, conserving agricultural areas, establishing transitions between open lands and development, retaining the rural character, conditions of existing roads, and areas of high ground water.

Vision

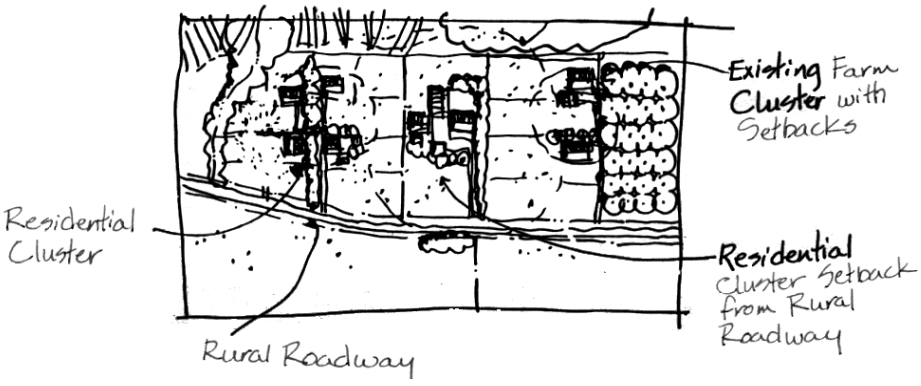
The challenge with this planning process is to recognize the possibility for additional development without altering the landscape considerably. A key technique for retaining the rural character of the area and the open landscape is by weaving development into the open space areas and creating transitions between development. Clustered development ensures that open space is an integral part of development. Open space corridors should also be used to establish linkages between larger open areas. Wildlife should still be able to roam from west to east and north to south within the Development Area. Open space corridors could also be used to establish equestrian and pedestrian linkages between development and between resource areas.



Existing Conditions



Typical Subdivision

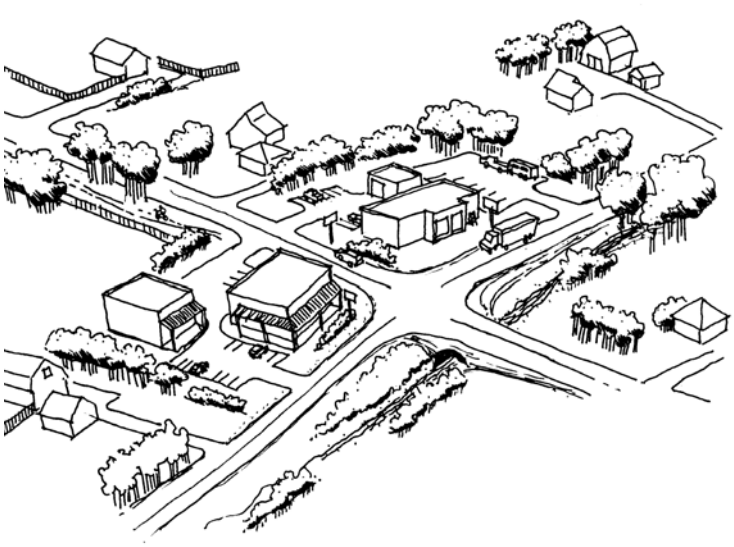


Potential Clustered Development

A region-wide concept of clustering is recommended to focus development in groups along the travel corridor and not on lands where resources should be protected. However, space between development is recommended along the travel corridors in order to accomplish a break in activities between Lolo and Florence. Transitions between development areas are important keys to the desire to retain rural character and maintain the focus on the landscape of the area.

Some residents of the area value the large lot development of ten acre parcels, but infrastructure investment in the highway, location of a park-and-ride lot, and commercial development indicates that small lot development may be appropriate as well. Development plans that cluster improvements at property edges, adjacent to development on other lots, could maintain the rural character of the area. Equestrian uses should compliment the character by incorporating trails, common pasture, and barns into design. Clustering is accomplished by varying lot sizes as well as building placement. Developers are encouraged to design compact tracts offset by large parcels of land for agricultural use and open space and designate building envelopes that result in buildings being clustered together throughout the development.

Unrestrained commercial development in this area is of concern to residential neighborhoods. Most commercial uses should occur in the larger communities of Lolo and Hamilton. Additional limited commercial uses**,** serving the local area**,** should front along Old Highway 93 and should be clustered at crossroads. Residents preferred to discourage uses**,** such as casinos and gas stations that would attract drivers from U.S. Highway 93. The Montana Department of Transportation policy limiting the number of accesses onto U.S. Highway 93 will help avoid the look of a commercial strip. Commercial development should refer to the community design guidelines (Appendix 6A) for techniques to incorporate into site development and buffering between dissimilar uses. Interested citizens of the area could pursue establishing performance standards for the area in order to require compliance with preferred development guidelines.



Clustered development at major crossroads

Development in this area should occur in a coordinated effort between uses**,** in consideration of trails, open space, wildlife habitat, and riparian resources. This Plan refers to Community Crossroads land use designation as an area that is primarily residential but includes a limited amount of commercial uses at major crossroads. Coordination and transitions between development types is encouraged. Clustering is key to retaining the open space and rural characteristics while also establishing areas for development.

3. Goals, Policies, and Strategies

Goal 6B

Preserve the rural character of the area while also establishing areas for additional development.

Policies and Implementation Strategies

1. Preserve the natural (e.g. the Bitterroot River, Carlton Creek, M^{c}Clain Creek, Squaw Creek) and historical features that distinguish the Bitterroot Valley.
   a) Protect scenic vistas that serve as backdrops for the North Bitterroot: the Sapphire Mountains, prominent ridges, and upper slopes and ridges in the Bitterroot Mountain foothills.
   b) Design development to avoid elk corridors.
   c) Refer to Chapter 4 "Natural Resources" for additional strategies.

2. Maintain the rural identity and character of the area.
   a) Consider using cluster development techniques, rural residential clusters, and "Conservation Design Guidelines" (Appendix 7A) when preparing and reviewing development proposals in order to preserve significant natural resource areas.

3. Development in the community crossroads areas should incorporate design characteristics that reflect the rural character of the area.
   a) Establish guidelines for development that lead to cohesiveness of "Bitterroot character," such as a western architectural style for commercial uses, signage, and landscaping.
   b) Lighting should not be designed to attract business from U.S. Highway 93 motorists.
   c) Signage should be clustered at the access points onto Old Highway 93 from U.S. Highway 93 in the area of the Old Highway and U.S. Highway 93 intersection.
   d) Parking facilities should be placed to the side or rear of commercial uses and share access and parking with adjacent uses if possible.
   e) Commercial uses should buffer from adjacent residential uses. Buffering can be accomplished by techniques, such as increased setbacks, additional landscaping, and site design that directs commercial activities away from residential areas.
   f) Large open areas and pathways should be developed to link clusters of houses and act as a buffer between clusters of small lot residential or commercial areas and larger adjacent parcels.
   g) Any new commercial and residential properties at the junction of Old Highway 93 and U.S. Highway 93 should be accessed solely off of Old Highway 93 and not oriented to encourage commuting traffic to enter the area from U.S. Highway 93.

4. Link new development to existing neighborhoods, public facilities, and open space amenities with a network of non-motorized connections.
   a) Link new housing areas to other neighborhoods with paths and connections for equestrian, recreation and pedestrian movement to the Florence-Carlton School.
   b) Connect paths and walkways to the system paralleling U.S. Highway 93 and the neighborhoods on the eastside of the highway (Leo Hansen Tracts).

Part 6C: Lolo Creek Valley Development Area

1. Existing Character

The Lolo Creek Valley is a narrow valley tucked in between the Graves Creek and Bitterroot Mountain Ranges. Traveling west from Lolo, the landscape transitions from valley floor to canyon with Lolo Creek and U.S. Highway 12 weaving between the two mountain ranges. The landform is primarily steep and forested with numerous drainages directed towards Lolo Creek. The forested hillsides, the visual access to Lolo Creek and its riparian area, and the magnificent view of Mormon Ridge, Carlton Ridge, and Lolo Peak all serve as key characteristics in the canyon. This area is known for its rugged beauty, natural rural setting, and sense of remoteness. It is attractive to people seeking privacy, outdoor recreational opportunities, and historical references.

Highway 12 is the main travel corridor and the primary vantage point for the views along the way. Many trailheads exist off of Highway 12 offering access to the hidden beauty of each mountain range. Fishing access, campgrounds, and other day use areas also exist.

The character primarily focuses on the natural rural surroundings. Development that has occurred is intermittent along Highway 12. Old homesteads and agricultural operations mix with smaller rural residential homesites. Pockets of residential development occur along side roads off of Highway 12, and many of those developments are hidden from the main highway by trees and hillsides. A collection of homes and one supporting small commercial use are located at the bottom of the Lolo Creek tributary and Mill Creek confluence. A majority of the area is untouched by building development. Where development exists**,** it is either hidden from the travelers or in character with its setting.

Rural property on U.S. Highway 12

A few key commercial uses and home businesses exist along Highway 12. Some of the commercial uses are: the Lolo Creek Store, the Lolo Square Dance Center and R.V. Park, a restaurant-motel and R.V. facility at the Travelers Rest private entity (was Bad Bubba's BBQ), and the motel and pools at Lolo Hot Springs (outside the Development Area). The Lolo Creek Store is small and, when open, it provides convenience items for residents. The home businesses are part of the rural character when they remain secondary to the principal residential or agricultural use of the property.

Lolo Hot Springs Facility

Lolo Hot Springs is a longtime attraction for all seasons. Horse trails, cross-country ski trails, and snowmobile trails exist in the vicinity of the motel and pools. The Hot Springs is also the site of an R.V. campground.

Some historically significant features still exist in the area including the Woodman Schoolhouse built in 1902, the Denton Homestead, Fort Fizzle, and the original Lolo Hot Springs facility. Other historic features, such as the Lewis and Clark Trail and Nez Perce Trail, are not immediately evident but will play a significant role in shaping the future character of the area because of their potential as tourist attractions.

Lolo Creek at Fort Fizzle

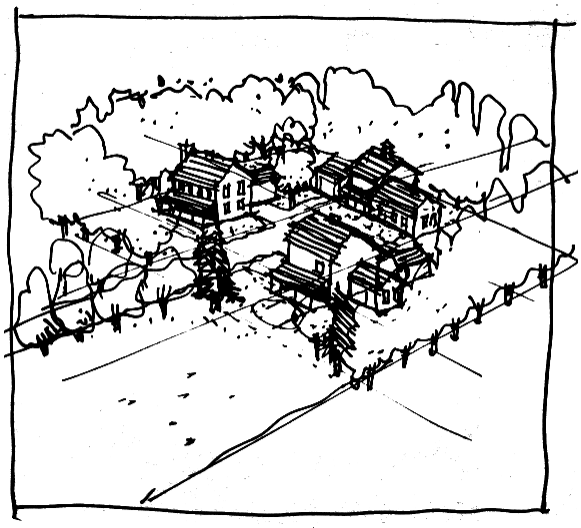
2. Analysis

This area is known for its multiple resources which presents a challenge to retaining the character. Preservation of existing character of the area is desired, therefore addressing the potential changes to the existing character of the area is critical. The Lewis and Clark Bicentennial will attract thousands of tourists to the area that are expected to travel along U.S. Highway 12 annually between 2003 and 2006. This area will be dealing with development pressures to meet the increased visitor demands. It will need to be prepared for increased traffic while not compromising the character of the area.

Existing residents in the area are concerned about preserving their privacy and retaining the rural character of the area. Meanwhile, recreational and heritage opportunities abound and are considered county, state, and national assets that will attract more people to the area. Establishing a balance between these interests is important.

Vision

This Plan is not recommending a significant increase in residential density compared to the past adopted plan for the area. In some places there is a recommendation for less residential density. As development occurs it should be clustered in order to preserve the rural and natural amenities.



Clustered new homes reflect form and shape of rural farm building

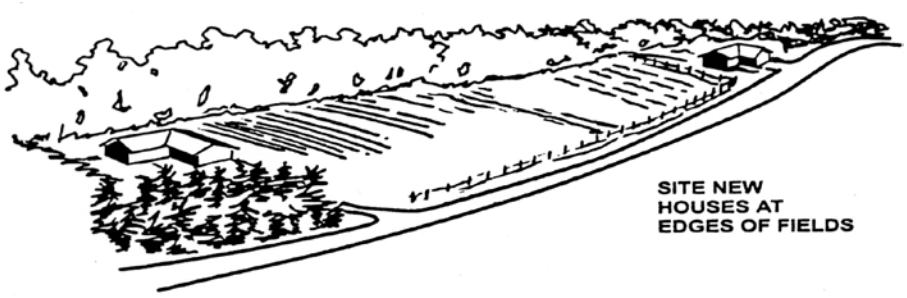
Commercial development, signage and specialized recreational commercial uses will present the greatest challenge to preserving the rural character of the area. The Plan recommends keeping commercial ventures to areas designated for commercial uses. Should existing commercial areas be modified or expanded, careful consideration should be given to lighting, retaining existing vegetation, parking and signage. Traffic impacts should also be addressed with every change in commercial activity in the area.

Some of the historical structures and their placement are examples of the rural aesthetic that is still a model today. The original form of the Woodman Schoolhouse is a model of historical rural character. Its compact form, steep pitched roof, and vertically oriented windows are desirable aesthetic attributes of rural character. The Denton Homestead and its collection of agricultural buildings is setback from the highway leaving active agricultural lands. It is a model for clustering structures, preserving agricultural opportunities and retaining the rural character.

The little red schoolhouse at Woodman 1903

Woodman School built in 1902 [1]

Preserving the existing rugged and rural character of the area can occur through various means. Careful consideration should be given to where development occurs, how it is placed in the landscape, and the limited use of signage along the way. Structures should be sited near edges of fields and setback from natural resource hazard areas. Billboards are discouraged. Signage should be kept to a minimum. Buildings should be clustered together. Significant natural resource areas, including existing vegetation, should be preserved.



Access to the recreational opportunities, historic setting, natural setting and other visual amenities are possible along U.S. Highway 12. Preservation of its scenic values can be accomplished in part by listing it as a "scenic byway."

3. Goals, Policies and Strategies

Goal 6C

Maintain the integrity of the Lolo Creek Valley as a rural area with scenic and recreational elements associated with the Nez Perce Trail and the Lewis and Clark Trail.

[1] *Lolo Creek Reflections* (1999). Edited by Mary Carpenter by Lolo Women's Club Stoneydale Press Publishing Company. Stevensville, Montana. p 23.

Policies and Implementation Strategies

1. Preserve the natural and historical features that distinguish the Lolo Creek Valley.
   a) Protect scenic vistas that serve as backdrops for the Lolo Creek Valley, such as views of Lolo Peak, prominent ridges, and upper slopes and ridges in the Bitterroot and Graves Creek Mountain foothills.
   b) Maintain the distinction of being on the Lewis and Clark Trail and the Nez Perce Trail.

2. Preserve the rural character of the Lolo Creek Valley in general and the U.S. Highway 12 corridor specifically.
   a) Develop standards for commercial development that reflect the rural character and any highway improvement guidelines.
   b) Support the establishment of highway improvement guidelines that incorporates the Lewis and Clark Bicentennial.
   c) Consider using clustered development techniques, rural residential clusters, and "Conservation Design Guidelines" (Appendix 7A) when preparing and reviewing development proposals.

3. Land use recommendations should reflect existing development patterns while recognizing potential increases in tourist activity due to the Lewis and Clark Bicentennial.
   a) New commercial development should occur only in areas recommended for commercial use on the Land Use Map (#7-3).
   b) Recognize existing commercial sites that are located off U.S. Highway 12, but do not encourage additional commercial development in those areas.
   c) Land uses that generate high amounts of traffic and/or have properties that utilize advertising that is visually out of character with the surrounding residential properties should be directed to designated commercial areas.
   d) Commercial activities, including home businesses, should provide buffering from existing adjacent residential areas.

CHAPTER 7: LAND USE TYPES

Goal 7

Recommend a land use pattern that collectively contributes to the community and region while retaining the cultural and physical characteristics that make the Lolo planning region unique.

Introduction

This chapter describes the land use types that appear on the land use map accompanying this Plan. (See maps 7.1 – 7.4 in the Map section.) The land uses types are grouped into five categories: Resource-based, Residential, Commercial, Public/Quasi Public, and Parks and Open Space. The description of each land use type includes information about intent, appropriate location, kinds of uses, and recommended density, if applicable. Development Guidelines are included for each land use type where appropriate.

Density recommendations quantify potential gross density on a parcel but do not necessarily establish minimum lot sizes. Density can be clustered within a parcel. The maximum gross density designated on the Land Use Map may not be achievable on every parcel due to other land constraints. Density recommendations are not equivalent to zoning rights. In addition to land use designations, other goals and policies of the Plan are considered in project evaluation.

As explained in Part 7A below, density may be transferred from some lands with resource or other constraints to land more suitable for development, resulting in decreased density in one area and increased density in another. On properties with split land use designations, the density for the entire parcel may be applied to the portion of the land with the most intensive land use designation, which may result in that portion having a density greater than the land use designation recommends. Density may also be increased on certain properties for projects using Open and Resource Cluster or Rural Residential Cluster options if design criteria are followed.

This chapter also explains why and where certain land use designations were applied within the planning region. The land use designations are intended to meet the goals and policies articulated throughout this Plan. Several factors were considered when designating a land use for a particular area**,** including:

- land capability, including resource constraints or health regulations;
- community input;
- existing comprehensive plan designations or zoning; and
- existing land uses and development patterns.

While the mapped land use designations indicate the most appropriate uses for an area, some uses from other land use designations may be considered in certain cases. Generally, commercial and industrial uses are not recommended in residential areas. However, residential uses could be allowed in some General or Community Commercial areas. General Commercial uses are not recommended in Community Commercial areas, but Community Commercial uses may be allowed in General Commercial designations. In areas designated Industrial, other uses could be allowed if an analysis showed that the uses were needed, compatible, and did not displace the need for Industrial land.

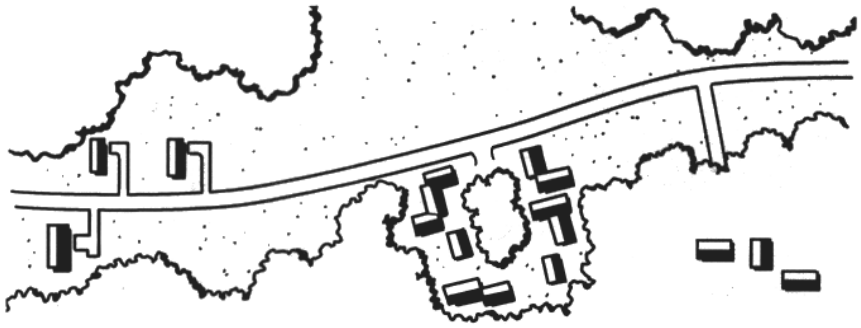
Part 7A: Resource Based Land Uses

Resource Based Land Uses include Open and Resource, Floodway, Area of Significant Flood Risk, and Areas of Special Value.

1. Open and Resource Areas

Description

This land use classification is intended to protect important resource land and areas of natural hazard. The primary objectives are preserving land for natural resources, agricultural activities, and maintaining wildlife corridors and open space, as well as limiting development in hazard areas**,** such as floodplains and steep hillsides, and in areas far from community services. Residential development is clearly intended as the secondary use of the land. While Open and Resource is not a residential designation, one dwelling per 40 acres may meet the intent of the classification in some cases if other Plan goals and policies are met. Development**,** such as residences, outbuildings, and roads in these areas**,** should be grouped or clustered near existing facilities, such as a road system, to protect the natural resource designation. As described in the "Specialized Recreational Commercial Section," (Chapter 7-C) certain recreational commercial uses may be suitable on some Open and Resource lands if design criteria are followed and resources are protected. Density transfers and density increases through Open and Resource Cluster are described later in this section.



Residential development clustered near existing roadway preserving open land

Lands Designated Open and Resource

General

Much of the planning region is designated Open and Resource reflecting forestry or agricultural uses, steep slopes, floodplain, natural resource values, or areas far from community services. Some drainages and large wetlands are also designated Open and Resource on the land use map. Others may exist and should not be developed. In general, land outside of the Development Areas is designated Open and Resource.

Floodplain

The land use map designates land near the Bitterroot River in the FEMA mapped 100-year floodway fringe and 500-year floodplain as Open and Resource. The land use map also designates the area in the FEMA mapped 100-year floodplain along Lolo Creek as Open and Resource. FEMA mapping along Lolo Creek only extends west from the Bitterroot River to the Mill Creek area. South of U.S. Highway 12, land along Lolo Creek west of the Mill Creek area that is within an Area of Significant Flood Risk is also designated Open and Resource. The Open and Resource designation also provides protection of the stream corridor and associated resources in this area.

Exceptions to the Open and Resource designation in the floodplain are for some lands that are already zoned. The land use designation on land that is zoned and in the floodway fringe reflects existing zoning in the North Bitterroot Valley. While the comprehensive plan land use designation recognizes existing zoning, a goal of the Plan is that no new development occur in the floodplain. The intent of matching the designation to existing zoning is to allow transfer of density to areas more suitable for development.

Land along the Bitterroot River in the FEMA mapped 500-year floodplain area, which is designated as Open and Resource, could be considered for increased development density if a landowner demonstrates that the land is not within an Area of Significant Flood Risk.

Some land in the Lakes Neighborhood within the 100-year floodplain is also zoned. Portions of this area that are already developed have a land use designation that reflects the zoning. Other areas, much of which were designated Parks and Open Space in the *1978 Lolo Plan*, have been designated Open and Resource. A revised flood study is being completed that will better define what portions of the Lakes Neighborhood are located within the floodplain. Lands that are shown to be out of the floodplain would be appropriate for residential development.

Development Guidelines

- Use cluster development and conservation design guidelines in order to preserve significant resource areas.
- Avoid encroachment into important natural resource areas with roadways, driveways and structures.
- Minimize site disturbance by requiring roads and driveways to follow existing contours; minimizing disturbances from the construction of roads, basins, grading, and other improvements; and implementing weed control measures.
- Minimize visual impacts from development by locating structures adjacent to roads, tree lines and wooded field edges, if feasible and resource or fire concerns are not created.
- Discourage placing structures in the middle of open fields.
- Plant native vegetation around new development and encourage restoration with native plants.
- Do not disrupt natural ridgelines or steep slopes.
- Site development in areas with stable soils and where geologic hazards are not present.
- Preserve open space areas to protect riparian, wildlife, and open space corridors.

Density Transfer

One method of preserving resource and agricultural land is through transfer of development density from resource lands to areas more suitable for residential uses. Density may be transferred from land with an Open and Resource designation. Density may also be transferred from zoned lands within the 100-year floodway fringe. (Land within the floodway is assumed to have no associated development potential from which density could be transferred.)

The density transferred from these lands may be applied to areas that are demonstrated to be capable of supporting the additional density, are suitable for the additional density, and are designed so as not to adversely impact adjacent uses. Density may not be transferred to land within the 100-year floodway fringe since development in these areas is not recommended.

Transfer of density is typically implemented on zoned land with legally defined density rights. Most of the planning region is unzoned. This Plan's land use designations include recommended maximum residential densities. These are not necessarily equivalent to development rights, but do provide guidance on appropriate density. The amount of density that may be transferred should be based on the underlying land use density recommendation.

Density transfers would generally occur in conjunction with a subdivision and would be considered during the subdivision review process. A density transfer can be accomplished by use of a density transfer agreement that runs with the land. Density transfer agreements can be used on parcels within the same ownership, parcels in different ownerships, and between non-contiguous parcels. The agreement should be approved by the governing body and recorded with the County.

Open and Resource Cluster

The Open and Resource Cluster option is intended to protect sensitive resources or community character. It provides incentives to use conservation design techniques and land conservation measures through increases in density. A cluster development reduces the size of building lots and concentrates homesites together, resulting in increased areas of contiguous conservation land. Linear arrangements of building sites along main travel corridors are discouraged. Consolidating lots establishes open areas for wildlife habitat and corridors and visual relief along main travel corridors. Cluster development also lessens infrastructure costs.

An increase in density above one dwelling unit per 40 acres may be achieved if resources are preserved and development is clustered. A density increase to a maximum of one dwelling unit per 20 acres may be possible if: 75% of the total acreage under consideration is conserved in large contiguous parcels; land management for the parcels adheres to conservation design guidelines and principles; and only 25% of the land is developed. Development area percentage calculations include all roads and lotted areas. When possible, development should be located near existing roads.

The following list of criteria will be considered when increased density is requested:

a) Access to existing infrastructure.
b) Preservation of rural character.
c) Fire protection.
d) Preservation of important natural resource areas including floodplains, floodway fringe areas, riparian areas, wildlife corridors, and steep hillsides.
e) Preservation of significant habitats, forested areas, and intact or re-established grasslands.
f) Minimal site disturbance.
g) Preservation of lands of agrarian importance.
h) Preservation of significant geologic landforms and sensitive soil areas.

Development should follow the development guidelines above and "Conservation Design Guidelines" (Appendix 7A). Criteria and goals for resource protection are outlined in various chapters in the Plan document and in the "Conservation Design Guidelines" (Appendix 7A). A development agreement limiting lot size and future divisions should be filed with Missoula County upon approval of an Open and Resource Cluster subdivision. The agreement should run with the land.

2. Floodway

Description

The Floodway designation is intended to reflect FEMA mapped floodway areas of the Bitterroot River and Lolo Creek. The land use map also extends the Floodway land use type west of the Mill Creek area, along Lolo Creek, to follow the creek channel upstream of the area mapped by FEMA. Agricultural structures or other uses not subject to flood damage, or not likely to cause impacts to other properties, may be allowed in the floodway. Otherwise, no development is recommended in these areas.

3. Area of Significant Flood Risk

Description

This land use designation is intended as an overlay to the base land use type to convey that additional limitations may apply in certain flood risk areas. Areas of Significant Flood Risk include areas within the floodway, 100-year floodway fringe, 500-year floodplain, and other areas of flood hazard. Further description can be found in the "Water" section of the Plan's "Natural Resource" chapter. When determining the location of these areas, site visits and other analyses will supplement mapping.

Generally, no new development, except for agricultural structures, is recommended for lands in the 100-year floodplain as designated by FEMA or shown to be such by some other reliable information. Lands above the 100-year flood elevation that are completely surrounded by land in the 100-year floodplain, that is not accessible by road during a 100-year flood, or is subject to erosion by changes in a watercourse channel should also not be developed. Development in other Areas of Significant Flood Risk will be evaluated on a case by case basis, based on the ability to mitigate; impacts to other properties or structures, impacts to natural stream function, and impacts to public health and safety.

4. Areas of Special Value

Description

The special value present in some areas designated for other uses has been recognized through a symbol on the land use map. This designation has been used to recognize the area of the Travelers' Rest campsite, areas with important scenic value, areas with important historic value, and community gateways.

Development Guidelines

- Consider the special community values when developing in these areas.
- Coordinate development near the Travelers' Rest historic site with ongoing archeological and historic preservation efforts.
- Identify entrance sign locations for Community Gateways. Construct entrance signage that considers the characteristics of the community of Lolo.
- Development should be consistent with the historic values of the area.

Part 7B: Residential Land Uses

There are four types of residential land: Urban, Suburban, Community Crossroads, and Rural. The land use types vary in recommended density and development guidelines.

1. Urban Residential

Description

The Urban Residential land use types are intended for areas where public infrastructure and services are available and proximal. This land use type has also been recommended for areas that are already at, or exceed, the recommended density and areas that were part of the study area for future expansion of the Lolo Wastewater Treatment Facility. In neighborhoods that are not built to capacity, additional density can be achieved with residential accessory apartments in owner-occupied homes, multiple unit buildings, or attached housing, as long as the development fits the architectural character of the neighborhood and adheres to the following guidelines. In areas designated for Urban Residential densities, there should be a clear and easily recognized pattern with a regular order to the lots, and a recognizable geometry to the spaces between buildings.

Urban Residential development has a clear and recognizable pattern to both the order and the lot size.

Urban Residential land use is described as three separate densities on the land use map. Those densities are established based on consideration of development constraints and distance to services.

Four dwelling units per acre is recommended in areas where public sewer service is anticipated and few development constraints exist. Easy access from a main arterial is also important. This designation also creates a transition towards less dense development near Lolo Creek.

Six dwelling units per acre is recommended as a typical residential neighborhood density within the community of Lolo. The designation also recognizes past comprehensive plan land use designations and acknowledges development potential in areas within the Lolo Wastewater Sewer Study Area.

Sixteen dwelling units per acre is recommended for areas close to the commercial uses in Lolo. These areas can also function as transitions to less dense areas. The designation has also been applied to acknowledge some existing uses and prior land use designations.

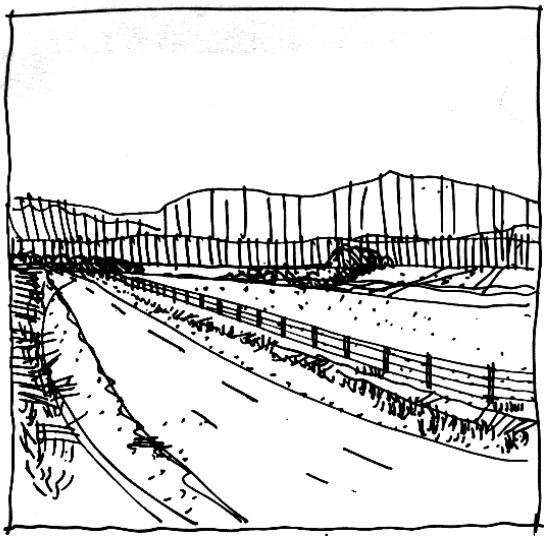
Development Guidelines

- Development should include appropriate infrastructure such as sidewalks, curb and gutter, streetlights, and motorized and non-motorized transportation connections.
- Buildings should be located within established setbacks or follow the prevailing pattern of adjacent building setbacks.
- Buildings should be oriented to the public street with windows, entries and porches facing and visible from the street and sidewalks.
- New development and road rights-of-way should be designed to accommodate future transit services.
- Depending on the size of the development, parks should be located at the center of a neighborhood within .25 miles of new housing.
- A range of building types is encouraged, including single-family detached, duplex, triplex, and multi-family dwellings.

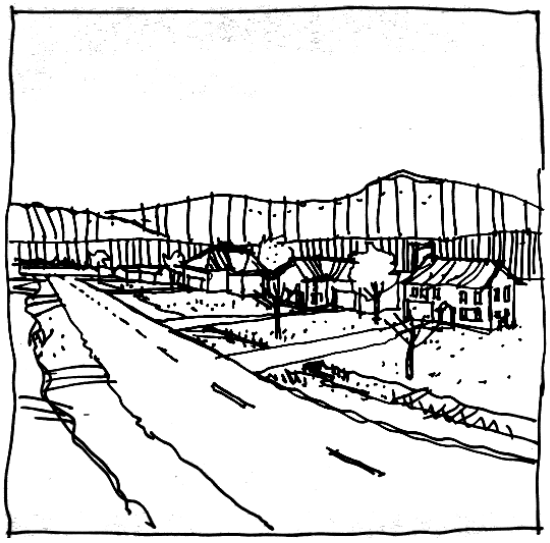
2. Suburban Residential

Description

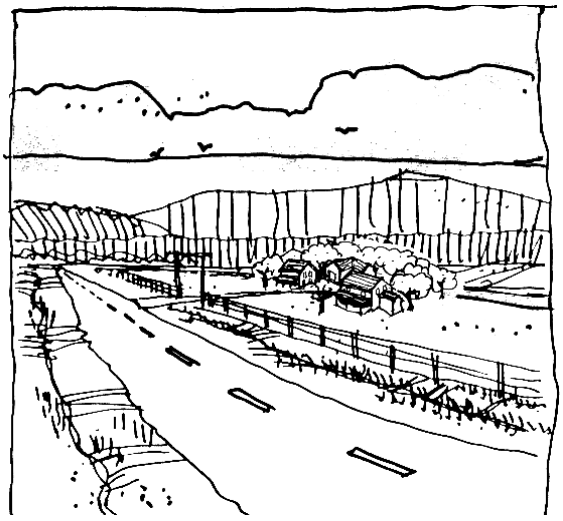
This designation is intended to recognize existing development patterns and areas where concentrated small-lot development is desirable. In a suburban development pattern, the spaces between buildings on lots .5 acre or smaller are usually regular. One-acre parcels often have irregular spacing between buildings and road frontages.



Existing rural conditions



Typical suburban subdivision



Potential cluster development

Suburban Residential land use is described as two separate densities on the land use map.

One dwelling unit per acre is considered a base density for many areas outside of the Wastewater Sewer Study Area. This land use type is also located to reflect existing patterns, match existing zoning, or function as a transition to less dense areas.

Two dwelling units per acre is considered for areas adjacent to the Sewer Study Area and may reflect existing patterns.

Development Guidelines

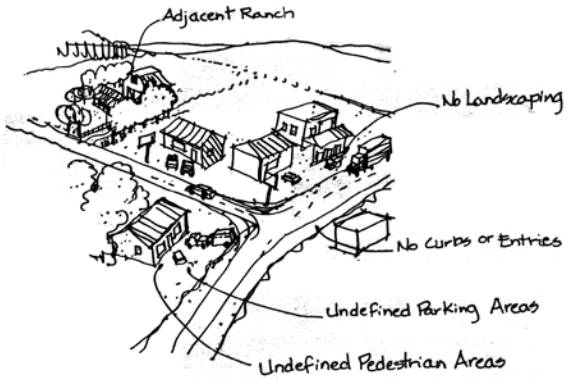
- Pathways or sidewalks should be constructed at the time of development.
- Depending on the size of the development, parks should be located at the center of a neighborhood within .25 miles of new housing.
- On lots one acre and larger, building footprints should be located to one side of a lot allowing further lot splits when, and if, public sewer becomes available.
- Development adjacent to U.S. Highway 93 or U.S. Highway 12 should be set back from the highway. These setback areas should be landscaped and bermed in order to reduce traffic sounds. Access onto the highway should also be taken into consideration when determining the appropriate number of dwelling units.
- Accesses to individual lots should be shared when possible.
- Provide opportunities for transit connections, such as park-n-ride or public bus service to Missoula.
- Cluster development, in order to retain large open areas and maintain the rural character of the area.

3. Community Crossroads

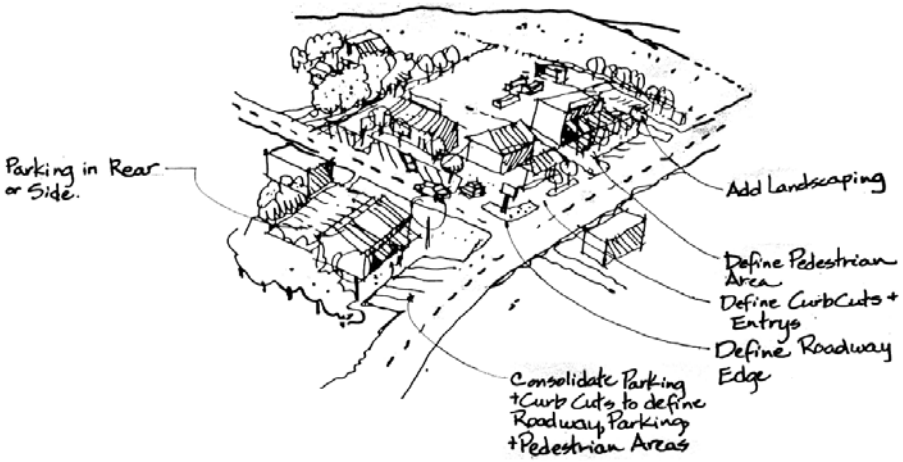
Description

This designation is intended to communicate a planned development concept that is primarily residential (one dwelling unit per acre) and focuses commercial uses adjacent to important road intersections. The area should be developed in a coordinated effort where design of the development is considered as essential as the density. Commercial uses should serve the needs of local residents with businesses such as a deli, neighborhood café, small grocery, personal services, specialty retail stores, and small professional offices. They may also serve the rural neighborhood with local agricultural services. The

commercial uses are not intended to draw tourist or commuter traffic or people from outside the neighborhood. Gas station**s**, automobile repair, casinos, and drive-through facilities are not recommended. Open space areas should accommodate wildlife migration and reinforce the rural character of the area.



Existing crossroads development pattern



Potential crossroads development pattern

Development Guidelines

- Develop trails through the area that connects to areas outside the development.
- Establish open space areas.
- Cluster development in order to retain open space and consolidate infrastructure.
- Design the structures so that they fit within the rural character of the area.
- Buffer commercial uses from U.S. Highway 93 and adjacent residential areas.
- Consolidate motorized access.
- Incorporate infrastructure that reduces vehicle speed at pedestrian crossings.
- Apply "one development deep criteria" (no more than one commercial use on each corner of a crossroad).
- Provide for rural parking needs (trucks and trailers).
- Refer to the Suburban Residential Development Guidelines.
- Use "Community Design Guidelines" for parking, lighting, landscaping, landscape buffers, and signage. (See Appendix 6-A.)

4. Rural Residential

Description

Rural Residential land use types are intended to retain rural character. These designations also function as transitional areas between increased development and open and resource lands. Distance to services has also been considered. Continued use of these areas for agricultural and other resource-based purposes is encouraged. The recommended gross density can be flexibly applied to result in a variety of lot sizes, with the ultimate goal of retaining some larger parcels for resource preservation or agricultural uses.

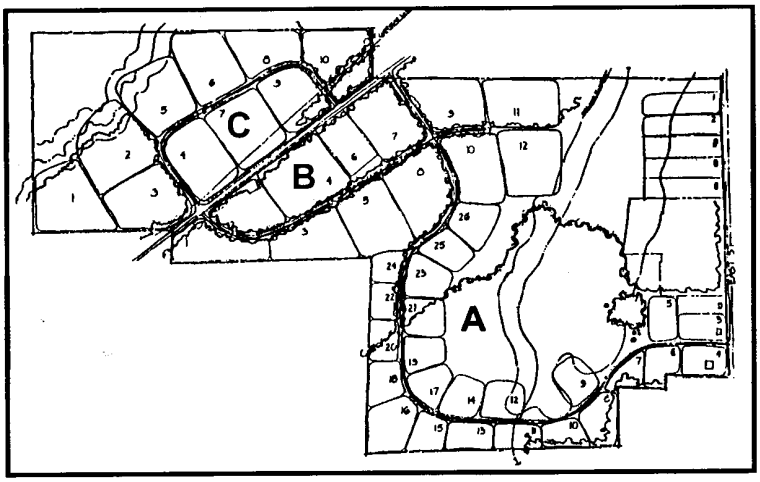
Rural Residential is described as two separate densities on the land use map.

One dwelling unit per five acres is recommended as a transitional land use pattern from suburban development patterns to less dense resource areas. This designation is also applicable where some constraints to development exist and where distance to services is increasing. This land use type has also been applied to match existing zoning or past comprehensive plan designations.

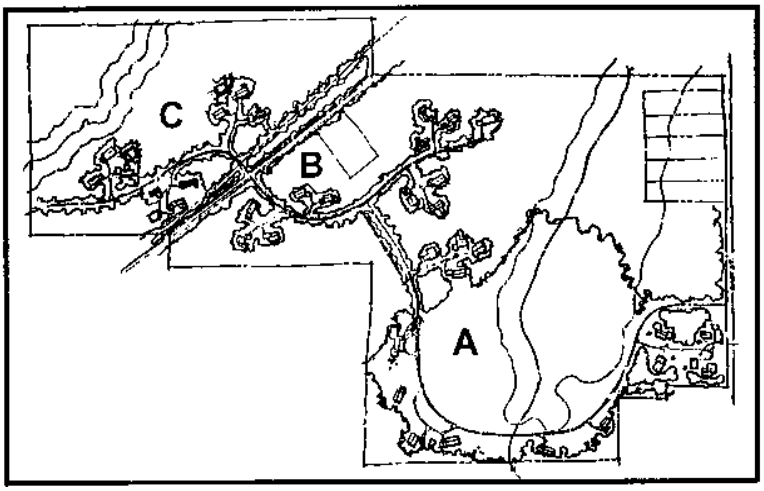
One dwelling unit per ten acres is recommended to reflect increased distance from services and increased development constraints. It functions as a transition from more dense development to Open and Resource areas. In some cases, the land use type has been applied to reflect existing comprehensive plan designations. Housing development should play a minor role on the landscape.

Development Guidelines

- Use conservation design guidelines in resource areas. (See Appendix 7-A.)
- Development sites should have access to existing road systems.
- Locate structures on slopes that do not exceed 25%.
- Use development patterns established in traditional farmsteads where outbuildings and homes were clustered together in sheltered areas leaving larger fields available for agricultural use.
- Locate buildings at the edge of open fields and timberlands**,** and use variable setbacks from rural roads.
- Pathways and connections should be established to provide for a variety of uses (pedestrian, bicycle and equestrian).



Residential development NOT recommended



Clustered residential development that IS recommended

Rural Residential Cluster

The Rural Residential Cluster is intended to provide incentives to use conservation design guidelines and land conservation measures through increases in density. A cluster development reduces the size of building lots and concentrates homesites together in order to protect sensitive resources or rural character. Cluster development also lessens infrastructure costs.

A Rural Residential Cluster may be used on parcels of land 40 acres in size or greater that are designated Rural Residential One Dwelling Unit Per Ten Acres. Parcels in contiguous ownership may be used to achieve the 40- acre minimum. A 25% density increase may be achieved if resources are preserved and development is clustered. Development should not disturb more than 15% of the total acreage under consideration. It should also be located near existing roads or services and address impacts to neighbors. The following list of criteria will be considered when increased density is requested:

a) Access to existing infrastructure.
b) Preservation of rural character.
c) Fire protection.
d) Preservation of important natural resource areas, including floodplain, floodway fringe areas, riparian areas, wildlife corridors, and steep hillsides.
e) Preservation of significant habitats, forested areas, and intact or re-established grasslands.
f) Minimal site disturbance.
g) Preservation of lands of agrarian importance.
h) Preservation of significant geologic landforms and sensitive soil areas.

Development should follow the development guidelines in the "Open and Resource Cluster" section (Chapter 7A) and the "Conservation Design Guidelines" (Appendix 7A). A development agreement limiting lot size and future divisions should be filed with Missoula County upon approval of a Rural Residential Cluster subdivision. The agreement should run with the land.

Development at a density of one dwelling unit per five acres is still considered Rural Residential. The Rural Residential Cluster option is not recommended for land designated Rural Residential One Dwelling Unit Per Five Acres since this would increase the density beyond what is generally considered rural.

Part 7C: Commercial and Industrial Land Uses

Some of the existing commercial uses are service related, designed to meet the needs of residents in the community and region. Other commercial uses are highway auto-oriented. General Commercial, Community Commercial, and Industrial areas were designated in the *1978 Lolo Land Use Plan*. Commercial and Industrial land uses in this Plan are described as six different types:

- General Commercial
- Community Commercial
- Specialized Recreational Commercial
- Home Based Business
- Light Industrial
- Light Industrial and Commercial

The Commercial land use types are intended for areas where public infrastructure and services are available. They reflect existing commercial uses and a desire to keep future commercial uses centralized and easily accessible. Expanding the commercial base of Lolo is a community goal. This Plan also encourages development of a more pedestrian and community-scale commercial area. To realize these goals, the Plan supports in-fill development of existing commercially designated areas, as well as recommends new areas for commercial use.

Industrial uses in the Community of Lolo Development Area are limited due to the lack of infrastructure. Current limitations include the lack of available sewer and water service. The community of Lolo is located within the Missoula Air Stagnation Zone, and existing regulations limit smoke, dust, steam or particulate emissions allowed from a heavy industrial use. Highway frontage is available, although commercial and residential uses are more common in these areas. Land south of Lolo Creek and east of U.S. Highway 93 was designated for industrial uses in the *1978 Lolo Plan* and has developed as a mixture of commercial and residential uses. The Bitterroot Branch Line still operates on a limited schedule (six to ten trains per week) transporting material to and from the Bitterroot Valley. Planning for potential light industrial use is important for establishing a diversity of job opportunities as long as those uses can be coordinated with infrastructure and meet County Health Department requirements. Other lands may be considered as suitable for industrial use under this Plan if they meet development guidelines and health requirements

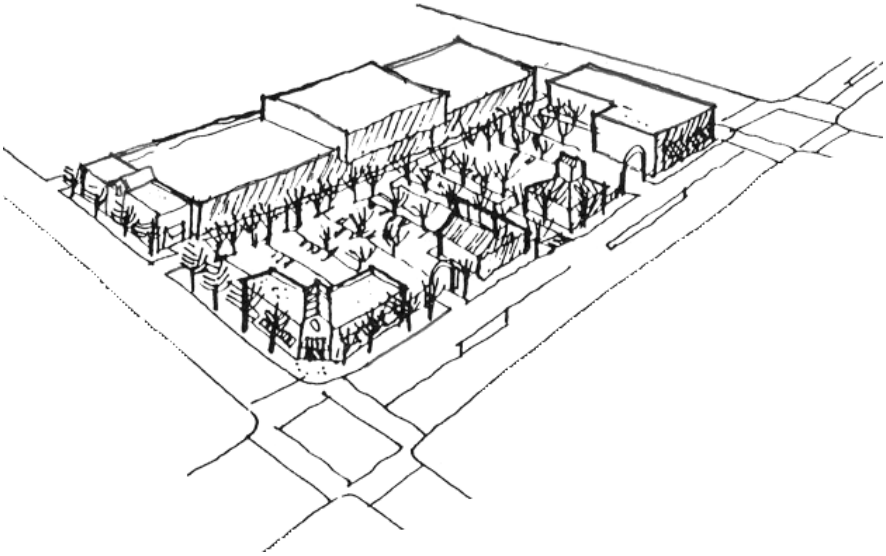
Existing light industrial activity in the planning region includes mill operations, logging operations, construction businesses, veterinary clinics, wood products assembly, and skilled trade businesses. Some of these uses occur outside the Development Areas.

1. General Commercial

Description

The Plan recommends a designation of General Commercial for the areas designated General and Community Commercial in the *1978 Lolo Land Use Plan*. In Lolo, the General Commercial uses have typically catered to commuter traffic and commercial transport of materials, such as truck stops and weigh stations. Existing commercial development in Lolo has become a mixture of General Commercial and Community Commercial uses, indicating that the distinction between the two land use types have become blurred. “Community Design Guidelines” are recommended as a means of creating a cohesive and compatible community environment that reflects the desired character of Lolo.

General Commercial uses include: highway-oriented uses**,** such as outdoor storage of merchandise or materials; automotive, mobile home, marine, recreational vehicle, and accessories sale; heavy equipment sale and service; building material, hardware and farm equipment sale, storage, and service; wholesale trade; support services to business or industry; and businesses that support highway travel, such as truck stops, motels, R.V. parks, or shipping/warehousing. Many of these uses require large areas of land which are not available within the commercial core area of Lolo. The General Commercial land use type also includes community-oriented uses, such as shopping centers, financial institutions, professional offices, personal services, drug stores, grocery stores, and other retail services.



Potential commercial development at street edge of existing commercial on U.S. Highway 93

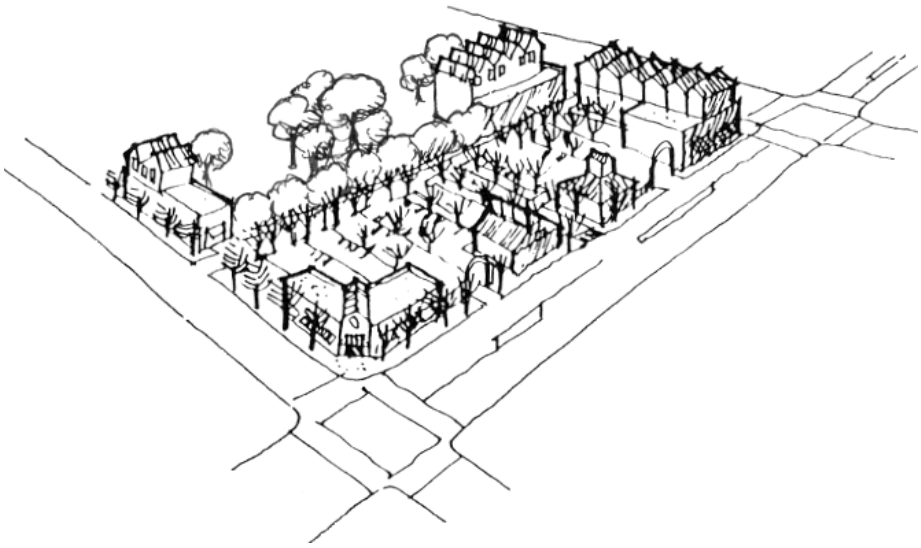
Development Guidelines

- Commercial development should reflect the identity of the place (architectural character, community theme, geographic uniqueness, etc.).
- Design easy and safe access in and out of businesses.
- Refer to "Community Design Guidelines" for specific recommendation for site development and building design (see Appendix 6-A).

2. Community Commercial

Descriptions

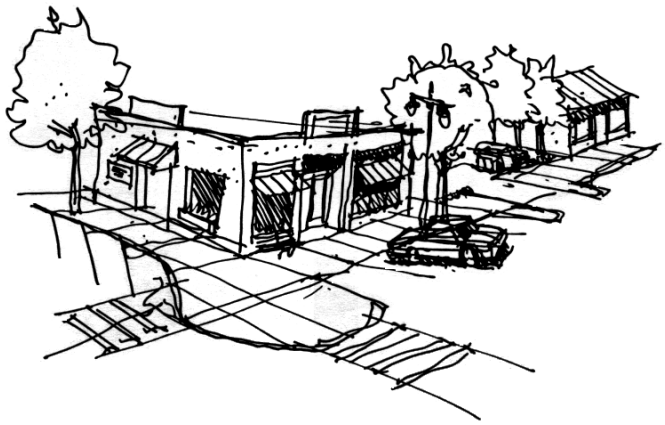
The Community Commercial designation is intended to accommodate small and medium scale retail and commercial service enterprises primarily for area residents and visitors to the region. Possible Community Commercial uses include: retail goods and services, financial institutions, business and professional offices, personal services, food and beverage establishments, lodging facilities, residential, and small scale entertainment facilities. New Community Commercial development in the Community of Lolo Development Area should mix uses if infrastructure and site design allow. Potential types of mixed-use are offices or residences on the second story above retail establishments. Similarly, apartment and studio living may be accommodated at the rear of buildings. Design of new commercial structures should enhance existing rural character, be small scale, and have limited signage. Developers should explore access sharing with adjoining commercial, industrial or public uses.



Potential commercial development with upper level residential

Development Guidelines

- Community Commercial uses can be mixed with residential uses on upper floors or integrated into the design of the site.
- Provide a minimum of 30% of the commercial building frontage with street level windows, window displays, doorways and building entries.
- Orient entries to commercial buildings to exterior blocks or street frontages. Secondary entries should open to the interior of the blocks and the parking lot.
- Discourage continuous blank wall space and service entries on the main street or street frontage.
- Refer to "Community Design Guidelines" for specific recommendations for site development and building design (see Appendix 6-A).



Potential street front Community Commercial development

3. Specialized Recreational Commercial

Description

This classification of commercial use is intended to provide criteria for outdoor uses that provide accommodations**,** such as day camps, campgrounds, R.V. parks, dude ranches, other destination resorts or conference centers, and for guest facilities, such as bed and breakfasts[1] or guest houses.[2] The designation would allow recreation and tourism that is compatible with rural character and that does not negatively impact environmental quality or surrounding uses, while also meeting the Plan recreation and economic goals and policies. Specialized Recreational Commercial facilities need specific description and development guidelines because they do not readily fit within other land use designations.

The intent of this classification is to acknowledge the possibility of additional uses within some Residential and Open and Resource lands. These uses are allowed in Commercial areas but are generally not considered compatible in Industrial areas. The types of uses that could be considered within each land use designation are described below. No specific areas are designated on the land use map as being appropriate for this type of use. Projects would be reviewed for comprehensive plan compliance on a case by case basis, based on the guidelines below and on the scale and intensity of the use. Small-scale Specialized Recreational Commercial uses need very little supporting infrastructure beyond that normally used by a rural residence or agricultural operation, whereas large-scale Specialized Recreational Commercial uses do generally require additional infrastructure.

Projects that include development of an R.V. park, or the addition of a dwelling unit to a property, trigger subdivision review. Other projects located in zoned areas or within the building permit jurisdiction would also be subject to review for comprehensive plan compliance. Campgrounds are subject to County Health Department review.

Open and Resource

The guiding principles for allowing Specialized Recreational Commercial uses within Open and Resource areas are that the primary use remains open and resource; impacts to natural resources and rural character are minimized and mitigated; and impacts to adjacent uses are negligible. Uses should be low intensity and resource related and should not compromise the resource. The types of uses that could be considered include**:** bed and breakfast, guest house, dude ranch, campground, or R.V. park.

Rural Residential

The guiding principles for allowing recreational commercial uses within Rural Residential areas are that the primary use remains rural residential; impacts to rural character and natural resources are minimized and mitigated; and impacts to adjacent uses are negligible. Uses that could be considered include**:** bed and breakfast, guest houses or other small-scale low intensity uses. Dude ranches could be considered on parcels 40 acres in size or greater. Campgrounds or R.V. parks could be considered in some locations on main travel corridors if impacts to rural residential character are minimized and adequate buffering and other mitigation measures are included.

[1] A bed and breakfast is defined as a single owner-occupied dwelling where there are no more than four rooms for rent to the travelling or vacationing public, whether regularly, seasonally, or occasionally, and where breakfast may or may not be served to overnight guests only.

[2] A guest house does not include a plumbed kitchen.

Urban/Suburban Residential

Bed and breakfasts or guest houses may be appropriate in Urban/Suburban Residential areas if there are no impacts to adjacent residential uses. R.V. parks may be suitable if located along a main travel corridor, close to urban services, and designed to mitigate impacts to existing residential uses or be located on a large undeveloped parcel where a spatial buffer is provided from existing residential uses.

Development Guidelines

Recreational Commercial uses should be designed to meet the following criteria:

- Locate facilities outside of environmentally sensitive areas**,** such as significant wildlife habitat, riparian areas and wetlands, and steep hillsides.
- Cluster development in order to preserve significant resource areas.
- Minimize and mitigate impacts to natural resources.
- Provide for land management and resource protection.
- Decrease scale and intensity of use as distance from a highway or main road increases.
- Mitigate traffic impacts.
- R.V. parks should have direct access from a paved road within approximately .5 miles of U.S. Highway 93 or U.S. Highway 12.
- Ensure that emergency services can be provided.
- Focus accessory uses, such as dining or laundry facilities, to serve only the on-site users of the Recreational Commercial use.
- Minimize impacts to rural character in Rural Residential and Open and Resource areas through considerations of scale and intensity of use as well as site design and buffering.
- Design the use to be compatible with adjacent land uses.
- Design the use to include appropriate landscaping, buffering, sign and lighting limitations, and adequate parking. Extensive visual buffering may be needed along main roads.

4. Home Based Businesses

As described in the "Economy Section" of this Plan, many home based businesses exist in and around the Community of Lolo Development Area. This Plan encourages the continuation of home based businesses where appropriate. Two forms of Home Based Businesses are described but are not specifically designated on the land use map. This classification is intended to provide criteria for development of home based businesses as accessory to residential uses.

Home Industry

Description

Home Industry is intended to describe small, individually owned businesses that function without altering the residential character of the area yet typically include a workshop outside the residence. Home Industry may be appropriate on parcels five acres or larger where the ability to buffer between dissimilar uses is possible. Types of uses that are considered home industry include, but are not limited to, arts and crafts studios, landscaping services, locksmith operations, small appliance service shops, small skilled trade shops, professional services, and construction businesses. This description does not include businesses that could be a nuisance to or impact others (e.g. feed lots, junk yards).

Development Guidelines

- Outside storage should be limited and screened from view by an opaque fence, wall, or dense landscaping.
- Signage should be limited to small, on-site directional signs and a maximum size of six square feet.
- The use should not have displays or advertising on the premises.
- The use should be buffered from the public right-of-way through the use of landscaping and berms.
- Existing vegetation that screens the use should remain wherever possible.
- The scale of accessory structures should remain comparable to the residence.
- Lighting should be similar to residential needs.
- Uses should not include businesses that generate traffic, odor, or parking demand. The uses should also not generate noise or light beyond the property boundaries.

Home Occupation

Description

A Home Occupation is a use accessory to the primary residential use of the premises. It should not be inconsistent with, nor disruptive to, normal residential use. It is intended for activities that do not generate traffic, noise, light, odor, parking demand or any exterior activity inconsistent with the character of the neighborhood. Home occupations typically take up a small area of the main residence. This use should not include businesses that could be a nuisance to or impact others (e.g. feed lots, junk yards).

Development Guidelines

- Equipment should be stored indoors.
- Signage should be limited to small, on-site directional signs and a maximum size of six square feet.
- The use should not have displays or advertising on the premises.
- The use should be buffered from the public right-of-way through the use of landscaping and berms.
- Existing vegetation that screens the use should remain wherever possible.
- Lighting should be similar to residential needs.

5. Light Industrial

Description

The Light Industrial designation is intended to provide employment opportunities for residents of the region and to improve the tax base. The emphasis of this designation is for the development of businesses that do not draw additional retail traffic, therefore not competing with the commercial core area of Lolo. It includes uses, such as research facilities, veterinary services, animal hospitals, kennels, industrial mini-warehouses, skilled trade businesses, warehouses, and light manufacturing. Many of these uses also require large areas of land, but by clustering the businesses**,** the ability to share some services and area is also possible. Light Industrial uses should be those uses that do not require an operational permit from the Missoula City-County Health Department Air Pollution Control Program or a Water Quality District Permit.

Development Guidelines

- Set development back from the highway.
- Buffer development from adjacent residential areas.
- Refer to "Community Design Guidelines" for specific recommendations for site development and building design (see Appendix 6-A).
- Consolidate motorized access.
- Establish a common architectural theme.
- Break-down the extent of large-scale developments into smaller elements by creating changes in wall planes and incorporating roof pitches.

6. Light Industrial and Commercial

Description

The Light Industrial and Commercial designation is intended to provide an area where either Light Industrial or General Commercial is appropriate.

Development Guidelines

- See the guidelines for General Commercial and Light Industrial uses.

Part 7D: Public and Quasi-Public Land Uses

Description

This designation is limited to those uses that have a uniquely public nature. The Public and Quasi-Public designation is applied to land with structures or uses, such as schools, community buildings, cemeteries and utility facilities. Lands currently owned by public agencies, or held in reserve for future development of community facilities, also receive this designation. Although no land is specifically designated, land located adjacent to or en route to Travelers' Rest may be appropriate for an interpretive center for the Lewis and Clark Bicentennial.

Federal lands administered by the United States Forest Service (USFS), State-owned lands administered by Fish, Wildlife and Parks, and conservation and recreation sites are also public lands but are designated Open and Resource or Parks and Open Space.

Development Guidelines

- All new public and quasi-public structures should use the "Community Design Guidelines."
- Construct facilities of products characteristic of the region and limit signage.
- Screen unoccupied facilities from public view and design them to blend into the landscape.
- Locate utility offices in commercial areas.
- Share access with adjoining commercial, industrial or public uses.
- Public and quasi-public facilities that access from U.S. Highway 93 should use existing roads that do not require new approach or encroachment permits from the Montana Department of Transportation.

Part 7E: Parks and Open Space

Description

Parks and Open Space is designated for park areas that are within public ownership, private common areas that are intended for use by a group of residents, or conservation lands that indicate a partnership between a public group and the private landowner.

Part 7F: Land Use Rationale

Development Areas have been described previously in this Plan. Land outside of Development Areas has been designated Open and Resource. Rationales for designations within each Development Area are provided below in order to give place-specific explanations for the designations. In order to find the locations of the areas described, refer to the land use maps accompanying this Plan.

1. Community of Lolo Development Area

Commercial designations are located primarily along the main travel corridors in the center of Lolo. Additional commercial areas are recommended along a portion of Lewis and Clark Drive.

Industrial designations are recommended in two peripheral areas of Lolo. The industrial uses should be concentrated in order to establish employment centers. The industrial areas are not intended to encourage retail use and a large amount of public traffic. Traffic to these areas should be primarily by those working in the centers. These areas are not intended to detract from the focus of commercial and community activity within the core of Lolo. They are encouraged to establish wide landscape buffers along the highway in order shield their view from the highway and to reinforce a positive image of community.

Residential designations are intended to establish higher density uses closer to the community core. The designations also reflect existing development patterns in some cases. Transition from one land use area to another and consideration of constraints to development were also looked at in the recommendations.

Public and Quasi-Public designations are recommended for areas that serve as community facilities**,** such as the school, community center, fire station, and wastewater treatment facility.

Area Specific Rationale for the Land Use Recommendations

1. West of U.S. Highway 93 South of Lolo Creek

   A. A majority of the area south of Mormon Creek Road extending to the first drainage south of Bitterroot Meadows is designated Suburban Residential-two dwelling units per acre. This area was designated as two dwelling units per acre in the *1978 Lolo Plan* and has been developed at a density ranging between one and two dwelling units per acre. The land use designation reflects the existing development pattern, the capability of the land, and a reduction in development density compared to that which is closer to the Lolo community core. A portion of this area is outside the Sewer Study Area and would require a community septic system to develop at the maximum density designated.

   B. Southwest of the drainage described above, land is recommended as Rural Residential-one dwelling unit per five acres. This designation decreases density further from Lolo, provides a transition along U.S. Highway 93 and is in an area that has some constraints to development. This area includes land that increases in grade from east to west, and serves as a transition to Open and Resource Areas. In the *1978 Lolo Plan*, a small portion of this area was designated Rural Residential while the part of the area closest to Highway 93 was designated Suburban Residential.

C. North of Mormon Creek Road land is designated Suburban Residential-one dwelling unit per acre. This area was previously designated two dwelling units per acre, but a decrease in development is recommended in order to reduce any potential groundwater contamination close to Lolo Creek. Some mobile home parks exist in the area, but further development at that density is not recommended.

D. In an area between a bench and the Lolo Creek floodplain, west of the Travelers' Rest State Park, Rural Residential-one dwelling unit per five acres land use is recommended. This is intended to encourage decreased development close to Lolo Creek and near the Travelers' Rest site.

E. General Commercial land use is recommended between Mormon Creek Road and the Open and Resource designation that follows Lolo Creek between Travelers' Rest State Park and U.S. Highway 93. This reflects the existing uses. The designation primarily fronts Highway 93 and should not extend much further west along Mormon Creek Road past the Travelers' Rest State Park. Additional buffering and less intense development should be considered closer to Lolo Creek.

F. Toward the west end of Mormon Creek Road, in Section 33, land is designated Rural Residential-one dwelling unit per ten acres, which reflects the 1978 land use designation, some constraints to development and a decrease in density west of Lolo.

G. Travelers' Rest State Park is designated Parks and Open Space.

2. East of U.S. Highway 93, South of Lolo Creek

A. General Commercial is designated between the highway and the railroad, outside of the Area of Significant Flood Risk. This reflects some existing uses. In 1978 this area was designated for some Parks and Open Space, Industrial, General Commercial, and Community Commercial.

B. An area east of the tracks is designated Light Industrial and Commercial. This area was designated Industrial and Rural Residential in the *1978 Lolo Plan* and has limited access. Because this area is at the confluence of railroad tracks and highway, it is not recommended for residential development.

C. A community gateway is recommended just south of the Light Industrial and Commercial designation.

D. A portion of the area east of the tracks is designated Rural Residential-one dwelling unit per five acres to reflect uses.

E. East of the Commercial area and within the 100-year floodplain land is designated Open and Resource. Much of this area is currently split into 20-acre parcels and was designated Parks and Open Space and Rural Residential-one dwelling unit per five acres in 1978.

F. An area south of the Light Industrial and Commercial use, between the highway and the floodplain, is designated Suburban Residential-one dwelling unit per acre and is intended to concentrate development outside of the floodplain. Currently, one access is permitted onto the highway.

G. Land east of the river is designated Open and Resource reflecting steep hillsides, remote access, previous land use designation, existing development pattern, and other resource constraints.

3. West of U.S. Highway 93, North of Lolo Creek, South of U.S. Highway 12

   A. General Commercial uses continue to be recommended near the intersection of Highway 12 and Highway 93. This designation reflects the existing development pattern and also reinforces the concept of a central commercial core.

   B. Multi-family-sixteen dwelling units per acre land use is recommended in an area that reflects the 1978 land use designation and existing mobile home development. This is also in an Area of Significant Flood Risk, and flood risks will need to be addressed prior to development.

   C. Along Highway 12 and beyond the commercial core area, a reduction in residential density is recommended compared to the 1978 designation of six dwelling units per acre. Four dwelling units per acre is recommended adjacent to the highway. This is an area where sewer might be extended and is easily accessible, but where many small rural residential parcels currently exist. Urban levels of development are considered in this area which will help pay for sewer should it become available. This area is also in an Area of Significant Flood Risk where new development would have to demonstrate that flood risks have been addressed.

   D. Between Lolo Creek and the Urban Residential designation, Rural Residential-one dwelling unit per five acres land use is recommended. This transition approximately follows topographic lines.

   E. Community Commercial is designated north of the creek and south of the community center in order to promote less intensive commercial uses that connect Travelers' Rest activities to the rest of the community.

   F. A community gateway is also recommended just west of the General Commercial designation. A community gateway may also develop over the long term in the vicinity of Sleeman Gulch should urban levels of development actually occur along Highway 12.

   G. An area west of the Urban Residential area is designated as Suburban Residential – one dwelling unit per acre. This area is outside of the Sewer Study Area and within close proximity to Lolo Creek. It has been used for commercial agricultural production in the past and may continue to do so because commercial agricultural production is exempt from land use regulations.

4. East of U.S. Highway 93, North of Lolo Creek, South of Lewis and Clark and Farm Lane

   A. The area between the railroad tracks and the highway, and closest to Lolo Creek is considered an area of special value due to the natural characteristics of the area. Encouraging development in response to those natural characteristics is very important through retaining scenic vistas, existing trees, and riparian vegetation. The majority of this area is also within the Area of Significant Flood Risk where new development would have to demonstrate that flood risks have been addressed.

      a) Rural Residential-one dwelling unit per five acres land use is recommended adjacent to the creek. This follows a similar pattern recommended west of the highway, and permits more room for protecting existing vegetation and developing around flood plain issues. This area was previously designated as a combination of Commercial, Parks and Open Space, and Multi-family Residential.
      b) General Commercial is designated along U.S. Highway 93. This area has the potential to establish a small street grid of small scale commercial and residential uses just off the highway.
      c) Multi-family Residential continues to be recommended behind the commercial area and in the area that is currently used as a mobile home park.

d) Open and Resource is also recommended in the area that was previously designated as Parks and Open Space.

B. General Commercial is recommended adjacent to U.S. Highway 93 and Lewis and Clark Drive. This is an area that has a mix of existing uses including a gas station/truck stop, equipment dealership, R.V. park, mobile home park, and a post office.

C. East of the tracks, land use designations closely match existing uses.

a) Land within the floodplain was designated in 1978 as Rural Residential-one dwelling unit per five acres and has developed in a rural residential pattern.
b) The area between Lewis and Clark Drive and the tracks is designated to match the existing development pattern of one dwelling unit per acre.
c) Land south of Farm Lane and close to Lewis and Clark Drive is designated to match the existing Urban Residential designation and development pattern.

5. East of the tracks, North of Tyler Way

A. The majority of this area was designated as Urban Residential-six dwelling units per acre in the *1978 Lolo Plan*. The designation of six dwelling units per acre is recommended to remain in the area that has not been zoned and is not within the floodplain.

B. Four dwelling units per acre is recommended in the area that is zoned correspondingly, but only in the area that is developed.

C. Two dwelling units per acre is recommended in the area that is zoned correspondingly, but only in the area that is developed.

D. There is a flood study in progress that will provide more accurate information on potential flood areas. Some parts of this area were surveyed in 1999. Areas above the flood elevation, using existing mapping from 1999, are designated as Urban Residential-four dwelling units per acre, however, the flood elevation for that area is not yet determined. Should other areas be deemed outside the floodplain after this study is completed, then those areas should be recommended for development matching the base zone.

E. Open and Resource is designated primarily for areas that are within the floodplain or potential flood area.

F. The Lolo Wastewater Treatment Facility is designated Public and Quasi-Public.

6. East of the tracks, North of Lewis and Clark Drive and Farm Lane, South of Tyler Way

A. An area east of the tracks and west of Lakeside Drive is designated Urban Residential-six dwelling units per acre, which matches existing development and the *1978 Lolo Plan*.

B. An area east of Lakeside Drive extending across Allomont Drive to the eastern section line of Section 35 had a 1978 land use designation of Urban Residential-six dwelling units per acre. The land has developed with parcel sizes generally ranging from two to four acres or greater. The land from the section line to the river was shown in 1978 as Parks and Open Space, except for a small portion in the northwest corner of Section 36, which was designated Urban Residential-six dwelling units per acre.

This is an area where balancing protection of resources with efficient use of infrastructure is particularly challenging. The land is located near the core of Lolo, within the Sewer Study Area, and adjacent to school land. The Plan encourages provision of housing close to services and development of the community core.

However, the area is also located where the Bitterroot River is close to its bank and the western boundary of the floodplain. In most other parts of the planning region, the river's floodplain extends to the west of the main channel providing a natural buffer. While the bank provides protection from flood hazard, development in this area brings other concerns including bank erosion, water quality, wildlife movement, and recreational amenities.

There has been considerable community discussion about the area. In addition to resource concerns, some residents have expressed a desire to maintain rural character through low density housing in the area.

a) Land directly adjacent to the river is designated Open and Resource. Some of this area is within the floodplain. The designation extends along a corridor that is approximately 300 feet wide adjacent to the river. This designation is intended to identify a buffer area were bank erosion is a concern and where development should probably not occur. The designation is also intended to protect water quality, wildlife habitat and movement, and recreational resources. Re-establishment of native vegetation and habitat is encouraged in this area. Proposed development within 300 feet of the average high water mark of the Bitterroot River should be reviewed to protect such values. (See Policy #8 in the "Water" section.)

b) Land extending west of the Open and Resource designation to east of Allomont Drive is designated Urban Residential-six dwelling units per acre. Proposed development located within 300 feet of the average high water mark of the river should be reviewed to protect bank stability, water quality, wildlife corridor, and social, cultural, and recreation values. (See Policy #8 on page 4B-13 of the "Water" section.)

c) An area west of Allomont Drive extending to Lakeside Drive is designated Urban Residential-six dwelling units per acre because it is close to community services, has the potential to be connected to municipal sewer, and has minimal development constraints.

7. <u>East of U.S. Highway 93, West of the railroad tracks, North of Lewis and Clark and Farm Lane</u>

A. General Commercial land use is recommended adjacent to Highway 93. This reflects some existing development. This designation fits the general concept of centralized commercial development along the highway corridor. Where residential uses are directly adjacent to potential commercial development, transitional uses and buffering techniques should be considered. The General Commercial land use designation includes a wide variety of uses. Transitional uses should be less intense commercial types in order to relate to nearby residential uses.

B. Community Commercial land use is recommended adjacent to Lewis and Clark Drive. This is an area that was previously designated as Multi-family, but at one time was the main street of Lolo. The Community Commercial designation is intended to encourage community-type services that are small scale and create a transition to nearby residential uses, as well as to reinforce the ability for Lolo to develop a main street that is pedestrian-friendly and inviting to local users.

C. Multi-family Residential-16 dwelling units per acre is designated along the tracks because it has been developed as a mix of high density residential. This is an area very close to commercial services, and it was previously designated Multi-family.

D. An area of Urban Residential land use is recommended to reflect the past land use designation. This area has not developed to such a density but could if it were connected to sewer.

E. General Commercial land use extends to the northern edge of Lolo. It includes many areas that have developed as either highway-oriented commercial uses or community commercial uses. A variety of commercial uses are encouraged in this area. Where development is close to existing residential areas, less intense transitional uses and buffering techniques should be considered.

8. West of U.S. Highway 93, North of U.S. Highway 12

A. Land use along Highway 93 is primarily designated as General Commercial, except for Lolo School land which is designated Public and Quasi-Public. The General Commercial designation includes areas that were previously designated as Community Commercial in the *1978Lolo Plan,* but where existing development is a mixture of highway heavy and community commercial uses.

B. Light Industrial and Commercial is designated in a currently undeveloped area that was formerly a gravel pit and has potential for many uses. It is accessible from the main travel corridor. The gravel pit would be very difficult to develop for residential uses.

C. A potential gateway into Lolo is possible at the northern end of the commercial uses along Highway 93.

D. Multi-family Residential-16 dwelling units per acre is designated for an area that developed as multi-family south of Ridgeway. Multi-family is also recommended on the north side of Ridgeway if public sewer becomes available. Multi-family use in this area should be located off of steep slopes and existing drainage areas.

E. Urban Residential-six dwelling units per acre is recommended for the area on the hill that is developed at Urban Residential density and matches the past land use designation.

F. Urban Residential-six dwelling units per acre land use is also recommended in an area north of Ridgeway, but only if it is connected to public sewer**,** or a community septic system that can be hooked up to sewer in the future. The alternative is for the land to be developed at a maximum of two dwelling units per acre. This designation closely matches the recommendations from the *1978 Lolo Plan*. Development is recommended to be clustered and setback from the ridgelines.

G. An area for Suburban Residential - two dwelling units per acre is recommended further north of the Ridgeway development. This area is outside the Sewer Service Area boundary and would be difficult to extend public sewer to. Development is recommended to be clustered and setback from the ridgelines. Protection of existing drainages and vegetation is also important.

H. Urban Residential-six dwelling units per acre development is recommended along Highway 12 west of the community core. This area is within the Sewer Study Area and has very few development constraints.

I. Land outside of the Sewer Study Area, west along Highway 12, is designated at two dwelling units per acre. Clustering and buffering from the highway is recommended. Because this area is adjacent to the Sewer Study Area, development may be able to connect to public sewer in the future. Flexibility in development design should include the ability to split lots further, as sewer

becomes available. The land use designation of two dwelling units per acre is also intended to encourage a decrease in density as development occurs further from the community core.

J. Beyond this residential area, land is recommended for Light Industrial use. This designation is located to recognize existing uses. Further industrial development in this area should be concentrated and setback from the highway. Landscape buffering should be established to improve the aesthetics of the area and contribute to the entrance into Lolo. Retail and commercial uses are not encouraged in this area because of additional public users and increased traffic. This area has the potential to develop as a light industrial employment center that increases the job potential for the area, but it is significantly different from the uses within the commercial core of Lolo so that it does not detract from the commercial core. This designation in this location allows a complete range of community uses and community identity. It also helps to reinforce the commercial job base. Light industrial use would potentially generate less traffic than residential use in the area. A concern with this designation in this area is that it is currently outside of the Sewer Study Area. Extension of public sewer to this area is encouraged. Light industrial uses should not create any impacts on the natural resources of the area and should be approved by the County Health Department.

K. West of the Light Industrial area land is recommended as one dwelling unit per acre. Residential development should decrease in density further from the community core of Lolo. This development pattern also functions as a transition to the rural character up Sleeman Gulch and north along Highway 12.

L. Land along Sleeman Gulch is recommended to retain the same Rural Residential designation as the *1978 Lolo Plan*. Development along the steep hillsides is discouraged.

M. Land west of Sleeman Gulch, along Highway 12, is designated as Rural Residential. Existing smaller lot developments (one dwelling unit per acre) are recognized, but further development at that density is not encouraged.

9. <u>West of U.S. Highway 93, North of the community core of Lolo</u>

A. A base land use designation of one dwelling unit per acre is recommended. This area has potential constraints to development including concerns over high ground water, especially close to the highway, and concerns over the safety of vehicular traffic entering and exiting the site from Highway 93. Development is not recommended along the steep slopes as described in the *County Subdivision Regulations*. Clustering of home sites should occur in order to place development away from the Area of Significant Flood Risk. The one dwelling unit per acre density also reflects the underlying zone in a portion of this area. The *1978 Lolo Plan* designated this area as two dwelling units per acre but also acknowledged that some constraints existed.

B. Commercial uses exist north of Lolo and west of Highway 93. The uses may continue, however, the commercial designation is not included in the area. Commercial uses are not recommended to extend further along the highway so that the overall development pattern remains residential.

C. Development in the area of Valley Grove is recommended at Rural Residential-one dwelling unit per five acres. This reflects the existing development pattern. Further splits of parcels that are already smaller than five acres are not recommended.

D. Towards the northern boundary of the Development Area, land is designated as Rural Residential-one dwelling unit per ten acres to reflect existing development and the 1978 land use designation.

2. North Bitterroot Valley Development Area

This area was previously governed under the *1975 Missoula County Plan*, which designated the majority of the land except for the area around Carlton, as Open and Resource. Some of the area around Carlton was designated Rural Residential. An activity circle around Carlton also indicated an area where increased residential or commercial development could occur.

Residential and limited commercial designations are recommended for areas primarily along the valley floor following U.S. Highway 93. Land east of the highway is generally considered within the floodplain. Land above the valley floor becomes steep and timbered and is generally recommended as Open and Resource in order to protect existing natural resources. A regional concept of clustering is recommended to focus on development along the travel corridor and not on lands where resources should be protected.

1. Northern portion of the area, West of U.S. Highway 93

   A. Rural Residential-one dwelling unit per five acres is recommended south of the Community of Lolo Development Area and north of the area designated for more concentrated development around Old Highway 93 and Highway 93. This area serves as an important break between areas of greater density.

   B. West of the area designated as one dwelling unit per five acres, land is designated as Rural Residential-one dwelling unit per ten acres based on the concept that development should reduce in density and intensity further from the highway. The one dwelling unit per ten acres designation is recommended in areas where there are more constraints to development, such as steep slopes and where protection of the existing drainages is important.

   C. Land west of the Rural Residential designations is designated as Open and Resource. This designation recognizes development constraints and the desire to protect existing natural resources.

2. Northern portion of the area, East of U.S. Highway 93

   This area is primarily within the floodplain and is designated as Open and Resource.

3. Area around the Old Highway 93 and U.S. Highway 93 intersection

   A. Community Crossroads is designated for the area closest to the intersection and between the old and new highways. This designation is intended to communicate a planned development concept that is primarily residential (one dwelling unit per acre) and focuses limited commercial uses adjacent to important road intersections. The area should be developed in a coordinated effort where design of the development is considered as essential as the density. This area is considered an appropriate place for Community Crossroads because of its location at the crossroad of Old Highway 93 and Highway 93. This area is also the collecting point of an existing residential neighborhood and is a northern access to the Carlton area. A park-and-ride facility was recently established adjacent to Highway 93 and existing commercial facilities exist within the area.

      a) Commercial uses that may be a part of this designation are intended to remain focused around two main intersections – the old highway and new highway intersections and a potential new public access from an existing approved private access. The commercial uses should be buffered from the highway and are not intended to draw tourist or commuter traffic.

b) Few development constraints exist, although concerns have been raised over the condition of some of the existing roads, an increase in traffic entering onto the highway during peak travel time, and surface water sitting in some areas. Areas of Significant Flood Risk have been identified where new development would have to demonstrate that flood risks have been addressed.

B. One dwelling unit per acre is recommended in an area around the Community Crossroads to provide a transition to some existing one and two acre residential developments.

C. Rural Residential at one dwelling unit per five acres is recommended between the one dwelling unit per acre area and Queen Anne Lane. This is intended to reflect existing development and the rural character of the area, and to provide a transition in development.

D. Rural Residential at one dwelling unit per ten acres is recommended west of Queen Anne Lane in the area of the existing Mackintosh Manor subdivision. This designation is intended to reflect the existing development pattern. This is also an area where the slope becomes steeper and wildlife habitat corridors are identified.

E. Land east of the highway that is outside of the floodplain has the potential for limited residential development. One dwelling unit per acre is recommended because this area is close to the Community Crossroad area. It has the potential for a pedestrian connection to the west side through the use of an under-crossing.

F. A large wetland west of Highway 93 is designated Open and Resource.

4. Area between the Old Highway 93 and U.S. Highway 93 intersection and the Carlton Community

A. An area on both sides of Highway 93 is designated Rural Residential-one dwelling unit per five acres, which corresponds to existing zoning.

B. An area west of this designation on the west side of the highway is recommended for a less dense Rural Residential designation of one dwelling unit per ten acres. This area provides transition between the development along the highway and Open and Resource lands in the hillsides.

C. Land on the east side of the river is designated Open and Resource.

5. Carlton Community, West of U.S. Highway 93, South to the County line

A. Most of the area around the intersection of Carlton Creek Road and Old Highway 93 is recommended as Rural Residential ranging from one dwelling unit per five acres to one dwelling unit per ten acres. Much of this area was previously designated for the similar range. Development in this area should be consistent with the surrounding rural pattern, the historic character, and consider the appropriate setback from important drainages.

B. An area south of Carlton Creek Road, both to the east and the west of Old Highway 93, is recommended for one dwelling unit per acre, in order to match existing development pattern and a mixture of lots smaller than five acres. Development in this area should be consistent with the surrounding rural pattern, the historic character, and consider the appropriate setback from important drainages.

6. Carlton Community, East of U.S. Highway 93, South to the County line

   A. Most of this area is within the floodplain and is designated Open and Resource. However, some of the land is zoned at one dwelling unit per 4.5 acres. Areas that are zoned and outside of the floodway are designated to reflect the zoning. Further development in the floodplain, however, is discouraged.

3. Lolo Creek Valley Development Area

This area was previously governed under the *1975 Missoula County Plan*, which designated the majority of the land, except for areas along Highway 12 and proximal to Lolo, as Open and Resource. Residential land use is designated for areas along the valley floor following Highway 12. Land beyond this is designated Open and Resource. Above the very narrow valley floor land becomes steep and access is limited. Lolo Creek, which follows Highway 12, also creates a barrier to development.

1. Between Sleeman Gulch and Mill Creek

   A. Development along U.S. Highway 12 in this area is intended to match the existing Rural Residential development pattern and is generally recommended at one dwelling unit per five acres.

   B. Two areas near Mill Creek were designated in 1975 as two dwelling units per acre but are considered too dense for the distance from Lolo. These areas are designated at one dwelling unit per acre to recognize existing lot sizes.

   C. Fort Fizzle and the Thayer Memorial Park are designated Parks and Open Space, which recognizes specific public parks or common areas.

   D. Existing commercial uses exist at Travelers' Rest Private entity (previously Bad Bubba's BBQ) which has been a destination point for local residents as well as travelers. These uses can continue; however, the commercial designation is not included in the area. Commercial uses are not recommended to extend further along the highway so that the overall development pattern in the area remains Rural Residential.

2. From Mill Creek West to the edge of the Development Area

   A. Land that is accessible from the highway, north of Lolo Creek, and outside of the floodplain area is considered Rural Residential–one dwelling unit per five acres. This designation matches the designation of the *1975 Lolo Plan.*

   B. Land south of Lolo Creek is less accessible and has more constraints to development due to creek crossings and wildland residential interface concerns. These areas are recommended as Rural Residential–one dwelling unit per ten acres.

   C. Woodman School, located north of U.S. Highway 12, is designated as Public and Quasi-Public.

3. Area outside of the Development Area

   Lolo Hot Springs, west of Lolo at the base of Lolo Pass, is directly accessible from Highway 12 and serves many different uses. It is a commercial destination that can continue to draw recreational users, tourists, and commuters. This site has the potential for more commercial use if permitted by health regulations. Any other commercial uses in this area should remain clustered.

CHAPTER 8: PLAN IMPLEMENTATION

A. How to Implement the Plan

A comprehensive plan is a non-regulatory document providing guidance for how different types of development should occur in an area. The *Lolo Regional Plan* is an amendment to the *1975 Missoula County Comprehensive Plan*. It reflects goals important to citizens in the Lolo region and describes how general County-wide policies and objectives can be applied or achieved more specifically in this area of the County.

Comprehensive plans should describe existing characteristics and offer projections of need in the areas of land-use, population, housing, economic conditions, local services, public facilities and natural resources. Plans also must articulate community goals and objectives relative to such elements and offer implementation strategies for accomplishing them. Plans are implemented in a number of ways through the actions of the residents, the governing body, landowners, and public and private agencies. Table 8-1 indicates general responsibility for implementation strategies from each section of the Plan.

1. General Implementation Tools

Some implementation strategies are employed most effectively by the community through public or private partnerships that combine funding and program initiatives in creative ways. Other strategies rely entirely on choices made by individual landowners or on actions taken by public or private agencies. The Board of County Commissioners can play a role in plan implementation by adopting capital improvement plans, approving grant requests, or making budget allocations to achieve plan goals and objectives. The governing body can use the Plan to make administrative and facility decisions, such as acceptance of dedicated parkland, extension of sewer, and road improvements. Using the Plan to demonstrate community interests, the local governing body also can advocate on behalf of the region before state and federal government agencies or elected officials.

Two of the most important methods for implementing the Plan include adopting regulations that are consistent with the Plan**,** and reviewing land-use projects for compliance with the Plan. These implementation tools are described generally below.

2. Regulatory Tools for Implementation

One of the most effective strategies for implementing a comprehensive plan is to adopt regulations designed to achieve its goals and objectives. On behalf of the community, the governing body can implement the Plan by adopting specific standards in subdivision, zoning, floodplain and other land-use regulations for use in reviewing development projects.

Subdivision regulations can be used to implement specific goals and policies in the Plan**,** since Montana law requires that subdivision regulations must be made in accordance with the comprehensive plan. Further, Montana law now requires that the review criteria for subdivision projects be addressed in the comprehensive plan (now known as a *Growth Policy*). M.C.A. § 76-1-601 states that a growth policy must include:

(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);

Those criteria include the effect on agriculture, agricultural water user facilities, local services, the natural environment, wildlife and wildlife habitat, and public health and safety.

Montana law also requires that zoning occur in conformance with an adopted comprehensive plan. Under State law, the creation of zoning districts, forty acres or larger in size, may be initiated by a petition of citizens. This is commonly referred to as citizen-initiated zoning. The governing body may also initiate the creation of zoning districts, of any size, on behalf of communities or landowners. In either case, citizen-initiated or county-initiated zoning district proposals may be defeated if their establishment is protested by a sufficient number of freeholders.

The Montana Supreme Court ruled that zoning regulations must closely conform to the comprehensive plan[1]. In the *Little* case, the Court explained that the intent of planning legislation was for plan adoption and then implementation through zoning. The Court found that a plan is the public's expression of a planning vision for the community. Further, regulations adopted in conformance with a plan are less likely to be arbitrary than those adopted in isolation.

3. Project Review Tools

Other implementation strategies are more appropriately employed at the time of development. Landowners and developers can advance Plan goals through their projects by proposing either development or preservation of the land in ways that are consistent with the Plan. Proposing development in compliance with the Plan adds a degree of predictability to the project approval process in those cases where governing body review and approval is required. Certain types of development projects that require subdivision review, a zoning compliance permit, zoning or rezoning approvals, or a local building permit are reviewed for substantial compliance with the comprehensive plan. Part B below describes how the Plan may be used to evaluate development projects.

In Missoula County, building permits for projects on unzoned lands are reviewed for compliance with the applicable comprehensive plan. Missoula County adopted two resolutions for use when determining comprehensive plan compliance, particularly in areas where development has occurred contrary to the Plan's recommendations. Resolutions 83-99 and 85-082 direct the Zoning Officer to find comprehensive plan compliance if a proposed use is compatible with 50% or more of the uses within 300 feet of the proposed use. The Resolutions allow an applicant to appeal a decision of the Zoning Officer to the Board of County Commissioners.

[1] *Little v. Board of County Commissioners of Flathead County*, 193 Mont. 334, 631 P.2d 1282 (1981).

4. Enforcement Tools

If a development does not involve a subdivision, is on unzoned land, and is outside the building permit jurisdiction, there is no trigger for review. Under these conditions, development may occur contrary to the recommendations of the Plan. Once that happens, there is little that can be done to enforce the Plan. No precedent exists for legally enjoining the development of a project that requires no action on the part of the governing body**,** based upon failure to comply with the comprehensive plan. Non-compliant development is further compounded when a governing body reviews a project in or adjacent to the area developed without review and contrary to the Plan. Resolutions 83-99 and 85-082 allow recognition of the significance of development itself establishing a development pattern. However, it frustrates residents to see development occur contrary to the Plan.

Enforcement of the Plan is most effective if County zoning is adopted. A Zoning Compliance Permit would be triggered by a building permit application. Where zoning exists, projects outside of the building permit jurisdiction still must comply with zoning and a Zoning Compliance Permit is required. Enforcement is also possible through legal action if the use is discovered after project completion.

B. How to Use the Plan to Evaluate Projects

Missoula County Subdivision Regulations require that proposed subdivisions be found in compliance with a comprehensive plan. As noted above, governing body approval of certain other kinds of land development projects is also dependent upon a finding of substantial compliance with the comprehensive plan. The Montana Supreme Court decided that substantial compliance, not strict compliance, is the requirement. The Court introduced the concept of substantial compliance in *Little*[2] when it said:

> To require strict compliance with the master plan would result in a master plan so unworkable that it would have to be constantly changed to comply with the realities. The master plan is, after all, a plan. On the other hand, to require no compliance at all would defeat the whole idea of planning. Why have a plan if the local governmental units are free to ignore it at any time? The statutes are clear enough to send the message that in reaching zoning decisions, the local governmental unit should at least substantially comply with the comprehensive plan (or master plan). This standard is flexible enough so that the master plan would not have to be undergoing constant change. Yet, this standard is sufficiently definite so that those charged with adhering to it will know when there is an acceptable deviation, and when there is an unacceptable deviation from the master plan.
>
> If the master plan is important enough to be a condition precedent to permanent zoning, it is also important enough to be followed once it is in existence. For these reasons, we hold that only substantial compliance is mandated by the statutes.

[2] *Little*, 193 Mont. at 353, 631 P.2d at 1293.

Steps in reviewing a project for substantial compliance include the following:

1. Review the Land Use Map

All of the land in the planning region is assigned a recommended land use on the land use map. When a proposal comes to the Planning Office for review, a first step is to determine the land use designation at the project location. The lines on the land use map generally indicate the boundaries of land use designations. These lines are approximate and have not been established with the same level of precision as zoning district boundaries, legally described by survey references. Further, the areas within a land use designation have not been established with the same rights of protest or opportunity for variance, nor do they grant the same level of entitlement or limitation that zoning provides.

Zoning maps usually follow ownership boundaries or survey lines. The land use designations in this Plan also might follow ownership lines but mostly follow topography, natural resource areas, infrastructure boundaries, and waterways, floodways and floodplains. The lines on the map distinguish land by use or by a recommended residential density. The recommended densities are guidelines and only one measure of substantial compliance with the comprehensive plan as described in the following examples.

If, for instance, land is designated for residential development at a density of two dwelling units per acre, the landowner has no guarantee that the land can be approved for development at that density. Further review of the Plan may uncover limitations to development that are specific to an area. Other limitations may only be discovered with an on-site analysis at the level of project review. For example, the presence of high groundwater might result in an overall allowed density of only one dwelling unit per acre.

On the other hand, a landowner may propose development at a density of two dwelling units per acre on a parcel that is designated for development at one unit per acre. The reason for the designation described in the Plan could be solely because the area is not served by sewer. If the landowner's proposal includes the extension of sewer to the development, the development could be determined to be in substantial compliance with the comprehensive plan. A finding could be made that the rationale for the designation (no sewer) is addressed and the goals of the Plan (protecting groundwater) are achieved by the manner in which the land is developed.

In areas designated for Community Commercial use, a proposal for a retail store may require evaluation to determine whether the use is appropriate in this land use designation. In this case, the use would be evaluated to determine if it is of a size and nature to serve the local residents of a particular area or community rather than a regional market. Substantial compliance might be attained by adopting a scale or design that limits the use to the local community.

While mapped land use designations indicate the most appropriate uses for an area, some uses from other land use designations may be considered in certain cases. Generally, Commercial and Industrial uses are not recommended in areas recommended for residential use. However, residential uses could be allowed in some General or Community Commercial areas. General Commercial uses are not recommended in Community Commercial areas, but Community Commercial may be allowed on land designated for General Commercial use.

Another type of analysis might be required when a Commercial use is proposed in an area designated for Industrial use. If evaluating the impact of locating a Commercial use in an Industrial area, the use might easily comply. However, the project would also be reviewed with respect to the overall Comprehensive Plan and the reason for designating the area as Industrial. Locating the Commercial use in an Industrial area eliminates the availability of that land for Industrial use without finding a replacement area for that land

designated for Industrial use. An argument could be made then that Commercial use in an Industrial area is not in substantial compliance with the comprehensive plan. If an analysis shows that adequate land remains for Industrial use, and that the land is needed or more appropriate for **c**ommercial use, and is compatible with existing uses, then compliance with the comprehensive plan could be found.

2. Review the Land Use Rationale

Chapter 7 includes descriptions of land use designations, as well as a rationale for where the land use designations are applied within each development area. A review of this section of the Plan will help to evaluate what conditions resulted in a land use designation. The examples given in the previous section also illustrate the use of these descriptions. For example, in the case of an area designated for residential development at a density of one dwelling unit per five acres, the rationale might depend solely on the fact that the property is in a transitional area that limits development to one dwelling unit per five acres. If a site-specific analysis determines that the transitional area is no longer needed, then the reason for the designation is not applicable and development at a higher density might be appropriate.

On some parcels the land use designation is split. For example, a parcel may have areas that are flat and easily accessible and areas located on steep hillsides. The land use designations may follow the topography, resulting in a designation of one unit per five acres on the flat ground and one unit per forty acres on the hillsides. The appropriate density and type of development is determined by a review of the rationale for each designation. Options include keeping the hillside free of development but allowing density recommended for the hillside to be used on the more developable land. This would result in a greater density on the flat ground than is recommended in the Plan but an overall density for the area developed that meets the recommendation of the Plan. Again, this analysis needs to occur on a site-specific basis**,** at the time of project review.

3. Review Goals, Policies and Guidelines

Each chapter includes goals and policies. Projects will be evaluated to determine whether these goals and policies are advanced. For example, a project may provide evidence that it meets certain goals of the Plan, such as providing a diversity of housing, in order to demonstrate substantial compliance with the Plan. These policies will need to be balanced with policies from other sections of the Plan on a case by case basis.

The design guidelines in this Plan help to guide development in response to the Plan goals. Incorporating design in accordance with the guidelines is another means of demonstrating comprehensive plan compliance. Following the design guidelines may be the best way to establish compliance with the goals and policies of the Comprehensive Plan when the proposal is for something other than the land use recommendation, and approval of the subdivision by the governing body may be conditioned upon following these design guidelines.

4. Determination of Comprehensive Plan Compliance

The analysis described in the first three steps above, is performed by the Planning Office and the applicant. The analysis benefits the governing body in its review. In subdivision review and re-zoning, the governing body makes findings of fact upon which to base its conclusion regarding compliance with the Comprehensive Plan. If the Zoning Officer has not issued a building permit because of failure to comply with the Comprehensive Plan, the applicant may appeal to the governing body.

C. How to Amend the Plan

1. When an Amendment is Needed

Occasionally a developer proposes a land use that does not meet the designation of the Plan and substantial compliance can not be found. Approval of the project would be contrary to the Plan. In some cases, a proposal to amend the Plan can be considered. The Supreme Court stated in *Little*:

> We are aware that changes in the master plan may well be dictated by changed circumstances occurring after the adoption of the plan. If this is so, the correct procedure is to amend the master plan rather than to erode the master plan by simply refusing to adhere to its guidelines.[3]

Amending the Plan is preferred to developing land contrary to the Plan. However, incremental amendments of the Plan may erode the Plan. The extent of that erosion depends upon the extent of the amendments and the process engaged in to amend the Plan. The more land encompassed by the amendment, the more likely that an amendment is appropriate. The more expansive the process, the better able the governing body is to ensure the integrity of the Plan.

Passage of time might also suggest amendment of the Plan. Evaluation of a plan helps the community and governing body to determine whether the Plan is still pertinent and reflective of community values. The evaluation should determine whether the goals, circumstances and needs of the area have changed. Issues for analysis include:

- Are the Plan's goals still valid?
- Have circumstances, upon which policies are based, changed?
- Is additional information available regarding the needs of the area?
- Has the legal framework changed?
- Does additional public input suggest the need to make changes?
- Is the planning process working in terms of using the Plan to evaluate projects?
- Would specific and identifiable amendments to the Plan improve the project review process?
- Could the Plan better serve the public as well as the landowner?

2. Amendment Process

a) Amendment Procedures

Future amendments to the *Lolo Regional Plan* may be initiated by making a request to the governing body. Requests may be made by the community, an individual landowner, the Missoula Consolidated Planning Board, or the Planning Office. In some cases, a developer may propose a plan amendment so that a project may be found to be in substantial compliance with a comprehensive plan. This kind of request often accompanies a development proposal. The request may be for an amendment to the map of land-use designations as it pertains to the development area, or for an amendment to the text of the Plan so that opportunities to find compliance with the Plan are increased. In such instances, it is difficult to review a plan amendment without also considering the specific proposal.

[3] *Little*, 193 Mont., at 354, 631 P.2d at 1293.

Depending upon its size and scope, an amendment request may result in modifications to the Planning Office workplan or budget, or require payment of a fee by the requester. In all cases, the decision to proceed with an amendment requires answering the questions posed above so that the governing body can determine that it is in the public interest to pursue a plan amendment.

b) Public Involvement

Planning is most successful when it involves members of the community. The type or degree of public involvement necessary for a plan amendment depends on the extent and scale of the amendment. A plan amendment process for a large area should include collecting opinions, assessing community needs, taking an inventory of resources, and engaging citizens effectively in each stage of the process. Public input may be obtained through open houses, presentations to civic groups, neighborhood and landowner association meetings, and distribution of materials with opportunities for written public comment. The more expansive the scope of an amendment is, the more public involvement opportunities should be available. A smaller amendment might require a more specific site analysis and neighborhood meetings.

c) Formal Public Hearing Process

- Noticed public hearings are required by the State law authorizing adoption of the Plan. The public is invited to comment at public hearings held by the Missoula Consolidated Planning Board and the governing body.

- A hearing before the Planning Board provides an opportunity for public comment in a more formal setting than the community meetings held during formulation of the Plan amendment. After the public hearing, the Planning Board may make additional changes to the proposed amendment.

- The Planning Board then forwards the Plan to the governing body with a recommendation to adopt the Plan, to adopt it as amended by the Planning Board, or to deny it.

3. Future Review of this Plan

The recommendations in the planning region are based upon a 20-year view contemplating adequate land available for each of the land uses for that time period. State law requires review and, when necessary, revision of the County-wide comprehensive plan every five years. On a periodic basis, and in the manner described in this chapter, the *Lolo Regional Plan* also should be evaluated to determine whether an update is appropriate.

APPENDIX 1A

LIST OF ADDITIONAL RESOURCES

These documents or agencies are referenced in the Plan or can provide additional information about the topics covered in the Plan.

Chapter 3: Cultural and Historic Resources

- Confederated Salish and Kootenai Tribes
  P.O. Box 278
  Pablo, MT 59855
  (406) 675-2700
- State Historic Preservation Office
  PO Box 201202
  Helena, MT 59620
  (406) 444-7715
- *Inventory of Conservation Resources for Missoula County*, October 1992 Update, available at the Missoula Office of Planning and Grants.
- *Lolo Creek Reflections*, Lolo Creek History Committee, available at the Missoula County Library. Lolo Women's Club (1999), Stoneydale Press, Stevensville, Montana.
- *Flathead Reservation Comprehensive Resources Plan*, January 1996, Confederated Salish and Kootenai Tribes.
- *Rails to Gold & Silver*, by Bill & Jan Taylor, Missoula: Pictorial Histories Publishing Co., 1999.
- "One Trail, Many Meanings: The Lolo Trail" by Sandi McFarland *Cultural Resource Management* Volume 20, No.1 1997.
- "Eliza Foster Carlton Holden Lavey" by Cheryl Holden Rice in *Dream Across the Divide, Stories of the Montana Pioneers*, Linda Wostrel, editor. Sons and Daughters of Montana Pioneers, 2001.

Chapter 4: Natural Resources

General

- *Inventory of Conservation Resources for Missoula County*, October 1992 Update, available at the Missoula Office of Planning and Grants.
- *Missoula County Subdivision Regulations*, amended December 13, 2000, available at the Missoula Office of Planning and Grants.

4A Geology

- Natural Resource Conservation Service (NRCS)
  3550 Mullan Road, Suite 106
  Missoula, MT 59808-5125
  (406) 829-3395
- *Soil Survey of Missoula County Area, Montana.* Available through the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS).

4B Water

- Missoula City-County Health Department
  Environmental Health Division
  301 West Alder St.
  Missoula, MT 59801
  (406) 523-4755

- *City-County Health Code,* available at the Environmental Health Division, Missoula City-County Health Department.

- *Missoula Valley Water Quality Ordinance*, available at the Environmental Health Division, Missoula City-County Health Department.

- *Clark Fork River Voluntary Nutrient Reduction Program,* Tri-State Implementation Council, June 15, 1998.

- *Missoula County Carrying Capacity Study*, Land & Water Consulting Inc, March 1996.

- *Final Wastewater Facilities Plan Missoula County Lolo RSID 901*, HDR Engineering, January 25, 2000.

- *Missoula County Floodplain Regulations,* available at the Missoula Office of Planning and Grants.

- *Out of Harm's Way: Activities for Flood Preparedness, Flood Damage Mitigation, Response to Floods and Recovery.*

- *Applied River Morphology*, by Dave Rosgen, Wildland Hydrology, 1996.

4C Biology

- Montana Department of Fish, Wildlife, and Parks
  3201 Spurgin Road
  Missoula, MT 59804
  (406) 542-5500

- Missoula County Weed District
  2147 Ernest Ave.
  Missoula, MT 59801
  (406) 829-0496

- *Montana Bald Eagle Management Plan*
  Bureau of Reclamation
  Montana Projects Office
  P.O. Box 30137
  Billings, Montana 59107-0137

- *Fire Protection Guidelines for Wildland Residential Interface Development,* Montana Department of State Lands, July 1993.

- *Protecting Your Home from Wildfire.* Video by Jack Cohen. Available for rent at video stores or through local fire departments.

- *A Landowner's Guide to Montana Wetlands,* produced by Montana Watercourse, P.O. Box 170575, Montana State University, Bozeman, MT 59717 (406) 994-6671.

- *Living with Wildlife,* brochure available at the Missoula Office of Planning and Grants.

- *Living with Mountain Lions* and *Living with Grizzly Bears,* brochures available from Montana Department of Fish Wildlife and Parks.

4D Air

- *Missoula County Air Quality Regulations*, available at the Missoula City-County Health Department.

Chapter 5: Development Resources

5A Population and Projected Growth

- Census Data: 1980, 1990, 2000.
- *Missoula Population and Household Projection*, prepared for the City of Missoula by James T. Sylvester, 1999.
- *Lolo Wastewater Treatment Facility Plan*, Lolo RSID 906, Missoula County, prepared by HDR Engineering, adopted January 25, 2000.

5C Housing

- *Missoula Consolidated Plan*, prepared for the City of Missoula, adopted 1999, available at the Missoula Office of Planning and Grants.
- *Population, Employment and Wage Trends in Missoula County*, prepared by Dr. Larry Swanson, O'Connor Center for the Rocky Mountain West, the University of Montana, December 1998.

5D Economy

- "The Bitterroot Valley of Western Montana Area Economic Profile", prepared by Dr. Larry Swanson, O'Connor Center for the Rocky Mountain West, the University of Montana, 2001.
- Missoula Area Economic Development Corporation.
- Agricultural Census, 1997.
- Missoula and Mineral County Farm Service Agencies.
- "Forest Resources for the Lolo National Forest," prepared by Larry T. DeBlander, 2000.
- *Lolo National Forest Plan*, United States Department of Agriculture, Feb. 1986.
- *Time-Saver Standards for Housing and Residential Development*, De Chiara, Panero and Zelnik (eds.), second edition, 1995.

5E Transportation

- Final Environmental Impact Statement, U.S. Highway 93, Hamilton to Lolo, Montana, April 1997.
- "The Transportation Land Use Connection" by Terry Moore and Paul Thorsnes, (American Planning Association, PAS No. 448/449, 1994).
- Ten Keys To Walkable/Livable Communities by Dan Burden, Director of Walkable Communities, Published by the Local Government Commission at http://www.lgc.org/freepub/land_use/articles/ten_keys.html.

5F Parks and Open Space

- *Missoula County Parks and Conservation Lands Plan*, 1997.

Chapter 6: Community Character

Appendix 6A: Community Design Standards

- *Missoula County Zoning Regulations*, amended January 31, 2001, available at the Missoula Office of Planning and Grants.

Chapter 7: Land Use Types

- *Conservation Design for Subdivisions*, by Randall Arendt, Island Press, 1996.

APPENDIX 4A

HILLSIDE DESIGN GUIDELINES

Purpose

Hillside areas in the planning region are characterized by slope, vegetation, drainage, rock outcroppings, geologic hazards, and other physical factors that, if disturbed for the purposes of development, can cause physical damage to public and private property. Therefore, the development of such areas and adjacent land requires special care.

These guidelines are recommended for developments located on slopes over 10% and are intended to accomplish the following objectives:

1. The protection of hillside land and resources within the legitimate expectations of property owners and the County's overall goals;
2. The protection of the public from natural hazards due to seismic activity, soil characteristics that are limiting, landslides, slope instability, sedimentation, stormwater runoff, sheet flooding on frozen surfaces, soil erosion, and groundwater;
3. The preservation of natural features, wildlife habitat, and open space;
4. The retention of natural topographic features, such as drainage channels, streams, ridgelines, rock outcroppings, vistas, trees and native vegetation;
5. The promotion of subdivision designs sensitive to existing vistas;
6. The preservation and enhancement of visual and environmental quality by the use of natural vegetation and minimal excavation and terracing;
7. The assurance of an adequate transportation system, including non-motorized transportation, for the total hillside area that considers densities and topography with minimal cuts, fills, and other visible scars;
8. The establishment of on-site and off-site transportation systems that ensure ingress and egress for vehicles, including emergency vehicles, into all developed areas at all times;
9. The encouragement of innovative planning, design, and construction techniques for development in environmentally sensitive areas; and,
10. The mitigation of adverse environmental impacts, including, but not limited to, erosion and the degradation of air and water quality.

Guidelines

1. Lots should have a 2,000 square foot contiguous buildable area with a slope of less than 25%.
2. Driveways should be designed to minimize cut and fill and site disturbance, provide year-round access, and accommodate emergency response equipment. The driveway should substantially follow the natural contour and not exceed the maximum grade recommended by County standards or fire jurisdictions. Plans for any driveway in excess of 150 feet shall be approved by the appropriate fire jurisdiction.

3. Structures

   (a) When structures are located on hillside land, they should be designed to fit into the hillside**,** rather than altering the hillside to fit the structure. The design may require the use of one or more methods to fit into the hillside. Methods for incorporating structures into hillsides include:

      i) Reduced footprint design, where the building foot print does not exceed 900 square feet of ground floor living area.
      ii) Multiple "step up" or "step down" structures that follow the natural hillside slope on any buildable portion of the site.
      iii) Orient buildings to slopes so that the greatest horizontal dimension is parallel with, not perpendicular to, the natural contour of the land.
      iv) Use of landscape screening**,** if the underside of the building is exposed**.**
      v) Building pads that are graded with a minimum of fill slope on the downslope side.

   (b) Individual wall elements should not exceed 18' in height.

   (c) Where retaining walls are used, the walls should step down from the building structure following the natural hillside contours. Maximum recommended height of a retaining wall is six feet.

   (d) When buildable and non-buildable areas exist on a lot or parcel, then the structures should be set back a minimum of 40 feet from the top of the slope where the non-buildable area (greater than 25% slope) becomes a buildable area (25% or less slope).

   (e) The maximum vertical height of a building or structure should not exceed the building height envelope of the underlying zone.

   (f) The highest part of any structure should be a minimum of 80 vertical feet below the closest point on the nearest prominent hilltop or ridgeline. The ridgeline's natural contour and native vegetation should remain intact. In addition, the choice of buildable area should weigh the need to protect conservation resources, such as natural slope, areas of riparian resource and habitat for species of special concern against the need to protect the view from the valley floor.

4. In residential developments with lot sizes one acre or smaller, if the total percentage of the impervious surface exceeds 35% of the lot size, additional drainage and erosion control considerations are recommended.

Grading, Drainage And Erosion Control Guidelines

Purpose

These guidelines recommend measures for site grading and storm water runoff control, both quantity and quality. These measures are intended to achieve erosion and sedimentation control, preservation of natural drainage systems, flood mitigation, site grading, and protection of property.

Guidelines

1. All disturbed slopes should be graded or have retaining walls constructed according to a grading plan that accomplishes the following:

   (a) Cut-and-fill slopes and intersections of manufactured and natural slopes should have curved configurations that reflect the forms and shapes of surrounding topography.

   (b) Grading should incorporate elements to protect drainage systems. Natural drainage ways should be preserved. Drainageways should remain clear and open and should not be obstructed with fences, structures, etc. Streets and roads that cross a drainage way should preserve its capacity for drainage.

   (c) Grading should integrate landscaping designs to provide erosion protection and prevent weed infestation to the site. Landowners should replant areas of disturbance no later than the first growing season in consultation with the County Extension Office.

   (d) Where site grading is necessary, top soil should be salvaged or imported to be redistributed in areas to be revegetated.

   (e) Where drainage swales are used to divert surface waters, they should be vegetated or protected to minimize potential erosion.

   (f) Manufactured slopes should exceed a slope ratio of 2:1 only if the soils are deemed suitable, it is necessary for preservation of significant environmental characteristics of a site, or the need for extensive cut and fill slopes is substantially reduced.

2. Provisions for the collection of stormwater runoff and prevention of soil erosion should be the first improvements constructed on the development site. Such improvements should be designed to divert surface water away from cut faces or sloping surfaces of a fill.

3. All surface run-off, in addition to that normally present before development, should be retained on-site or released from the site in a manner which will not substantially increase the peak run-off normally present before development unless an adequate storm sewer exists or is provided.

4. Design of such drainage facilities should be based upon local soil factors, topography, natural drainages, gullies and swales, aesthetics, and capacity for proper disposal of excess water. Drainage facilities should be designed to handle both the development and the adjacent drainage basin.

5. Grading should not take place inside the 'drip line' of the tree canopies.

6. Cut and fill for roadways and driveways should be confined to stated right-of-way widths or roadway easement widths.

7. If the total percentage of the impervious surface exceeds 35% of the lot size in residential developments with lot sizes one acre or smaller in size, additional drainage and erosion control may be recommended.

APPENDIX 4B

LIVING WITH WILDLIFE GUIDELINES

The following measures are intended to reduce the potential for human-wildlife conflicts. They can be followed as needed by individual landowners or incorporated into subdivision covenants where appropriate.

a) Permanent barbecue pits should not be installed in non-urban areas. Portable barbecues should be cleaned regularly and stored indoors when not in use to prevent wildlife attraction.

b) Gardens and compost piles should be adequately fenced one foot below the surface and eight feet high with a top rail made of something other than wire to prevent wildlife entanglement.

c) Encourage the use of native vegetation when landscaping and revegetating disturbed areas. Flowers, ornamental trees and fruit-bearing trees are susceptible to damage from wildlife. Fence and protect flowers, ornamental shrubs, fruit trees and gardens, which may be susceptible to damage from wildlife. Fruit trees should be properly harvested and not allowed to accumulate rotting organic matter that will attract wildlife.

d) Garbage should be stored in wildlife proof containers with sufficiently tight-fitting covers to prevent the escape of noxious odors and to prevent the entrance and destruction by wildlife.

e) Domestic pets (dogs, cats, etc.) should not be allowed to roam freely and potentially harass wildlife. Dogs should be kept in an enclosed area when not under the direct supervision of the owner. Besides loss of life and the maiming of wildlife, this harassment also causes unnecessary energy expenditures and can displace animals to less suitable habitats.

f) Pet and livestock food should be stored in a secured area**,** not accessible to wildlife. Feed domestic pets indoors to prevent attraction of wildlife.

g) Rabbits, goats, sheep, turkeys, chickens, pigs and other 4-H type animals should be protected and enclosed with adequate fencing or sturdy cages to protect them from wildlife. These domestic species have little or no defense against predators and can be attractive food sources for wildlife.

h) Artificial feeding of wildlife is prohibited. Do not allow salt blocks, mineral blocks and feeding platforms for deer or other wildlife. They attract prey species that, in turn, often attract the corresponding predator species, such as mountain lions and bears, to residential areas leading to human and wildlife conflict.

i) Apiaries (bee hives) may attract species**,** such as bears**,** and should be avoided. Before an apiary is located on a lot, the owner of the bee hive(s) should first contact the Department of Fish Wildlife and Parks to discuss their plans and how to best avoid wildlife conflicts.

Additional recommendations may apply to areas with bears. For additional details see "Living with Wildlife," a brochure available from the Missoula Office of Planning and Grants, 435 Ryman, Missoula, MT 59801, (406) 523-4657. The Montana Department of Fish Wildlife and Parks can also provide further guidelines, including the brochures, "Living with Mountain Lions," and "Living with Grizzly Bears."

Appendix 4C
Special Status Plants and Animals

Special Status Animals						
Common Name	**Scientific**	**Grank**	**Srank**	**BLM Status**	**USFS Status**	**USFWS-ESA**
Bald Eagle	Haliaeetus leucocephalus	G4	S3B, S3N	Special Status	Threatened	LT
Boreal Owl	Aegolius funereus	G5	S4	Special Status		
Sheathed Slug	Zacoleus idahoensis	G3G4	S2S3			
Bitterroot Mountainsnail	Oreohelix amariradix	G1G2	S1S2			
Bull Trout – Columbia River	Savelinus Confluentus	G3T2Q	S?	Special Status	Threatened	LT
Westslope Cutthroat Trout	Oncorhynchus Clarki Lewisi	G4T3	S3	Special Status	Sensitive	

Special Status Plants						
	Sphagnum mendocinum	G4	S1			
Tapered-root Orogenia	Orogenia fusiformis	G5	S2		Sensitive	
Oregon Bluebells	Mertensia bella	G4	S1		Sensitive	
Pale Laurel	Kalmia polifolia	G5	S1		Sensitive	
Hiker's Gentian	Gentianopsis simplex	G4	S1	Watch	Sensitive	
Toothcup	Rotala ramosior	G5	S1			
Chaffweed	Centunculus minimus	G5	S1	Watch		
Idaho Barren Strawberry	Waldsteinia idahoensis	G3	S1		Sensitive	
Pointed Broom Sedge	Carex scoparia	G5	S2			
Shining Flatsedge	Cyperus rivularis	G5	S1			
Small Yellow Lady's-slipper	Cypripedium parviflorum	G5	S3	Watch	Sensitive	

Key:

Grank/Srank	
Rank	**Description**
1	Critically imperiled because of extreme rarity; or because of some factor of its biology making it especially vulnerable to extirpation.
2	Imperiled because of rarity; or because of other factors demonstrably making it very vulnerable to extinction throughout its range.
3	Vulnerable because of rarity; or found in a restricted range even though it may be abundant at some of its locations.
4	Apparently secure; though it may be quite rare in parts of its range; especially at the periphery.
5	Demonstrably secure; though it may be quite rare in parts of its range; especially at the periphery.
U	Possibly in peril but status uncertain; more information needed.
H	Historical; known only from records over 50 years ago; may be rediscovered.
X	Believed to be extinct; historical records only.
G#G# S#S#	Numeric range rank: A range between two of the numeric ranks. Denotes range of uncertainty about the exact rarity of the species.

Qualifiers	**Description**
?	Inexact or uncertain; for numeric ranks, denotes inexactness.
B	Breeding status of a migratory species.
N	Non-breeding status of a migratory species.
Q	Taxonomic questions or problems involved, more information needed; appended to the global rank.
T	Rank for subspecific taxon (subspecies, variety, or population); appended to the global rank for the full species.

BLM Status	
Sensitive	Sensitive species: proven to be imperiled in at least part of its range and documented to occur on BLM lands.
Watch	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.

USFS Status	
Threatened	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.
Sensitive	Sensitive species; subspecies or variety; for which the Regional Forester has determined there is a concern for population viability range-wide or in the region.

USFWS-ESA Status	
LT	Listed as threatened under the Endangered Species Act.

Appendix 5C

Existing Residential Densities

Residential Neighborhoods							
Group	**Area (ac)**	**Multi-family**	**Mobile Home**	**Single Family**	**Dwelling Unit**	**Density**	**Avg. Lot (ac)**
A.1	524.39	26	17	305	346	0.66	1.34
A.2	347.59	20	24	399	427	1.23	0.79
A.3	70.51	83	4	40	123	1.74	0.64
A.4	342.73	0	3	45	48	0.14	2.30
A.5	133.65	1	62	10	71	0.53	4.61
A.6	282.26	1	107	20	124	0.44	6.01
A.7	184.94	2	65	24	88	0.48	4.11
A.8	204.93	12	7	174	191	0.93	1.01
Total	**2091**				**1418**	**0.68**	**2.60**

Subdivision Areas							
Group	**Area (ac)**	**Multi-family**	**Mobile Home**	**Single Family**	**Dwelling Unit**	**Density**	**Avg. Lot (ac)**
B.1	44.04	0	0	13	13	0.30	2.94
B.2	129.13	20	1	289	312	2.42	0.39
B.3	102.83	83	21	269	277	2.69	0.36
B.4	24.48	0	4	31	31	1.27	0.66
B.5	19.35	1	1	115	122	6.31	0.16
B.6	7.97	1	1	4	4	0.50	1.99
B.7	25.82	2	0	1	1	0.04	0.51
B.8	28.74	12	0	59	59	2.05	0.49
B.9	24.64	145	0	48	48	1.95	0.49
B.10	16.38	0	4	11	17	1.04	0.86
B.11	751.92	0	0	21	21	0.03	16
Total	**1175.29**				**905**	**0.77**	**2.26**

Multi-family/Mobile Homes						
Group	**Area (ac)**	**Multi-family**	**Mobile Home**	**Single Family**	**Dwelling Unit**	**Density**
C.1	2.01	0	11	0	11	5.47
C.2	1.89	12	0	0	12	6.35
C.3	2.96	0	1	1	1	0.34
C.4	1	3	0	0	3	3
C.5	2.10	0	3	0	3	1.43
C.6	8.54	0	14	0	14	1.64
C.7	11.17	0	29	0	29	2.60
C.8	3.87	0	0	0	0	0
C.9	5.76	0	53	0	53	9.20
C.10	2.30	1	6	0	7	3.04
C.11	2.19	1	14	0	15	6.85
C.12	4.07	2	7	0	9	2.21
C.13	4.62	0	2	0	2	0.43
C.14	8.59	0	3	0	3	0.35
C.15	2.88	0	14	0	14	4.86
C.16	1.77	0	1	0	1	0.56
C.17	2.60	0	1	0	1	0.38
C.18	2.42	0	30	0	30	12.40
C.19	1.50	0	0	1	1	0.67
C.20	18.28	0	7	1	8	0.44
C.21	2.11	2	0	0	2	0.95
C.22	1.05	2	0	0	2	1.90
Total	**93.68**				**221**	

APPENDIX 5D

POPULATION LEVELS AND URBAN ACTIVITIES

Population levels recommended to support urban activities.[1]

Education	Population
Daycare Center	500
Children's Play Space	300 –700
Elementary School	1800
Middle School	5000
Library, Education Res. Center	5000 – 8000
High School	9000
Institutional	
Post Office	100
Library	500
Town Hall	5000 – 8000
Employment	
Office Complex	10,000
Services Complex	5000 – 8000
Light Industry	5000 – 8000
Local "Neighborhood Industrial"	5000 – 8000
Transportation	
Private Parking	100
Auto Service Station	2000
Recreation	
Communal Garden	100
Infants' Play Space	500 – 1000
Children's Play Space	300 – 700
Restaurant	2000
Local Park	2000 – 4000
Playground	5000
Bar, Saloon	5000 – 8000
Commercial	
Corner Store	500
Convenience Grocery Store	2000
Delicatessen & Bakery	3000
Drug Store	1000 – 5000
Snack Bar	1000 – 5000
Liquor	1000 – 5000
Beauty Parlor	1000 – 5000
Service Station	5000
Bank Office	5000 – 8000
Hardware	5000 – 8000
Barber Shop	5000 – 8000
Single Purpose Store	10,000

[1] *Time-Saver Standards for Housing and Residential Development* (1995). Second Edition. De Chiara, Panero and Zelnik. p. 10.

APPENDIX 6A:
COMMUNITY DESIGN GUIDELINES

1. Purpose

These design guidelines are in response to the goals of the *Lolo Regional Plan*. They are intended to help guide new construction and exterior remodeling of commercial, industrial, and multi-family development throughout the planning area. The guidelines provide compatibility with the existing neighborhoods and with the vision for the future of the area. Design guidelines should not discourage innovative and individual design expression nor detract from community richness.

Commercial development is a welcome component of the Community of Lolo Development Area. There is a mix of different types of commercial uses along the very visible travel corridor of U.S. Highway 93. This corridor is also a potential main street that currently separates the community. The intent of these guidelines is to unite commercial, industrial, and multi-family developments under a common identity. The desire for encouraging some common characteristics and compatibility between uses are the focus of the "Community Design Guidelines."

"Community Design Guidelines" are also a helpful tool for development of commercial or home industrial uses in outlying areas. Residents of existing rural areas, such as the North Bitterroot Valley, have expressed a desire for increased compatibility between commercial development and existing neighborhoods. Concerns about lighting and landscape buffering were specifically pointed out. Planning for commercial or home industrial uses depends on its fit within the landscape**,** and not disrupting neighboring uses. Transition between areas is addressed in the following guidelines.

A function of guidelines in a planning document, such as this Plan, is a planning function serving as ideals and suggestions for development. These guidelines may be useful when determining the degree of compliance with the comprehensive plan. This information is also helpful for developers in the area because it identifies certain architectural qualities that can be incorporated into development projects.

These guidelines resulted from several community planning workshops including participation from the Highway 93 Focus Group. Some of the guidelines are more applicable to the Community of Lolo Development Area, while others are applicable throughout the region.

The guidelines are divided into seven categories:

- Highway Beautification
- Parking
- Landscaping
- Landscape Buffering
- Historic and Traditional Character
- Lighting
- Signage

2. Highway Beautification

Intent

The intent of the Highway Beautification Guidelines is to encourage safe vehicular movement while also enabling safe pedestrian movement along the highway and crossing the highway. It is important to consider the highway commercial corridor as a place that best communicates the unique characteristics of Lolo, encouraging travelers to stop and spend time in Lolo.

Guidelines

- Emphasize pedestrian crossings with "bulb-outs" at major intersections.
- Preserve and enhance the medians in Lolo with the installation of irrigation and landscaping that meets the Montana Department of Transportation (MDT) specifications.
- Construct additional central landscaped medians north of the existing median for approximately one mile along U.S. Highway 93.
- Incorporate textured surface material or different colors, such as stamped and colored asphalt, colored concrete, or concrete pavers, into existing pedestrian crossings along the commercial core area of Lolo. Use a similar design for new crossings.
- Install pedestrian activated signals at signaled intersections.
- Develop signage to increase awareness of pedestrians and pedestrian crossings when warranted.
- Narrow the road widths either physically or by placing new development closer to the street, and place parking to the side or rear of the structure creating a sense of enclosure.
- Establish a separate bicycle-pedestrian path on each side of U.S. Highway 93 and the north side of U.S. Highway 12 within the community of Lolo.
- Install pedestrian-scale lighting along the corridor.
- Develop a community banner or theme program to coincide with the Lewis and Clark Trail.

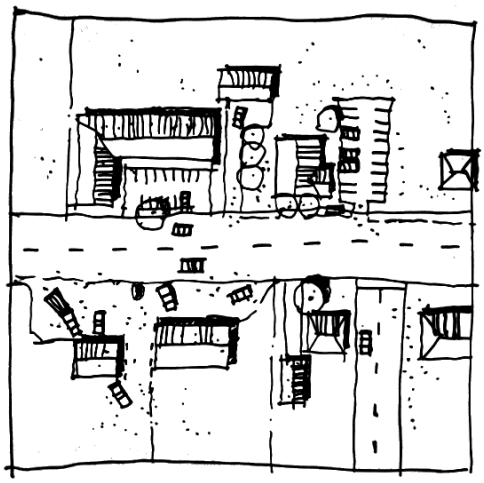
Applicability

- Throughout the Community of Lolo.
- Many of the guidelines are suggestions for the community to implement in coordination with the MDT.

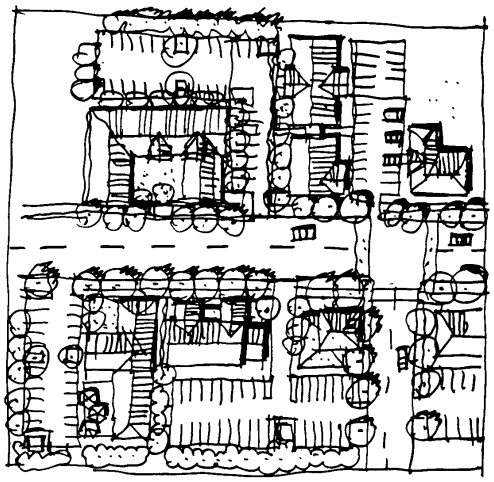
3. Parking (for Commercial, Industrial, and Multi-family Uses)

Intent

Often the parking lot is the first view travelers gain of the community. Those parking areas could be developed in such a way as to reinforce the rural small-town character of the area by enhancing the landscaping. Develop a more enclosed streetscape along streets with commercial uses to reinforce the relationship between different commercial uses**,** and to encourage customers to walk between businesses.



Existing commercial development



Potential development at commercial strip

Guidelines

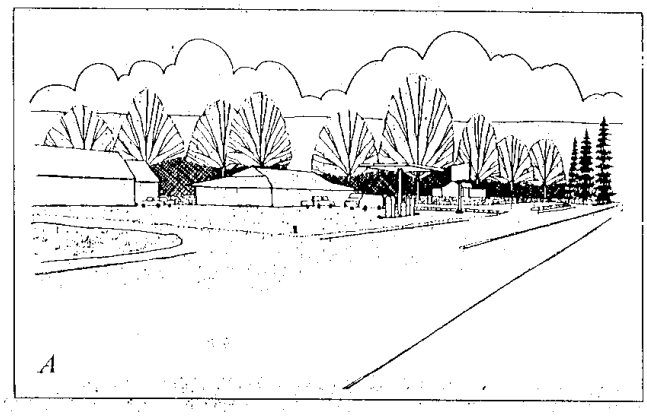
- Place parking at the side or rear of new development.
- Install landscaping at the edges of parking areas to serve as a buffer between properties, including public right-of-way.
- Consolidate street accesses and parking areas.
- Parking areas should include landscaped islands.
- Do not provide any more parking area than the required amount according to the regulations.[1]
- Consider shared parking with neighboring businesses.
- Plan for snow plowing and snow storage in parking lot design.
- The specific characteristics of parking and vehicular travel in the geographical area should be taken into consideration when designing parking areas. This should result in the flexible determination of number of parking spaces and possible allocation of on-street parking.

4. Landscaping

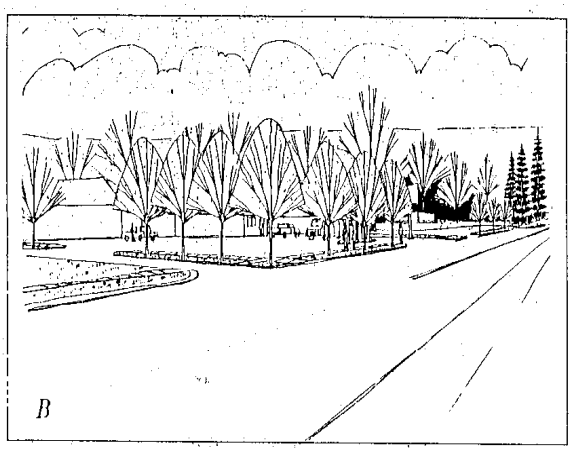
Intent

Landscaping helps to soften the built environment and provide continuity throughout the area. It also establishes a coherent streetscape, a pedestrian-friendly scale, shade, improves air quality, buffers noise, manages weeds, and provides habitat for songbirds and small mammals. Landscaping is an important aspect of buffering, providing screening between development and public right-of-way or dissimilar uses. For more information on buffering, see the next design guideline.

[1] Development within the Building Permit Jurisdiction is required to meet minimum parking requirements according to the "General Standards" in the *County Zoning Regulations* even for unzoned areas**.**



Existing Conditions



Potential Landscape Improvements

Guidelines

- Landscape areas that are not covered by buildings or areas intended for vehicle and pedestrian use.
- Protect and retain existing trees, shrubs and other landscape elements on-site.
- Plant native and naturalized drought tolerant plants.
- Plant lawns only in the active recreation and use portions of a developed site.
- Boulevard street trees, consisting of regular spaced trees, are encouraged within the community of Lolo and could enhance the gateways into the community.
- Rural boulevard landscaping, consisting of a mixture of native conifers and fast growing shrubs, are encouraged along developed areas beyond the community of Lolo.

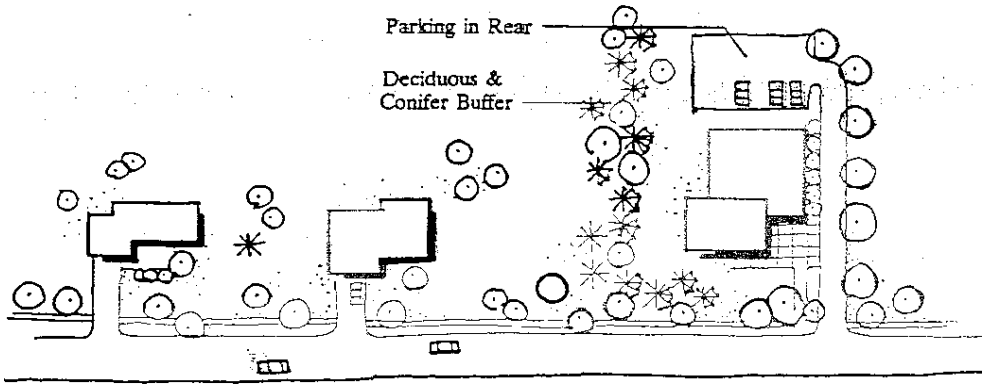
Applicability

- Throughout the planning region.

5. Buffers

Intent

Buffers establish transitional space between dissimilar uses and provide desirable views onto a site. Buffering also reduces the noise generated on each parcel**,** and typically provides landscaping.



Guidelines

- Buffering can be achieved through a combination of techniques including increased setbacks between dissimilar uses, planting trees and shrubs, landscape berms, and fencing in combination with shrubs.
- Buffer storage and parking areas related to unsightly activities, such as stockpiled materials, outside storage, recycling**,** and auto and machine repair.
- Buffer service facilities**,** such as trash dumpsters, transformers, and propane tanks from public right-of-way. Recommend placing the service facilities to the rear of the site or screen it using the various techniques listed above.

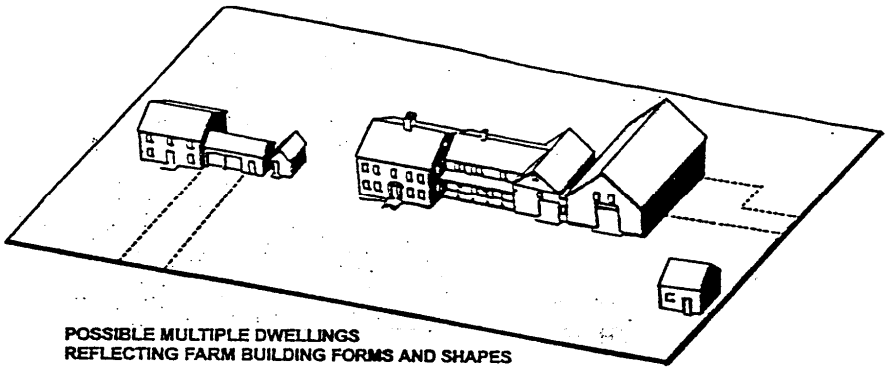
Applicability

- Throughout the planning region.

6. Historic and Traditional Character

Intent

There is a desire to make commercial sites more appealing with a theme that reflects on the area's history. Reflecting the historic character does not mean copying the same literal features.



Guidelines

- Use existing or once-present historic structures and development patterns for appropriate new development patterns and building design including shape, scale, window patterns, and color.
- Use wood, brick, rock and other natural materials on building exteriors in keeping with the character of "rural" Montana.
- Design accessory structures to be compatible with main structures.
- Break down the scale of large-scale development into small elements containing recessed spaces and roof pitches.

Applicability

- Throughout the planning region.

7. Lighting (for Commercial and Public Corridors)

Intent

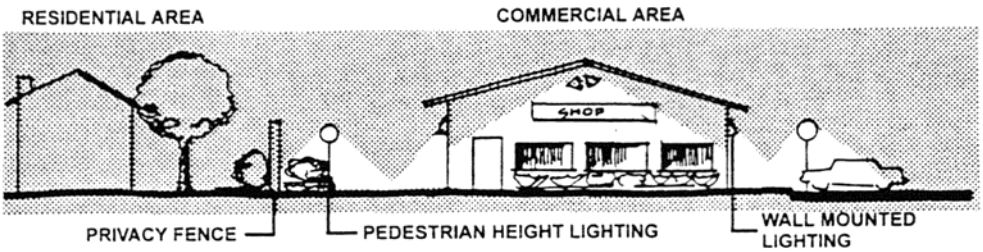
Lighting within the commercial area and public corridors has been identified as an area of concern, community blight (light pollution) and distraction for vehicular travelers. Lighting for commercial properties should be adequate to provide for safety and security, yet not cast light beyond the specific property.

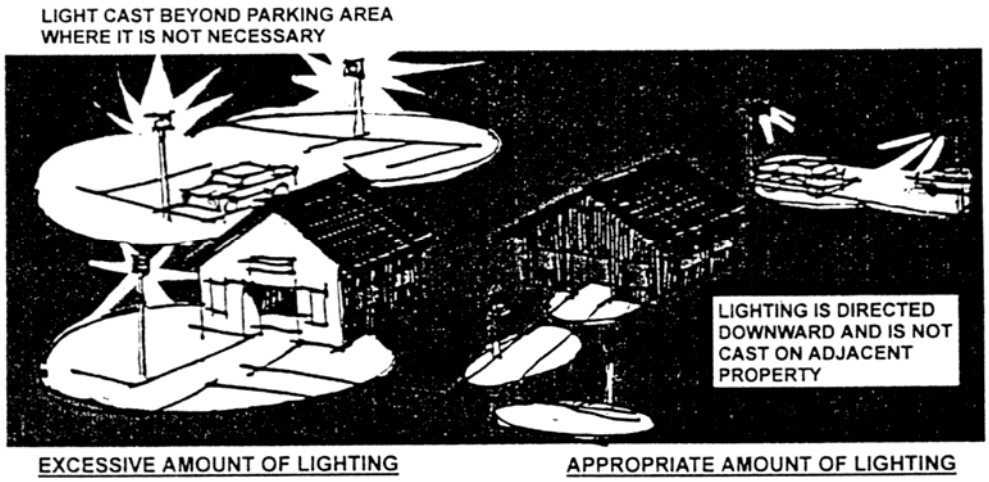
Guidelines

- Use only security lighting at night or after business hours.
- Directional or motion-detecting lights are recommended versus constant halogen fixtures.
- Limit the height and intensity of lights to the maximum necessary to provide for safe walking and driving.
- Create a consistent lighting pattern along U.S. Highway 93 and U.S. Highway 12 within the commercial core area of Lolo.
- Lighting on site should not extend beyond the property line, except for safety lighting.
- Avoid flashing or strobe lights for advertising purposes.
- Encourage use of shielded street lights that illuminate only the area beneath it.

Applicability

- Throughout the planning region unless otherwise noted.
- Some of these guidelines require coordination with the MDT for improvements along public corridors.

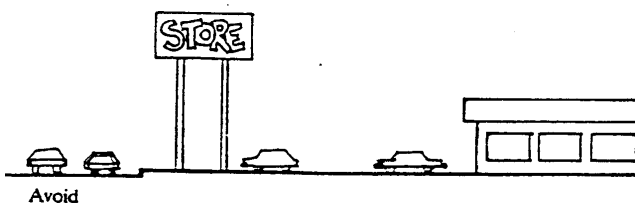




8. Signage

Intent

Signage should not block important views of the surrounding landscape or should not be placed in areas that impede visual needs on travel corridors. Efforts to consolidate signs and reduce the visual chaos along the main travel corridors should be considered.



Avoid

Preferred

Guidelines

- Wall signs should fit with the architectural form of the building.
- Use indirect lighting for signs.
- Signs should not be lit after business hours, except for safety purposes.
- Ground signs should be low to the ground, located in landscaped areas. They should be small and reflect the architectural form of the on-site business structure.
- Freestanding signs should not exceed 12 feet in height.
- Billboards are not encouraged – either on-premise or off premise.
- Avoid commercial signage in residential districts.
- Avoid signs with moving text, strobes, or reader boards unless they provide information of public benefit and do not advertise products or businesses.

Applicability

- Throughout the planning region.

APPENDIX 6A:
COMMUNITY DESIGN GUIDELINES

1. Purpose

These design guidelines are in response to the goals of the *Lolo Regional Plan*. They are intended to help guide new construction and exterior remodeling of commercial, industrial, and multi-family development throughout the planning area. The guidelines provide compatibility with the existing neighborhoods and with the vision for the future of the area. Design guidelines should not discourage innovative and individual design expression nor detract from community richness.

Commercial development is a welcome component of the Community of Lolo Development Area. There is a mix of different types of commercial uses along the very visible travel corridor of U.S. Highway 93. This corridor is also a potential main street that currently separates the community. The intent of these guidelines is to unite commercial, industrial, and multi-family developments under a common identity. The desire for encouraging some common characteristics and compatibility between uses are the focus of the "Community Design Guidelines."

"Community Design Guidelines" are also a helpful tool for development of commercial or home industrial uses in outlying areas. Residents of existing rural areas, such as the North Bitterroot Valley, have expressed a desire for increased compatibility between commercial development and existing neighborhoods. Concerns about lighting and landscape buffering were specifically pointed out. Planning for commercial or home industrial uses depends on its fit within the landscape**,** and not disrupting neighboring uses. Transition between areas is addressed in the following guidelines.

A function of guidelines in a planning document, such as this Plan, is a planning function serving as ideals and suggestions for development. These guidelines may be useful when determining the degree of compliance with the comprehensive plan. This information is also helpful for developers in the area because it identifies certain architectural qualities that can be incorporated into development projects.

These guidelines resulted from several community planning workshops including participation from the Highway 93 Focus Group. Some of the guidelines are more applicable to the Community of Lolo Development Area, while others are applicable throughout the region.

The guidelines are divided into seven categories:

- Highway Beautification
- Parking
- Landscaping
- Landscape Buffering
- Historic and Traditional Character
- Lighting
- Signage

2. Highway Beautification

Intent

The intent of the Highway Beautification Guidelines is to encourage safe vehicular movement while also enabling safe pedestrian movement along the highway and crossing the highway. It is important to consider the highway commercial corridor as a place that best communicates the unique characteristics of Lolo, encouraging travelers to stop and spend time in Lolo.

Guidelines

- Emphasize pedestrian crossings with "bulb-outs" at major intersections.
- Preserve and enhance the medians in Lolo with the installation of irrigation and landscaping that meets the Montana Department of Transportation (MDT) specifications.
- Construct additional central landscaped medians north of the existing median for approximately one mile along U.S. Highway 93.
- Incorporate textured surface material or different colors, such as stamped and colored asphalt, colored concrete, or concrete pavers, into existing pedestrian crossings along the commercial core area of Lolo. Use a similar design for new crossings.
- Install pedestrian activated signals at signaled intersections.
- Develop signage to increase awareness of pedestrians and pedestrian crossings when warranted.
- Narrow the road widths either physically or by placing new development closer to the street, and place parking to the side or rear of the structure creating a sense of enclosure.
- Establish a separate bicycle-pedestrian path on each side of U.S. Highway 93 and the north side of U.S. Highway 12 within the community of Lolo.
- Install pedestrian-scale lighting along the corridor.
- Develop a community banner or theme program to coincide with the Lewis and Clark Trail.

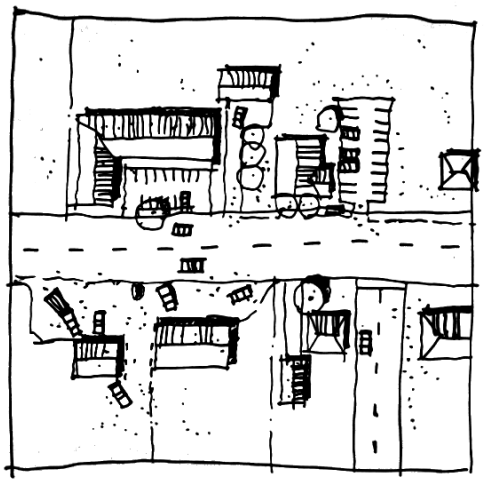
Applicability

- Throughout the Community of Lolo.
- Many of the guidelines are suggestions for the community to implement in coordination with the MDT.

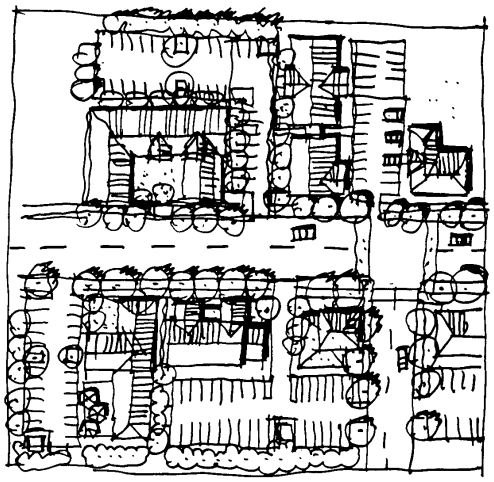
3. Parking (for Commercial, Industrial, and Multi-family Uses)

Intent

Often the parking lot is the first view travelers gain of the community. Those parking areas could be developed in such a way as to reinforce the rural small-town character of the area by enhancing the landscaping. Develop a more enclosed streetscape along streets with commercial uses to reinforce the relationship between different commercial uses**,** and to encourage customers to walk between businesses.



Existing commercial development



Potential development at commercial strip

Guidelines

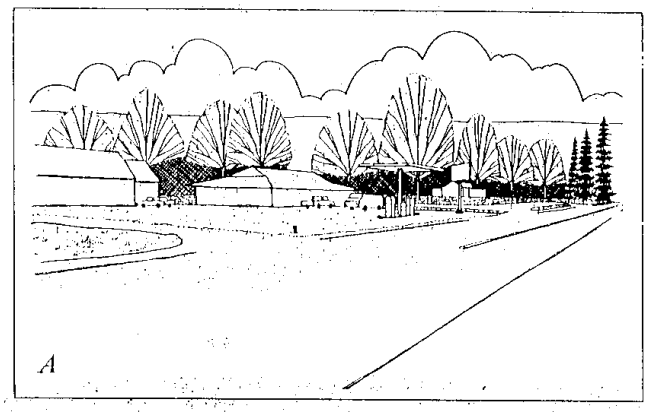
- Place parking at the side or rear of new development.
- Install landscaping at the edges of parking areas to serve as a buffer between properties, including public right-of-way.
- Consolidate street accesses and parking areas.
- Parking areas should include landscaped islands.
- Do not provide any more parking area than the required amount according to the regulations.[1]
- Consider shared parking with neighboring businesses.
- Plan for snow plowing and snow storage in parking lot design.
- The specific characteristics of parking and vehicular travel in the geographical area should be taken into consideration when designing parking areas. This should result in the flexible determination of number of parking spaces and possible allocation of on-street parking.

4. Landscaping

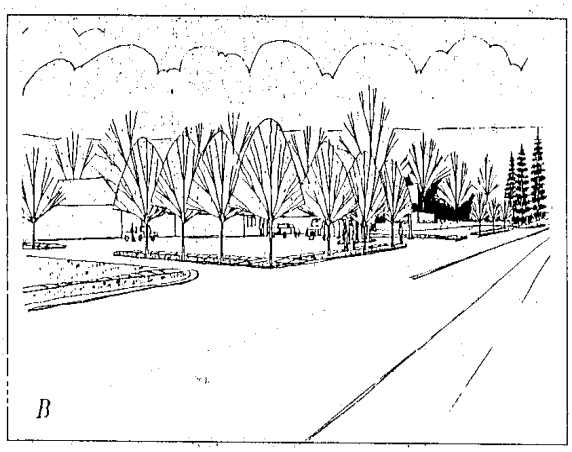
Intent

Landscaping helps to soften the built environment and provide continuity throughout the area. It also establishes a coherent streetscape, a pedestrian-friendly scale, shade, improves air quality, buffers noise, manages weeds, and provides habitat for songbirds and small mammals. Landscaping is an important aspect of buffering, providing screening between development and public right-of-way or dissimilar uses. For more information on buffering, see the next design guideline.

[1] Development within the Building Permit Jurisdiction is required to meet minimum parking requirements according to the "General Standards" in the *County Zoning Regulations* even for unzoned areas**.**



Existing Conditions



Potential Landscape Improvements

Guidelines

- Landscape areas that are not covered by buildings or areas intended for vehicle and pedestrian use.
- Protect and retain existing trees, shrubs and other landscape elements on-site.
- Plant native and naturalized drought tolerant plants.
- Plant lawns only in the active recreation and use portions of a developed site.
- Boulevard street trees, consisting of regular spaced trees, are encouraged within the community of Lolo and could enhance the gateways into the community.
- Rural boulevard landscaping, consisting of a mixture of native conifers and fast growing shrubs, are encouraged along developed areas beyond the community of Lolo.

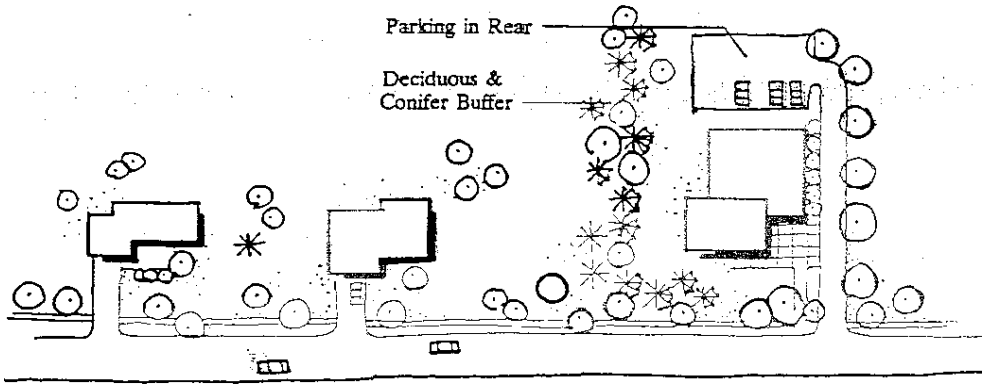
Applicability

- Throughout the planning region.

5. Buffers

Intent

Buffers establish transitional space between dissimilar uses and provide desirable views onto a site. Buffering also reduces the noise generated on each parcel**,** and typically provides landscaping.



Guidelines

- Buffering can be achieved through a combination of techniques including increased setbacks between dissimilar uses, planting trees and shrubs, landscape berms, and fencing in combination with shrubs.
- Buffer storage and parking areas related to unsightly activities, such as stockpiled materials, outside storage, recycling**,** and auto and machine repair.
- Buffer service facilities**,** such as trash dumpsters, transformers, and propane tanks from public right-of-way. Recommend placing the service facilities to the rear of the site or screen it using the various techniques listed above.

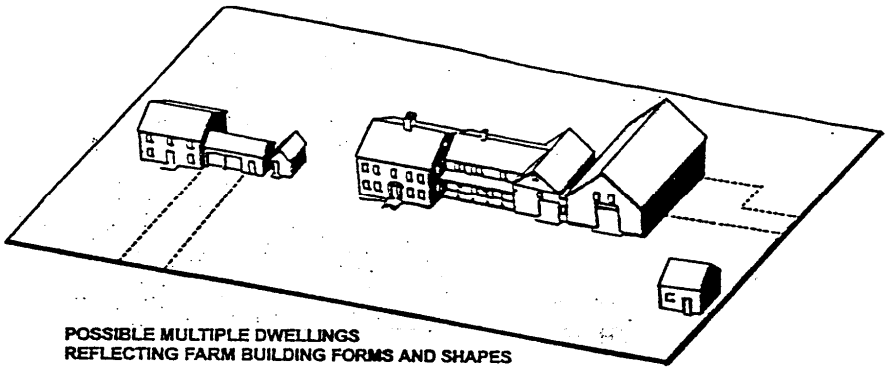
Applicability

- Throughout the planning region.

6. Historic and Traditional Character

Intent

There is a desire to make commercial sites more appealing with a theme that reflects on the area's history. Reflecting the historic character does not mean copying the same literal features.



Guidelines

- Use existing or once-present historic structures and development patterns for appropriate new development patterns and building design including shape, scale, window patterns, and color.
- Use wood, brick, rock and other natural materials on building exteriors in keeping with the character of "rural" Montana.
- Design accessory structures to be compatible with main structures.
- Break down the scale of large-scale development into small elements containing recessed spaces and roof pitches.

Applicability

- Throughout the planning region.

7. Lighting (for Commercial and Public Corridors)

Intent

Lighting within the commercial area and public corridors has been identified as an area of concern, community blight (light pollution) and distraction for vehicular travelers. Lighting for commercial properties should be adequate to provide for safety and security, yet not cast light beyond the specific property.

Guidelines

- Use only security lighting at night or after business hours.
- Directional or motion-detecting lights are recommended versus constant halogen fixtures.
- Limit the height and intensity of lights to the maximum necessary to provide for safe walking and driving.
- Create a consistent lighting pattern along U.S. Highway 93 and U.S. Highway 12 within the commercial core area of Lolo.
- Lighting on site should not extend beyond the property line, except for safety lighting.
- Avoid flashing or strobe lights for advertising purposes.
- Encourage use of shielded street lights that illuminate only the area beneath it.

Applicability

- Throughout the planning region unless otherwise noted.
- Some of these guidelines require coordination with the MDT for improvements along public corridors.

APPENDIX 7A:
CONSERVATION DESIGN GUIDELINES

The following guidelines are recommended in order to achieve development consistent with the Plan's goals and to preserve resources and regional character.

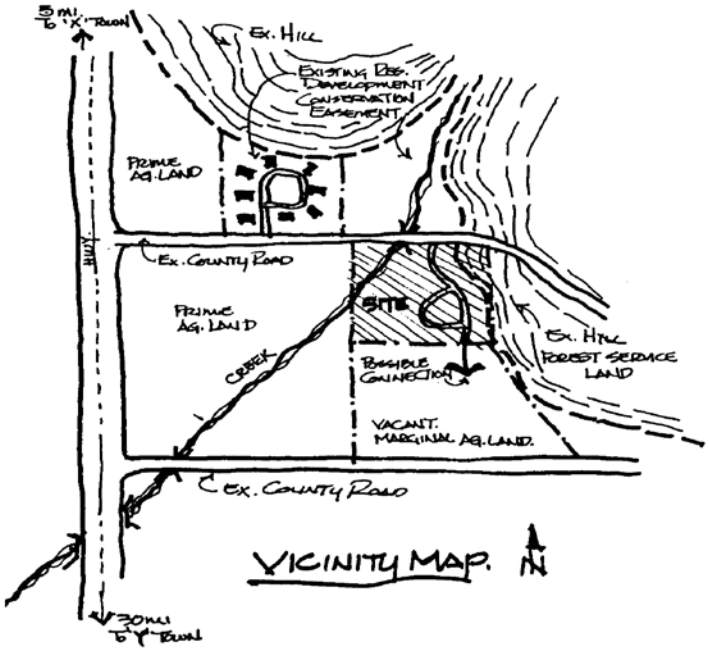
Key Goals:

- Select areas for conservation before designing development.
- Preserve significant geologic landforms and sensitive soil areas.
- Place new development on stable soils and appropriate underlying geologic areas.
- Limit hillside and steep slope development.
- Discourage development and road construction on steep slopes (25% or greater).
- Avoid development in floodplains and floodway fringe areas.
- Preserve significant habitats, forested areas and intact or re-established grasslands.

All land development, regardless of its size, should be designed to take into account multiple elements for the long-range sustainability of land, character, and resource values. Site characteristics and features**,** as well as relationships with the nearby built and natural environment**,** should be considered. The goal is to provide for lots that are well suited for the capabilities of the land. These steps should be followed whether starting a development or adding to existing development.

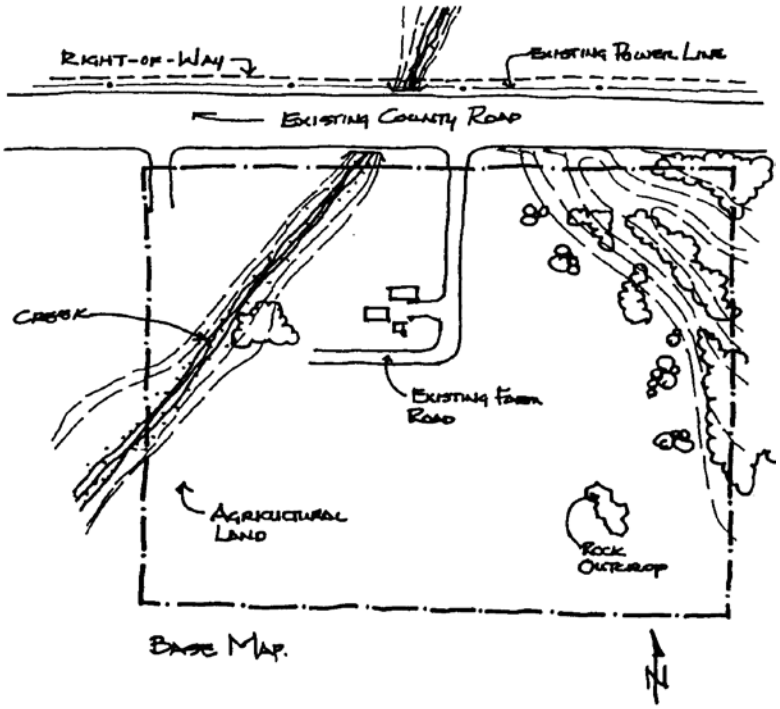
Step 1: Develop a Vicinity Map

Develop a vicinity map of the surrounding area large enough to show the context of the site. The adjacent properties' sizes and uses should be shown, as well as proximity to services and transportation. See example vicinity map below.



Step 2: Develop a Base Map

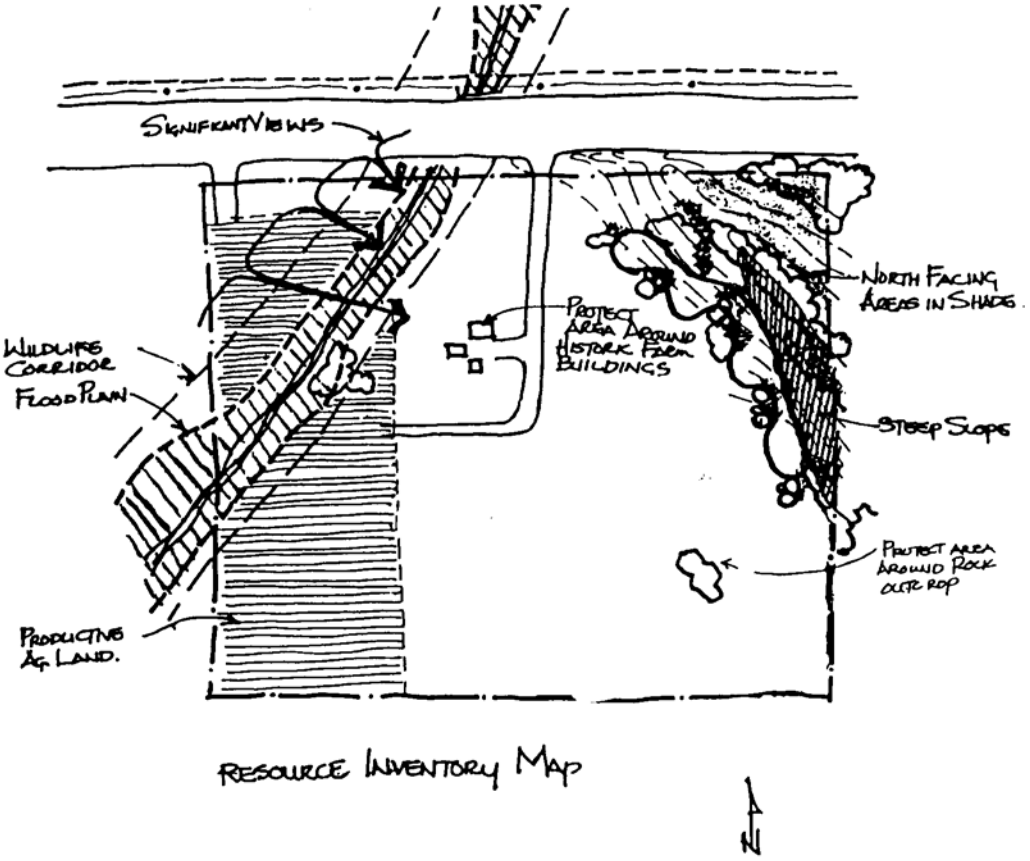
An accurate base map is crucial to this design method. It should clearly show property boundaries; existing features, such as structures, roads, railroads, fences, significant footpaths, irrigation ditches, and power lines; existing easements and rights-of-way; existing topography; and significant natural features, such as surface water, hillsides, and vegetation. A base map may use the parcel boundaries shown on a previous Certificate of Survey or subdivision plat as a starting point.



Step 3: Identify Resources

Inventory the most severely constrained lands where development is already restricted for example, steep slopes, wetlands and floodplains. Identify other significant features that may warrant protection, including:

- Open space (scenic views, ridgelines);
- Significant wildlife habitat;
- Forested Areas, including old growth or other unique stands;
- Native grasslands;
- Plant and animal species of special concern;
- Agricultural resources, such as prime farmland soils;
- Geologic features, such as outcrops;
- Faults or slumps; and
- Historic and cultural resources.



Step 4: Identify Other Site Constraints

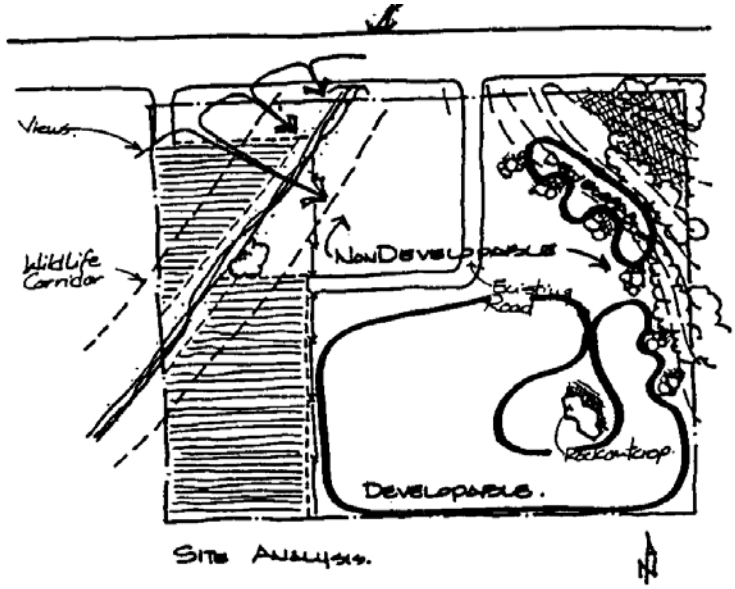
Identify other site constraints or restrictions**,** including: land disturbances, soil conditions, septic limitations, zoning requirements, comprehensive plan land use and density designations, comprehensive plan goals, and adjoining land constraints that affect the parcel.

Step 5: Visit Site to Confirm Characteristics

Verify and analyze site characteristics and resources identified earlier on the ground. Identify the boundaries of the parcel on site. Record any new observations about the site or unique circumstances.

Step 6: Identify Areas to be Conserved

Establish developable and undevelopable areas on the property. Considerations include, but are not limited to, resource areas, other site constraints, density, setbacks, climate information, sun/shade, prevailing wind direction, etc.



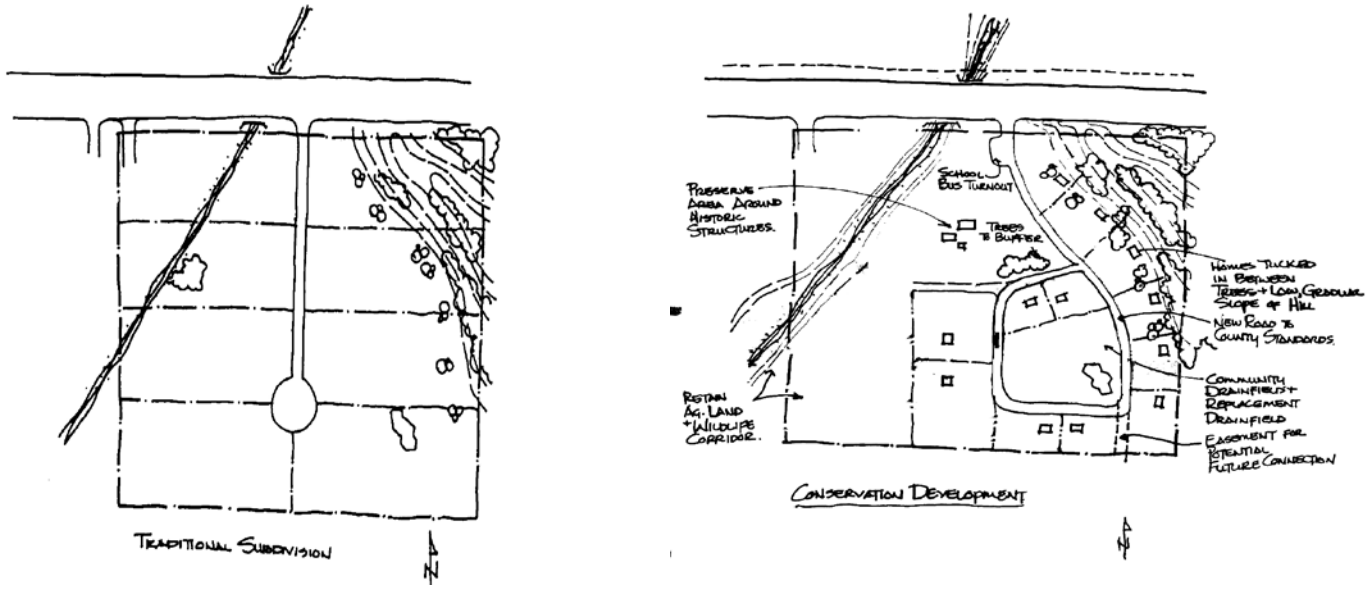
Example of Developable and Non-Developable Areas

Step 7: Identify Building Locations within the Developable Area

Step 8: Plan Needed Infrastructure

Locate roads, greenways or trails, sanitation systems, water supply, and other needed infrastructure.

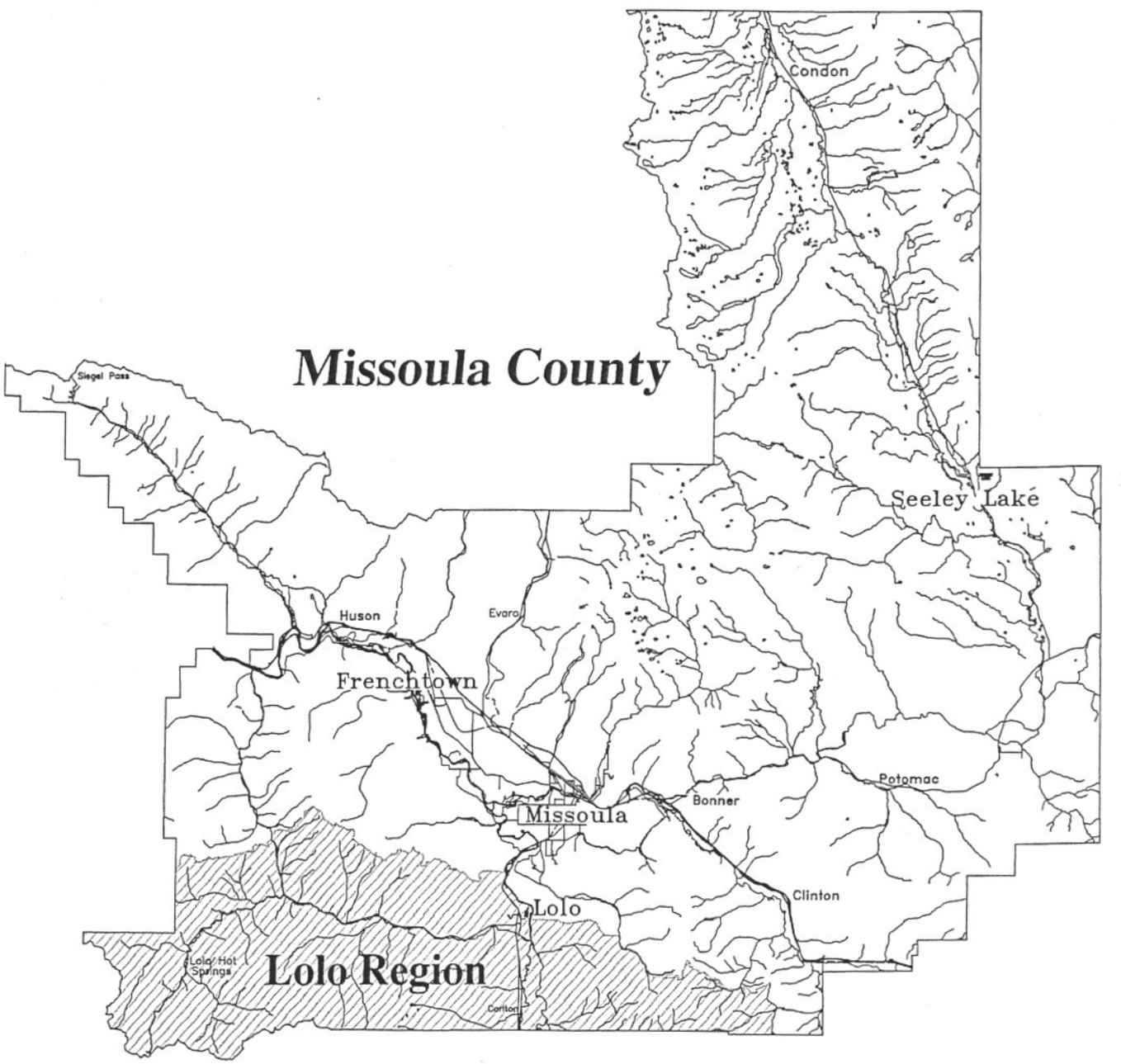
Step 9: Draw Lot Lines [1]



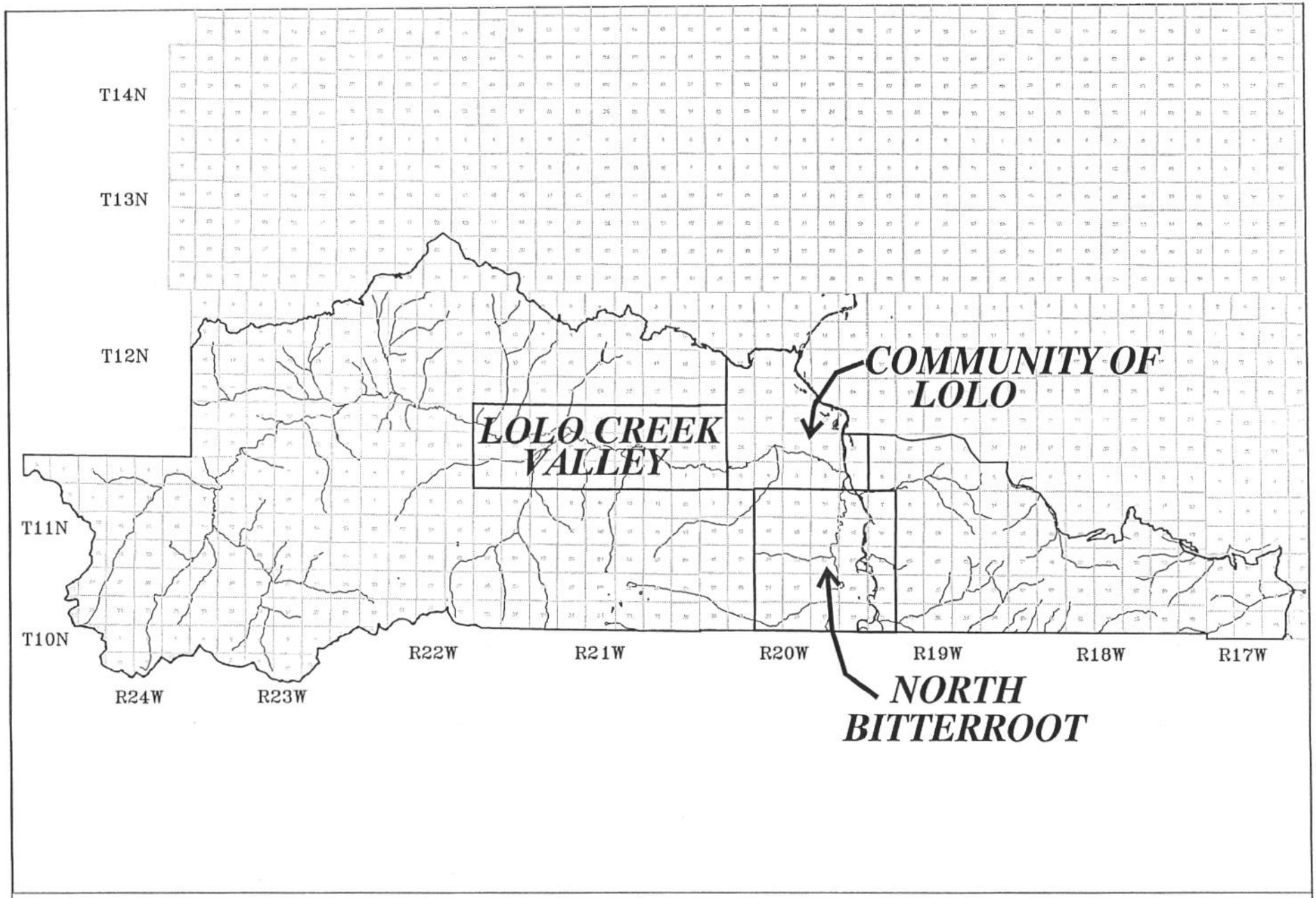
[1] See also *Conservation Design for Subdivisions* (1996). Randall Arendt. Island Press.

LOLO PLANNING REGION
LOCATOR MAP

Office of Planning & Grants



The Lolo Planning area contains 234,880 acres or 367 square miles.



LOLO PLANNING REGION
Development Areas

Lolo Planning Area
234,880 Acres

Community of Lolo
12,222 Acres

North Bitterroot Valley
15,976 Acres

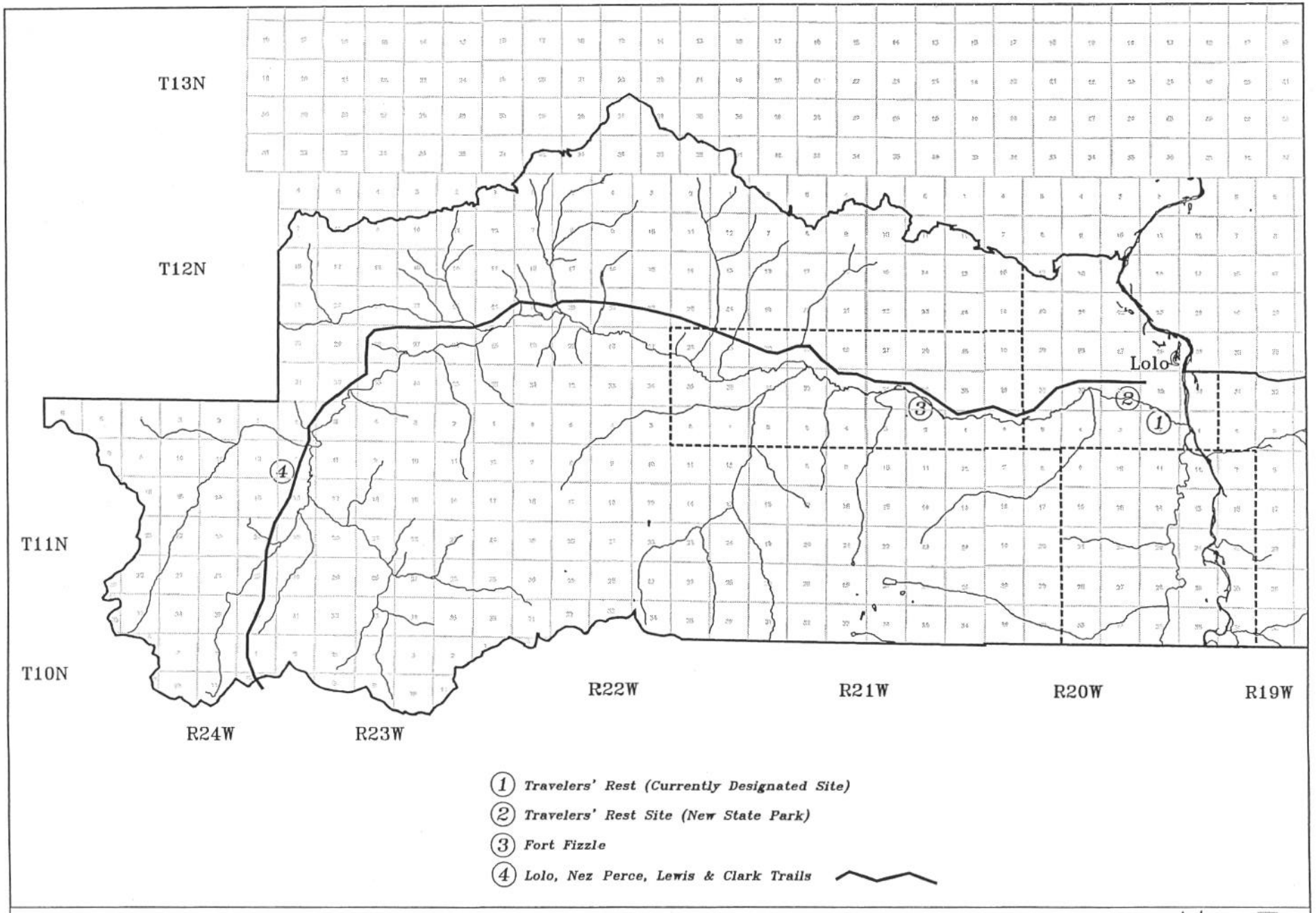
Lolo Creek Valley
17,234 Acres

0 12500 25000
Scale 1" = 25000'

N

Office of Planning & Grants

Figure 2-2



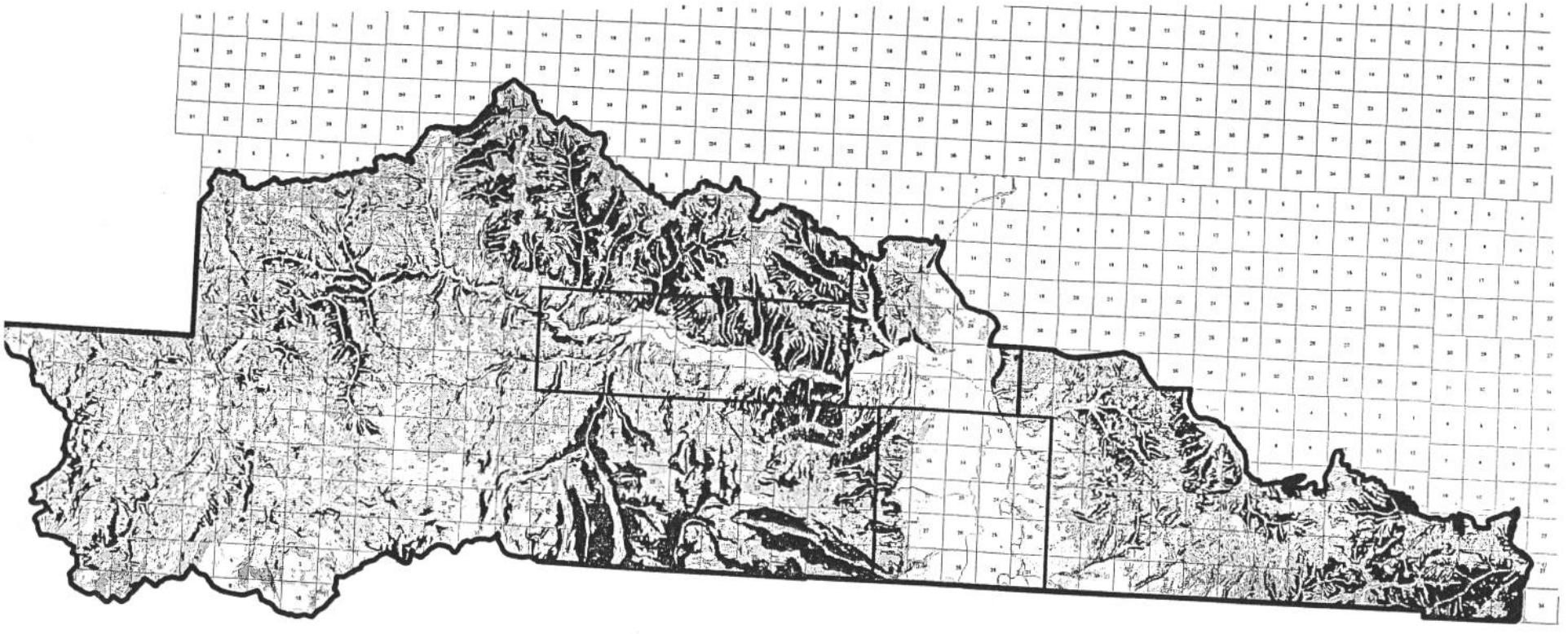
LOLO PLANNING REGION

Nationally Recognized Historic Sites

For more detail, please refer to the large maps located at OPG.

Office of Planning & Grants

Figure 3-1



Legend

- Lolo Plan Boundary
- Development Areas
- 0 -10%
- 10 -15%
- 15 - 25%
- 25% or Greater

LOLO PLANNING REGION

SLOPE

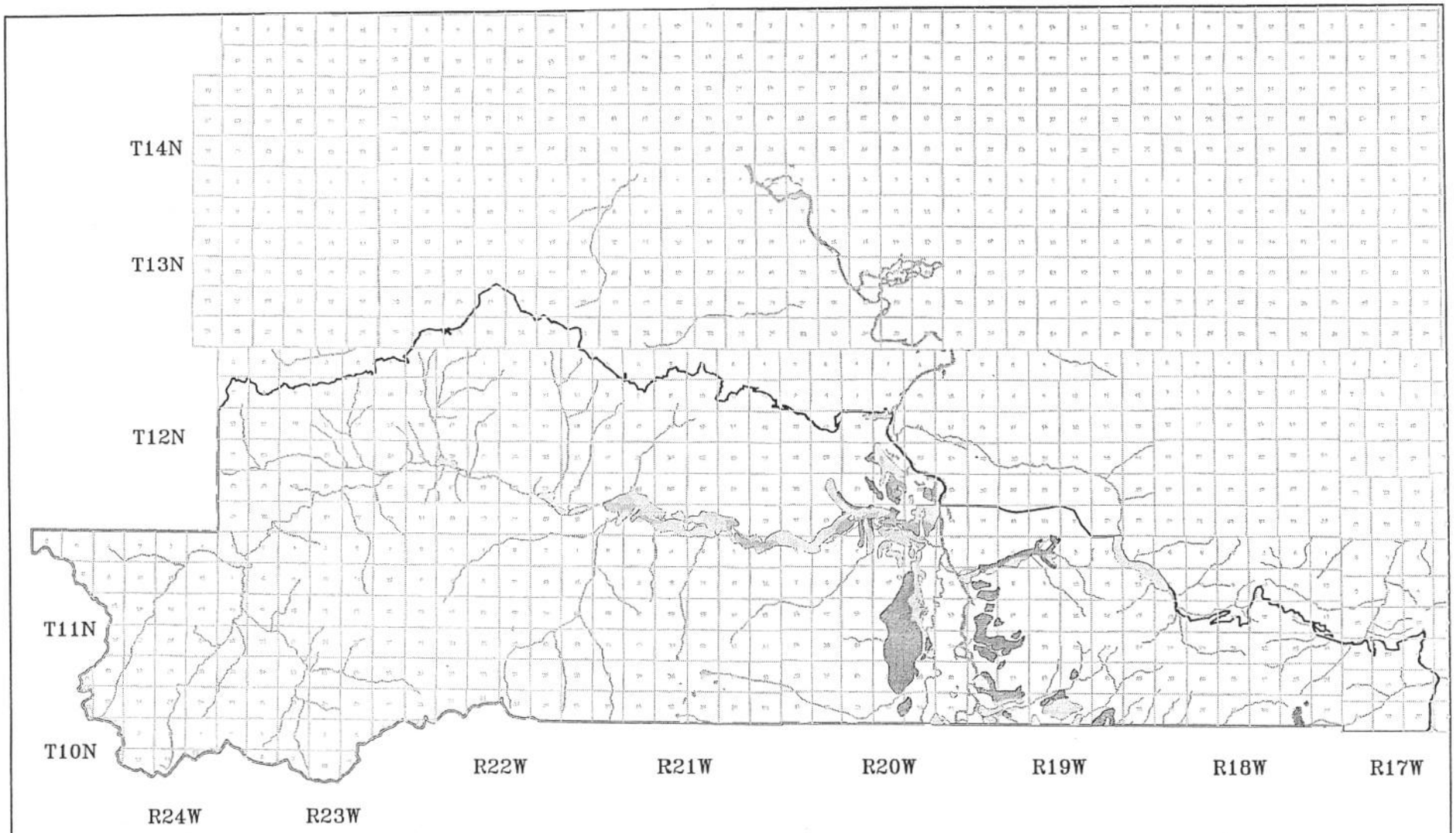
For more detail, please refer to the large maps at OPG.

0 12500 25000

Scale 1" = 25000'

Office of Planning & Grants

Figure 4A-1



LOLO PLANNING REGION
Agricultural Soils

Prime

State

Local

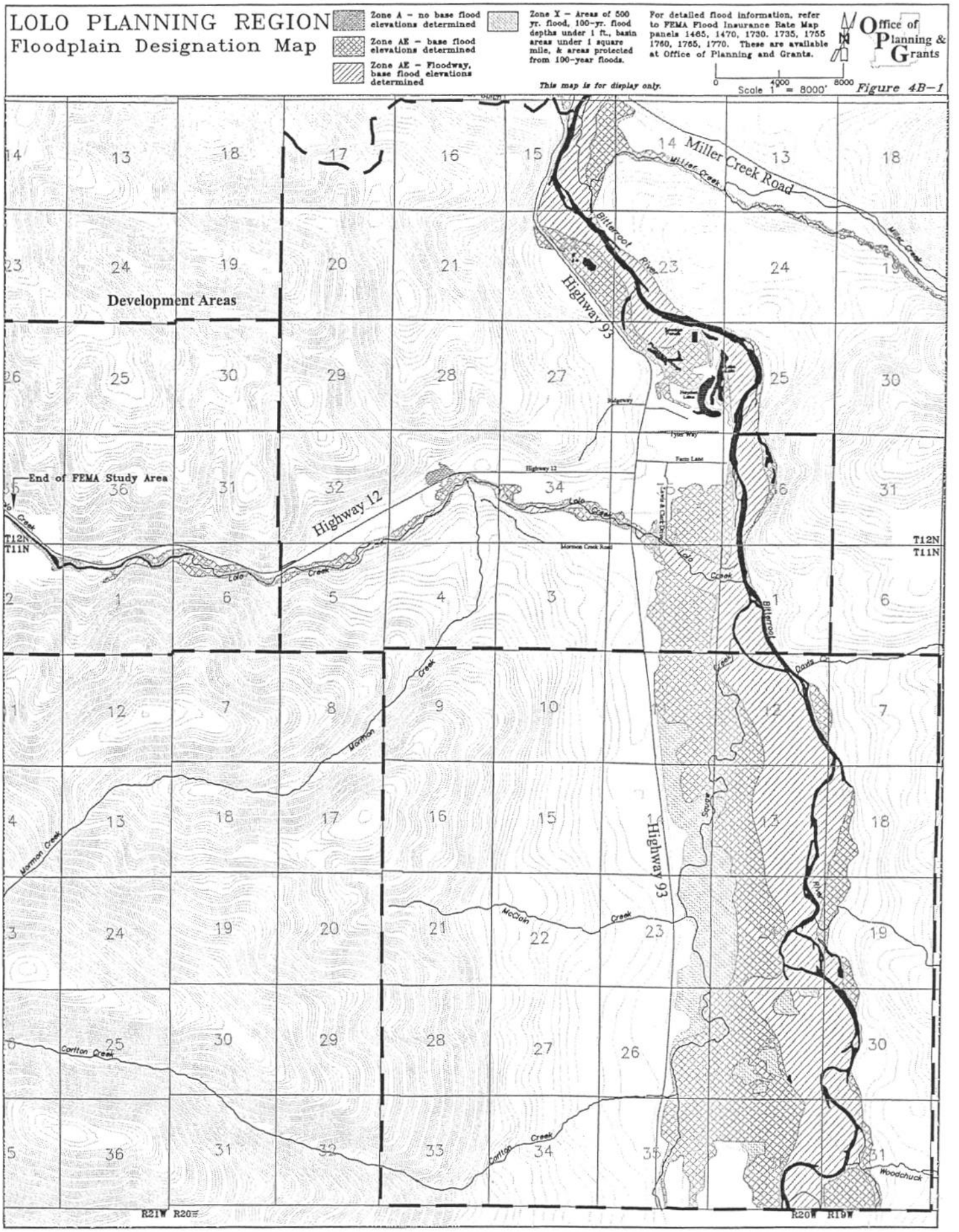
For more detail, please refer to the large maps located at OPG.

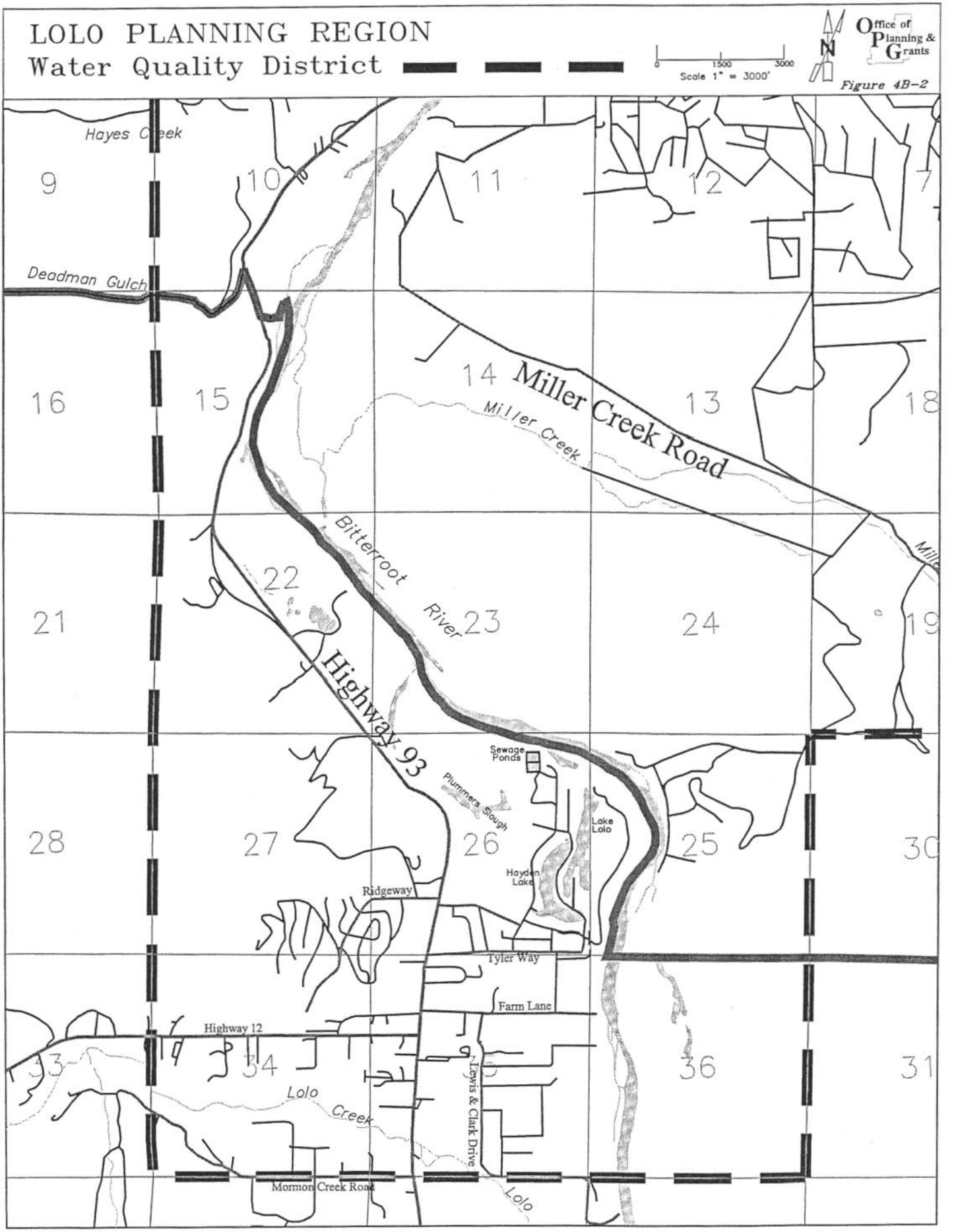
0 12500 25000
Scale 1" = 25000'

N

Office of Planning & Grants

Figure 4A-2


LOLO PLANNING REGION
Floodplain Designation Map
Zone A – no base flood elevations determined
Zone AE – base flood elevations determined
Zone AE – Floodway, base flood elevations determined
Zone X – Areas of 500 yr. flood, 100-yr. flood depths under 1 ft., basin areas under 1 square mile, & areas protected from 100-year floods.
This map is for display only.
For detailed flood information, refer to FEMA Flood Insurance Rate Map panels 1465, 1470, 1730, 1735, 1755 1760, 1765, 1770. These are available at Office of Planning and Grants.
Scale 1" = 8000'
Office of Planning & Grants
Figure 4B–1
Development Areas
End of FEMA Study Area
Miller Creek Road
Highway 93
Highway 12
Bitterroot River
Lolo Creek
Mormon Creek
McClain Creek
Carlton Creek
Woodchuck
T12N
T11N
R21W
R20W
R19W


LOLO PLANNING REGION
Water Quality District
0 1500 3000
Scale 1" = 3000'
N
Office of Planning & Grants
Figure 4B-2
Hayes Creek
Deadman Gulch
Miller Creek Road
Miller Creek
Bitterroot River
Highway 93
Sewage Ponds
Plummers Slough
Lake Lolo
Hayden Lake
Ridgeway
Tyler Way
Farm Lane
Highway 12
Lolo Creek
Lewis & Clark Drive
Mormon Creek Road
Lolo
9
10
11
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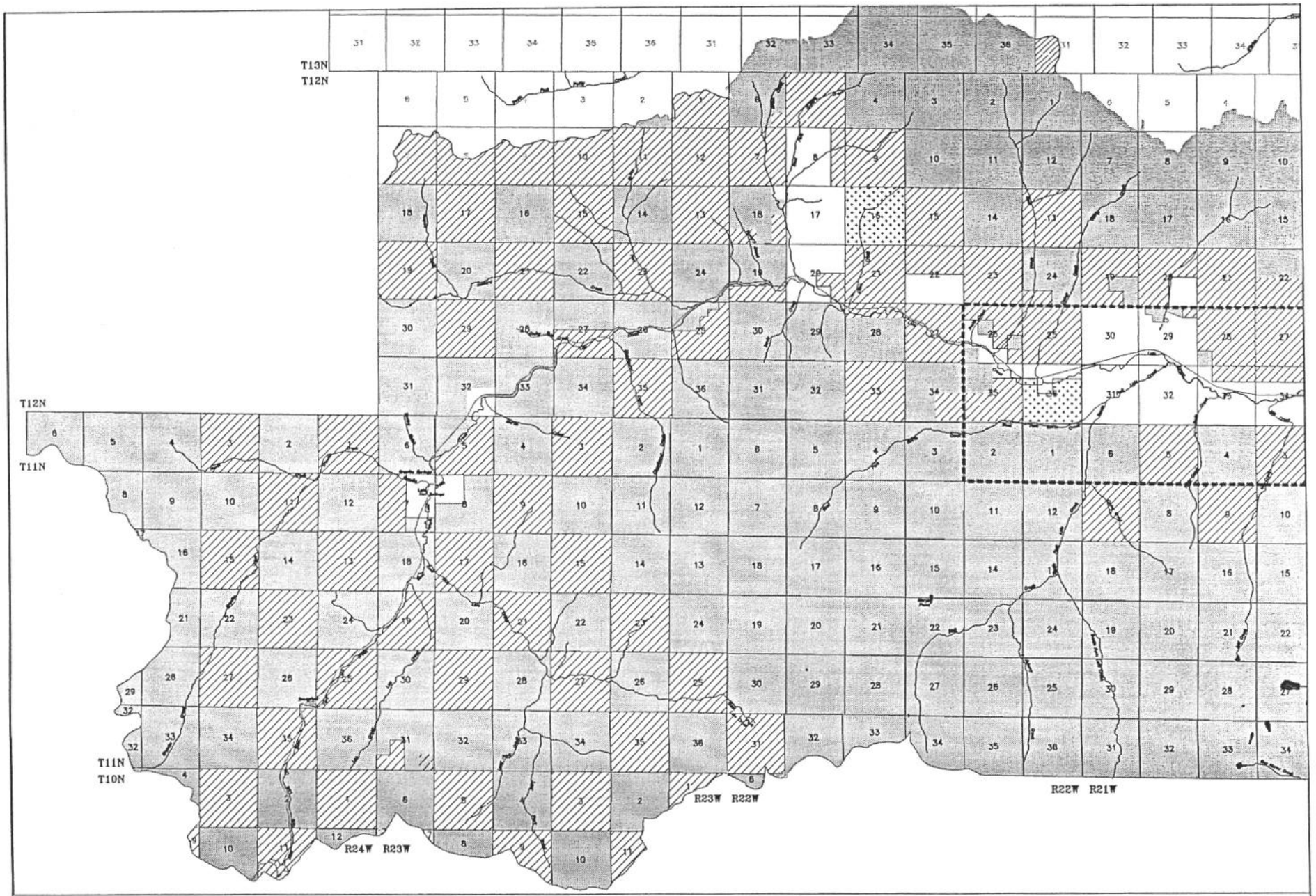


LOLO PLANNING REGION
Land Ownership (west half)

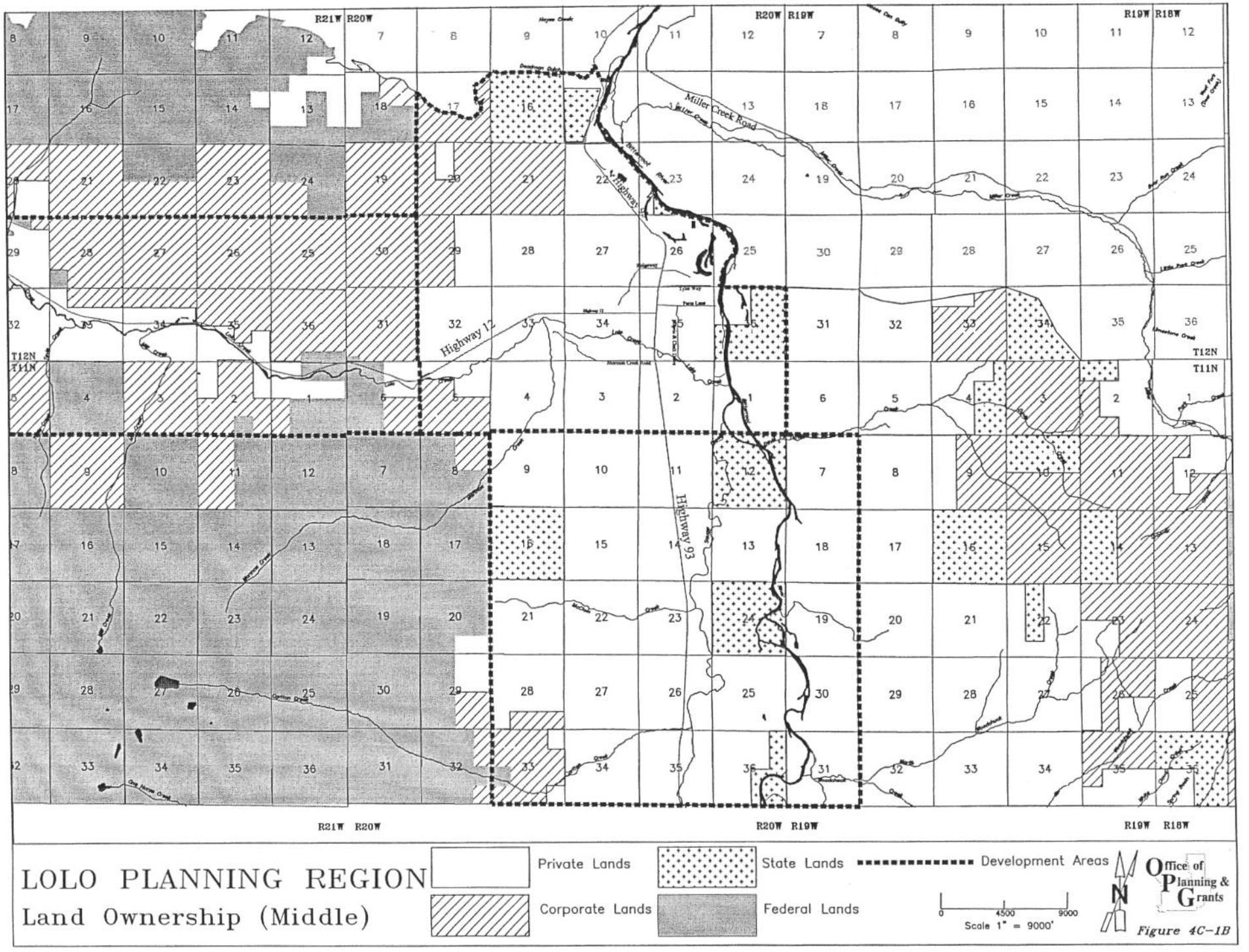
Private Lands
Corporate Lands
State Lands
Federal Lands
Development Areas

0 6000 12000
Scale 1" = 12000'

N

Office of Planning & Grants

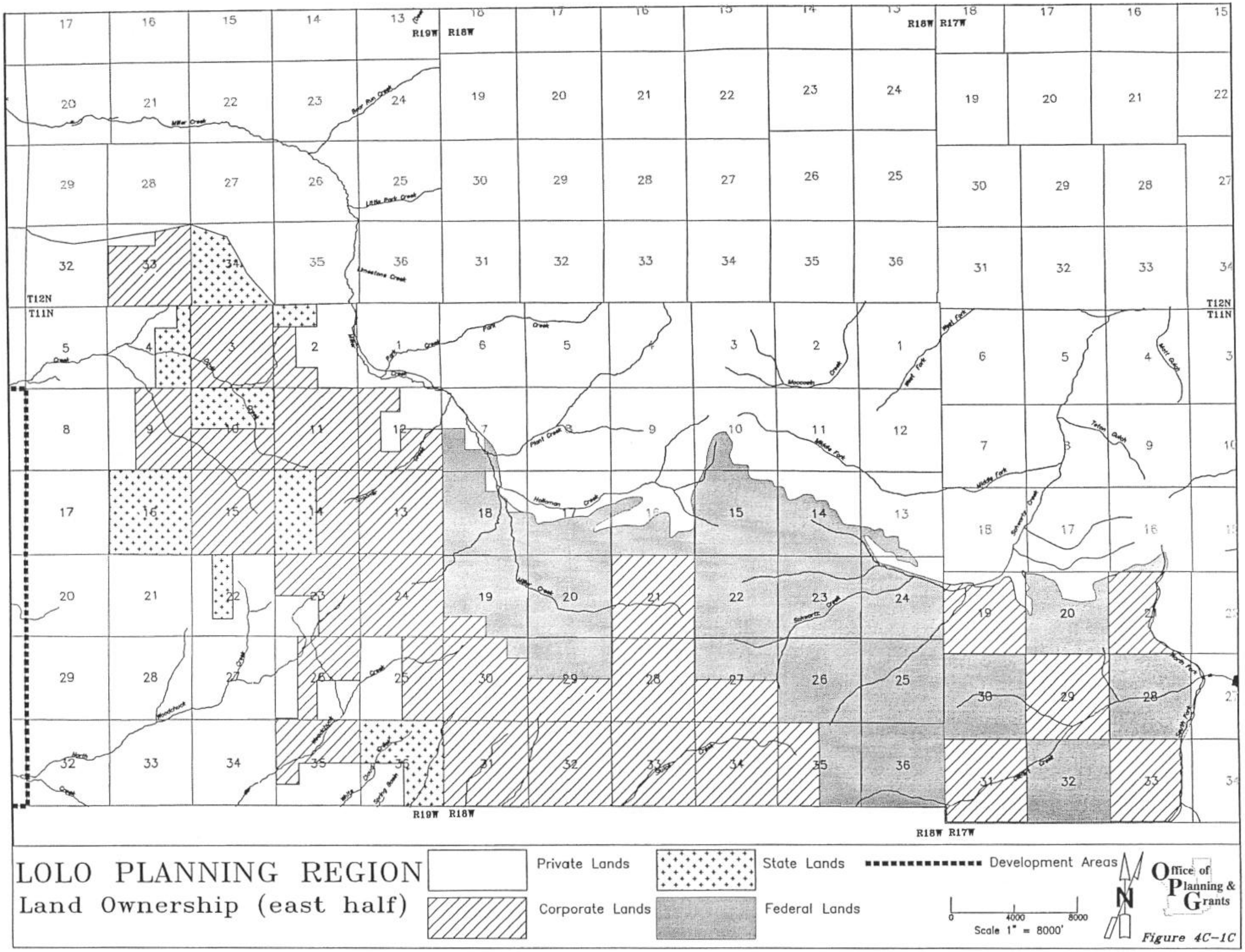
Figure 4C-1A



LOLO PLANNING REGION

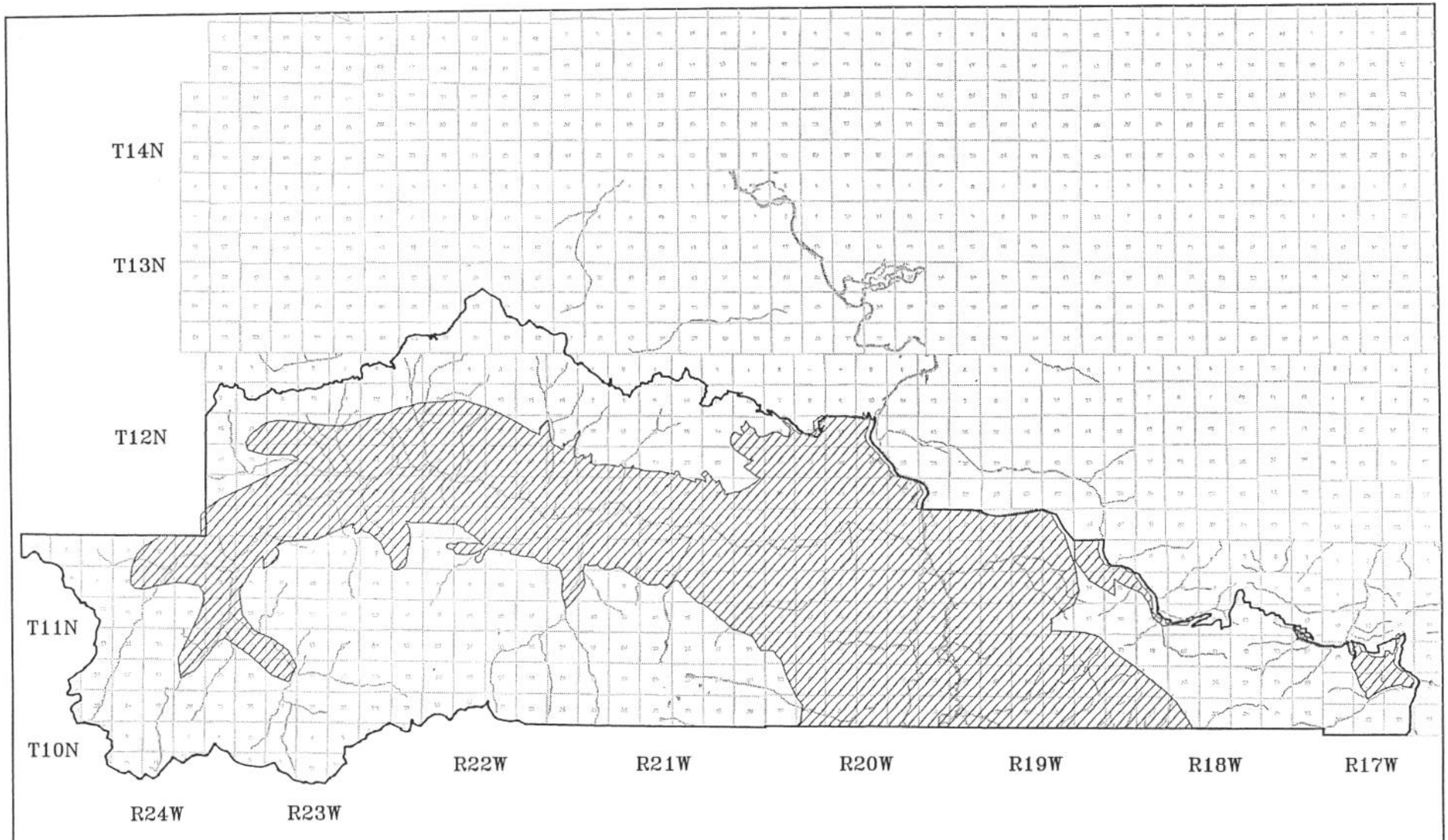
Land Ownership (Middle)

Figure 4C-1B



LOLO PLANNING REGION
Land Ownership (east half)

Figure 4C-1C



LOLO PLANNING REGION

Big Game Winter Range

Elk or Whitetail Deer
Moose or Mule Deer

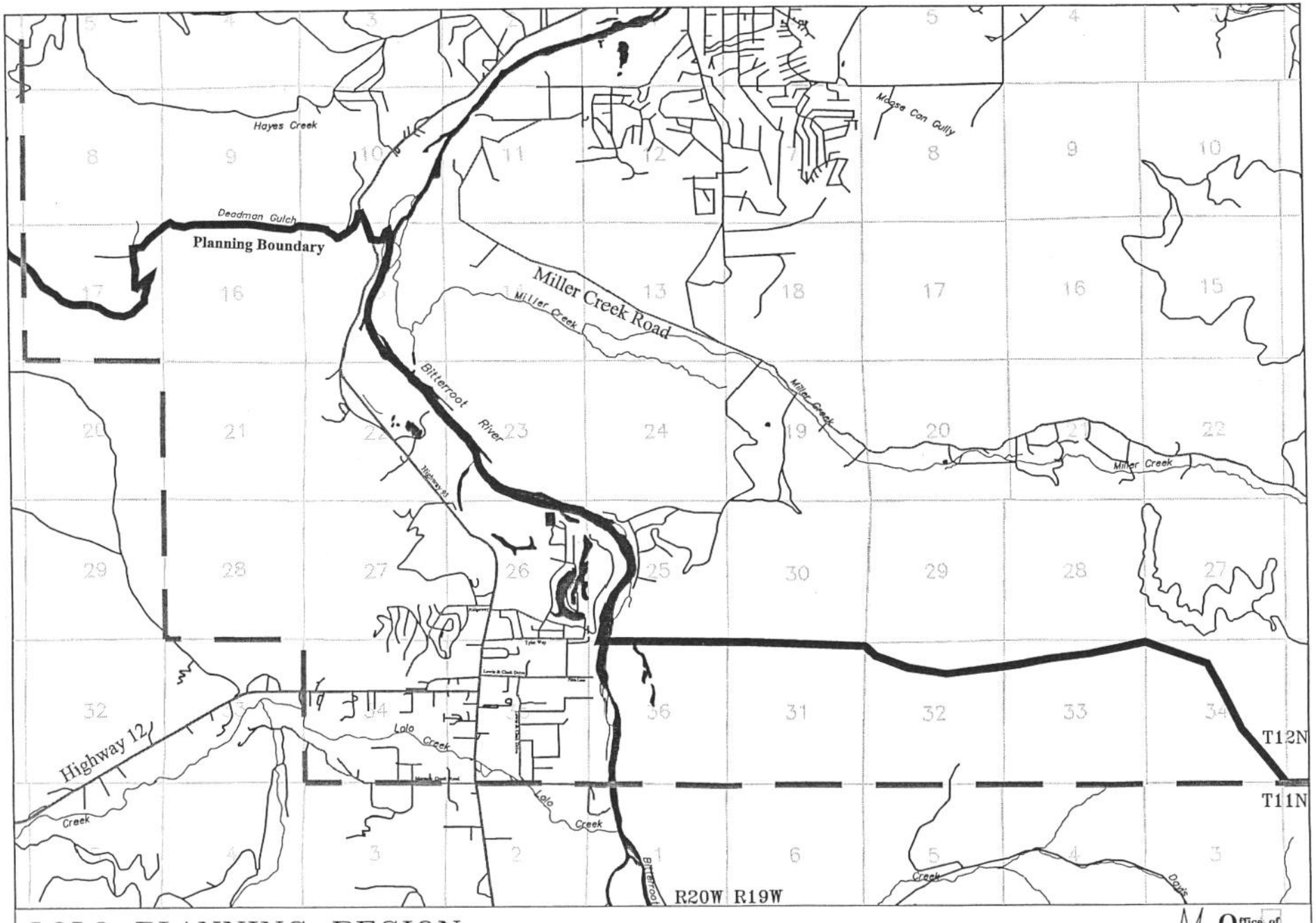
For more detail, please refer to the large maps located at OPG.

0 12500 25000
Scale 1" = 25000'

N

Office of Planning & Grants

Figure 4C-2



LOLO PLANNING REGION

Air Stagnation Zone

Air Stagnation Boundary

For more detail please refer to the large maps located at OPG.

Scale 1" = 5000'

Office of Planning & Grants

Figure 4D-1

LOLO PLANNING REGION
Census Designated Place

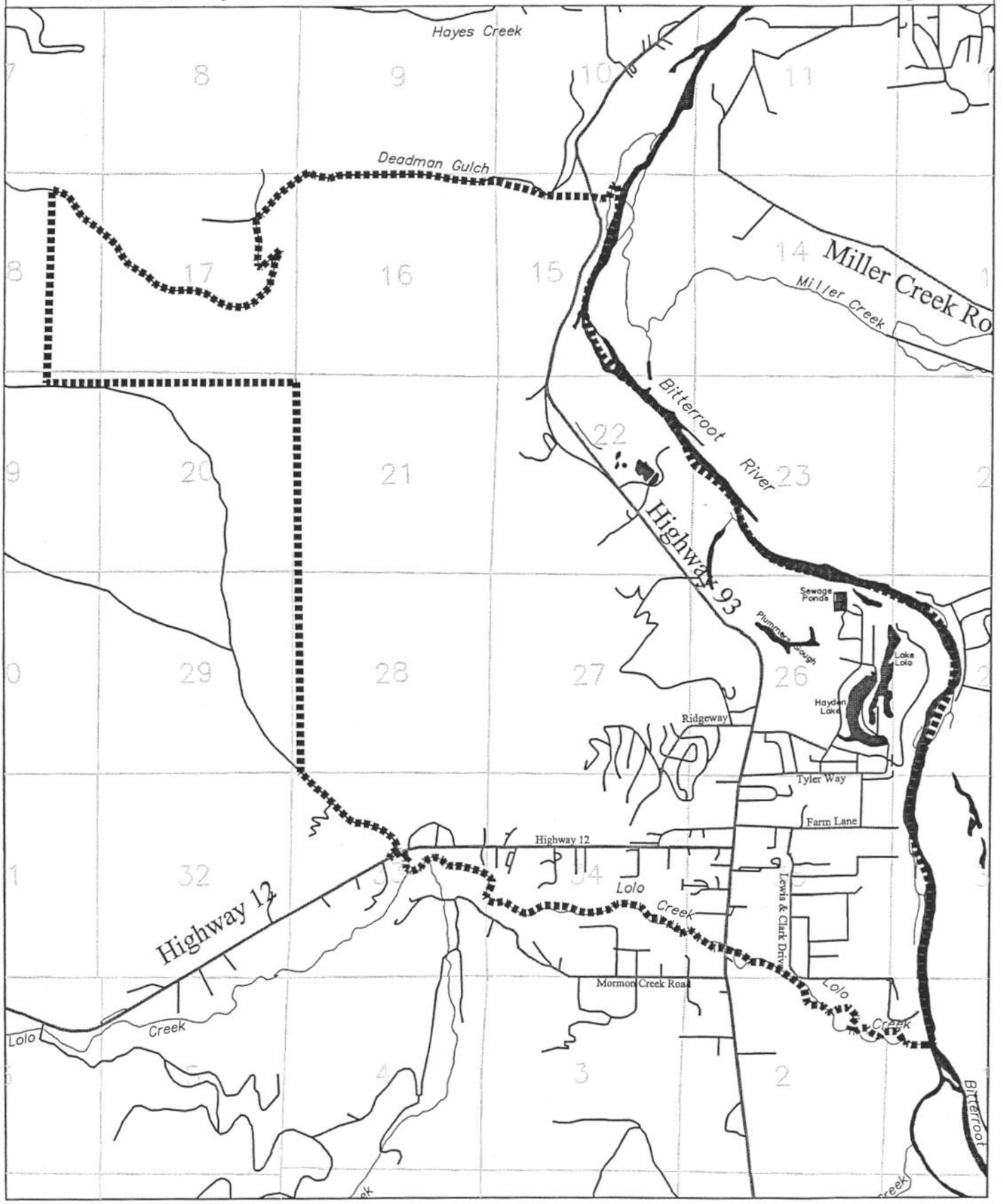
Based on a boundary from the 2000 TIGER Files, US Census.

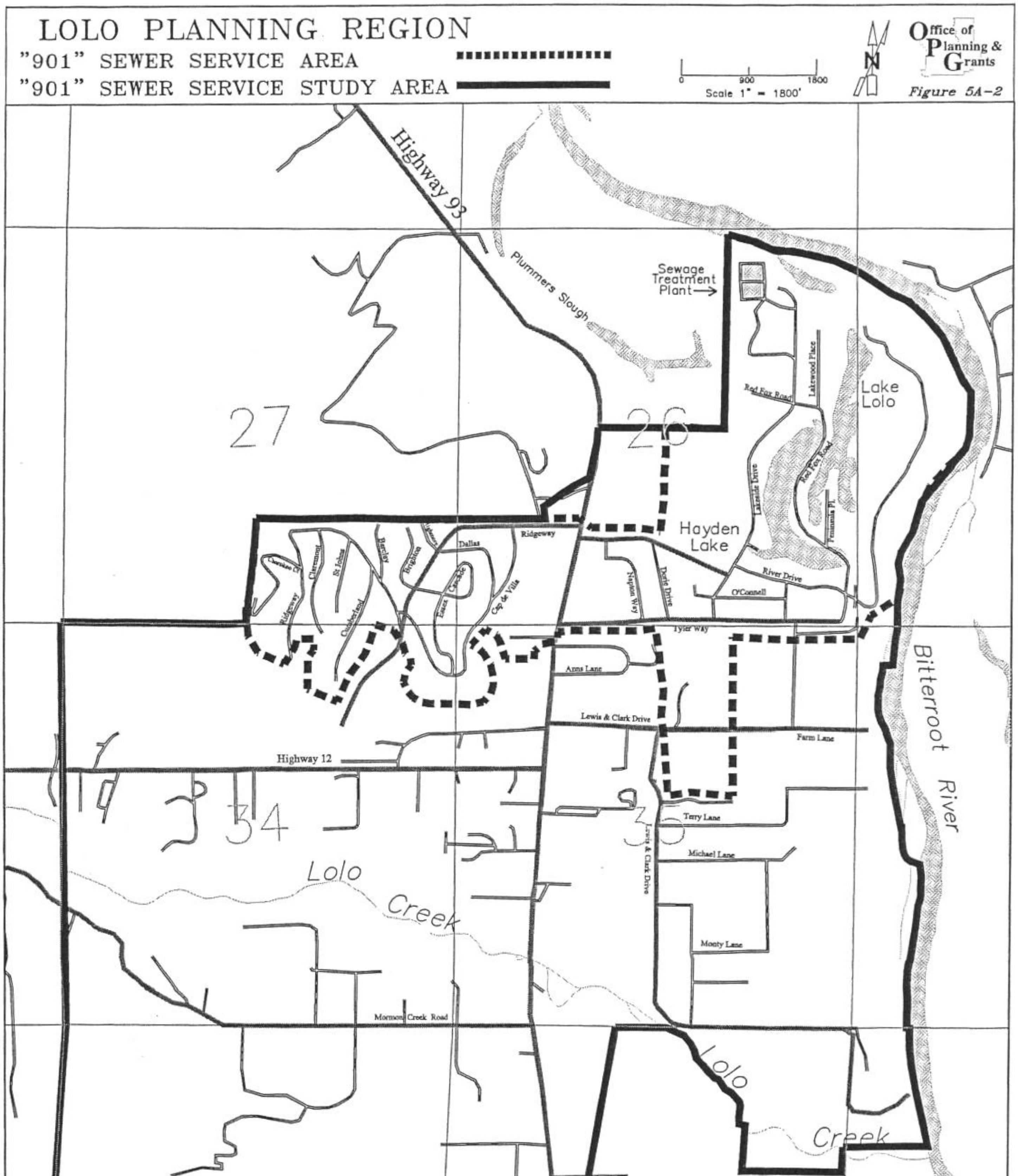
0 3500 7000
Scale 1" = 3500'

N

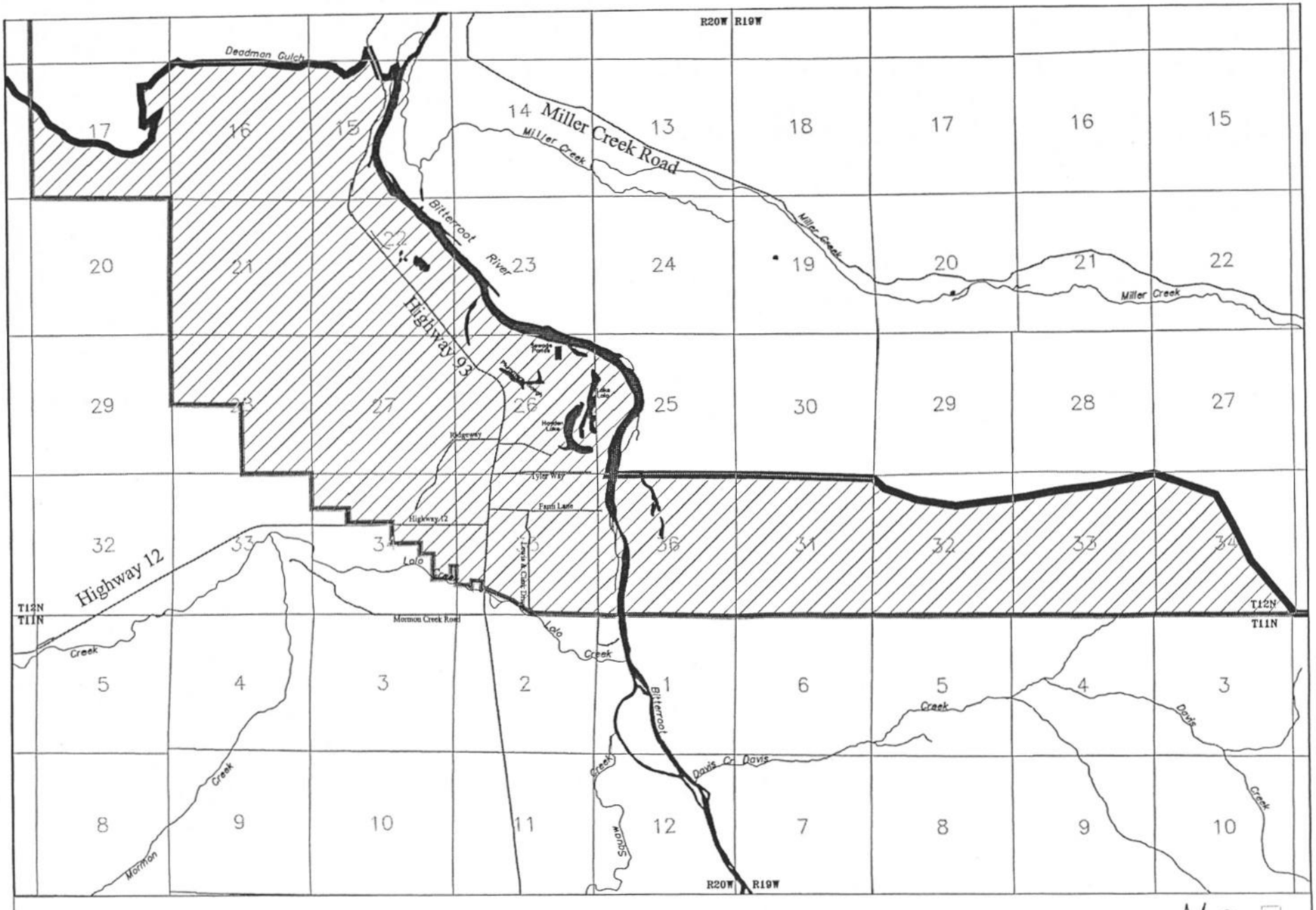
Office of Planning & Grants

Figure 5A-1





LOLO PLANNING REGION
"901" SEWER SERVICE AREA
"901" SEWER SERVICE STUDY AREA
0
900
1800
Scale 1" = 1800'
N
Office of Planning & Grants
Figure 5A-2
Highway 93
Plummers Slough
Sewage Treatment Plant
Red Fox Road
Lakewood Place
Lake Lolo
27
26
Lakeside Drive
Peninsula Pl.
Hayden Lake
Ridgeway
Dallas
River Drive
O'Connell
Napton Way
Doris Drive
Tyler Way
Anns Lane
Lewis & Clark Drive
Farm Lane
Highway 12
34
35
Terry Lane
Michael Lane
Monty Lane
Lolo Creek
Bitterroot River
Mormon Creek Road
Lolo Creek
3
2



LOLO PLANNING REGION

Building Permit Jurisdiction Boundary

4 1/2 Mile Building Jurisdiction Boundary in the Lolo Planning Area

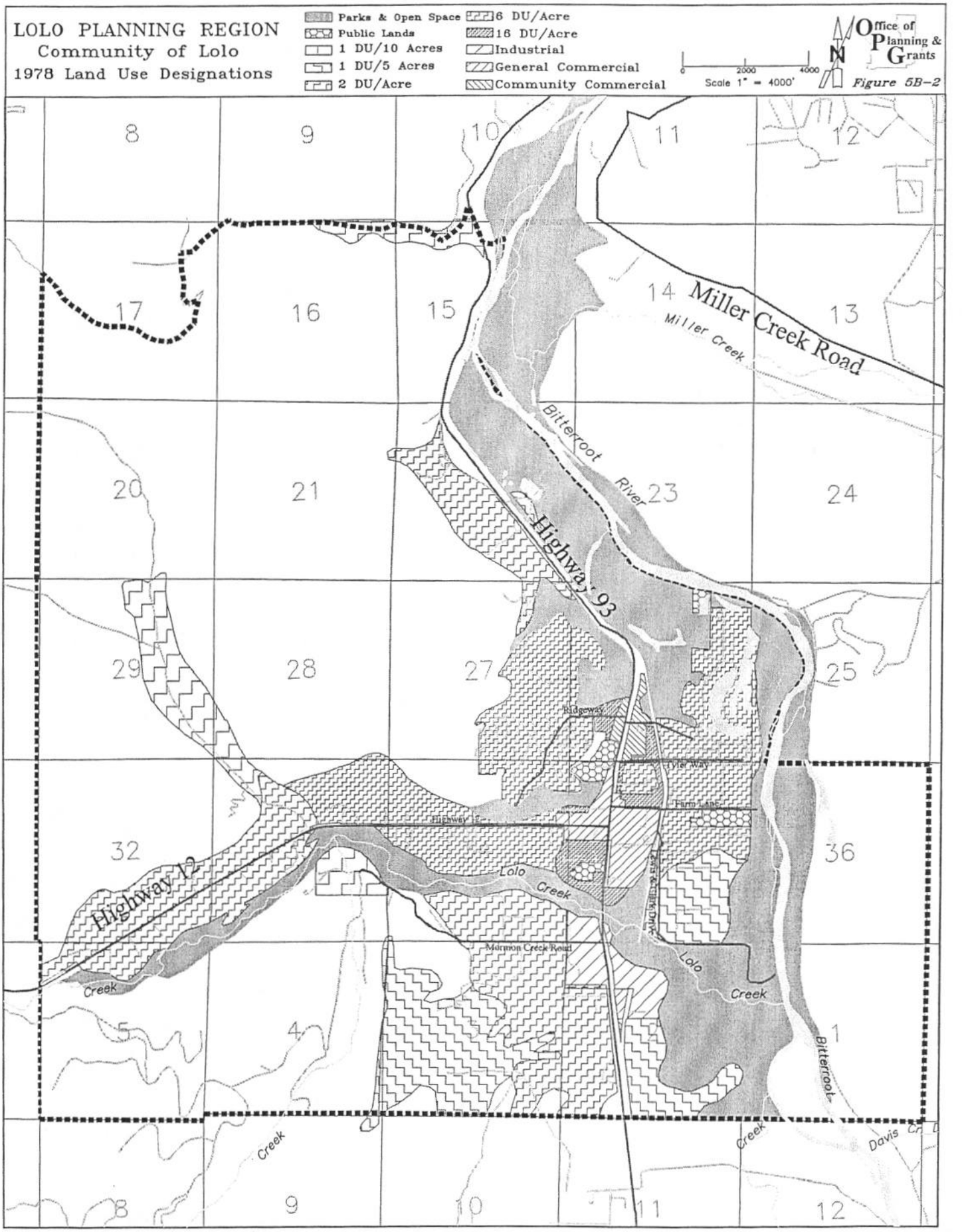
(For detailed boundary information, please refer to the Missoula City Public Works Department at 435 Ryman.)

0 2500 5000
Scale 1" = 5000'

N

Office of Planning & Grants

Figure 5B-1


LOLO PLANNING REGION
Community of Lolo
1978 Land Use Designations
Parks & Open Space
Public Lands
1 DU/10 Acres
1 DU/5 Acres
2 DU/Acre
6 DU/Acre
16 DU/Acre
Industrial
General Commercial
Community Commercial
Scale 1" = 4000'
Office of Planning & Grants
Figure 5B-2
Miller Creek Road
Miller Creek
Bitterroot River
Highway 93
Highway 12
Lolo Creek
Mormon Creek Road
Ridgeway
Farm Lane
Davis Creek
Bitterroot
8
9
10
11
12
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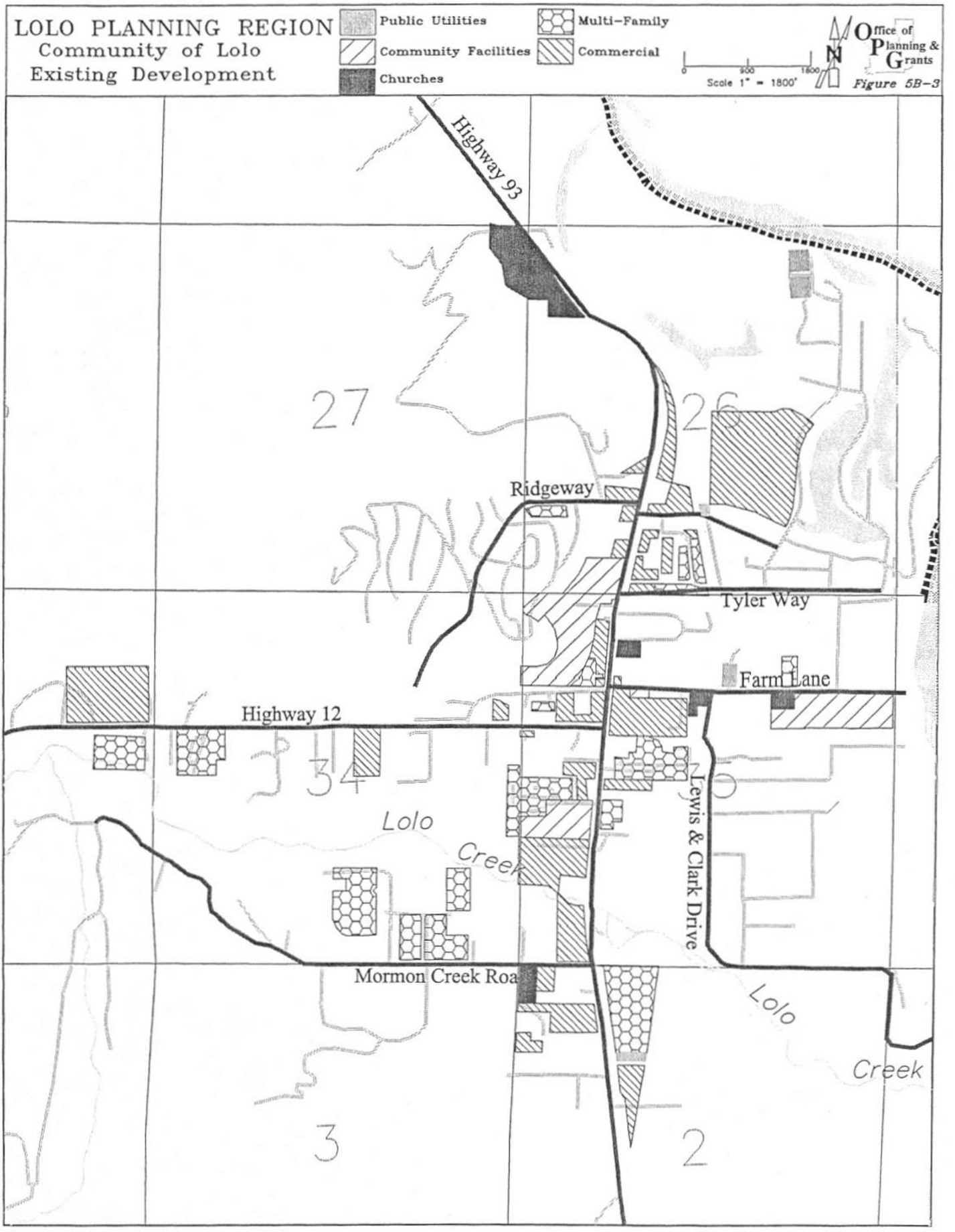
4
1

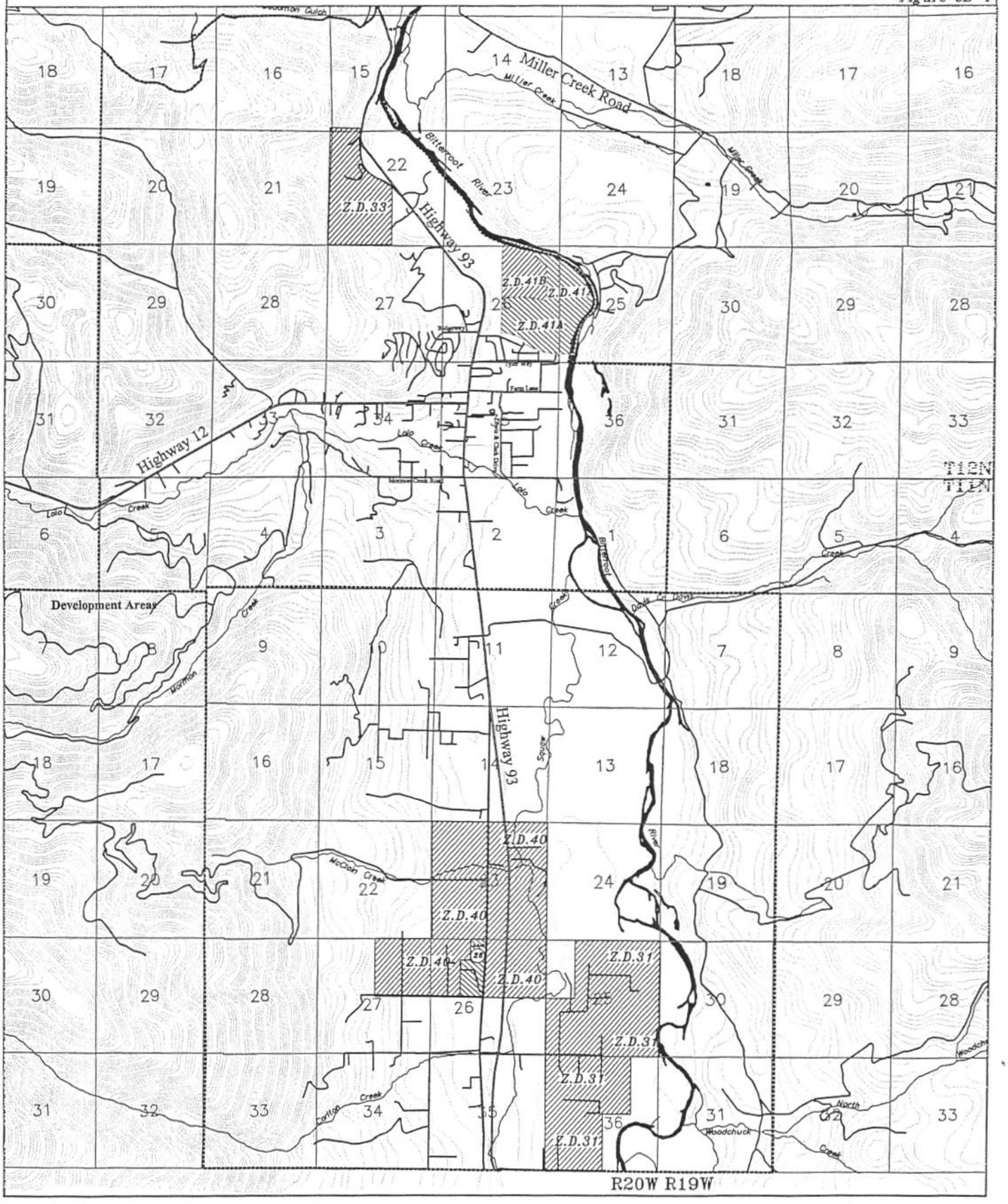

LOLO PLANNING REGION
Community of Lolo
Existing Development
Public Utilities
Community Facilities
Churches
Multi-Family
Commercial
Scale 1" = 1800'
Office of Planning & Grants
Figure 5B-3
Highway 93
Ridgeway
Tyler Way
Farm Lane
Highway 12
Lewis & Clark Drive
Lolo Creek
Mormon Creek Road
Lolo Creek
27
26
34
3
2

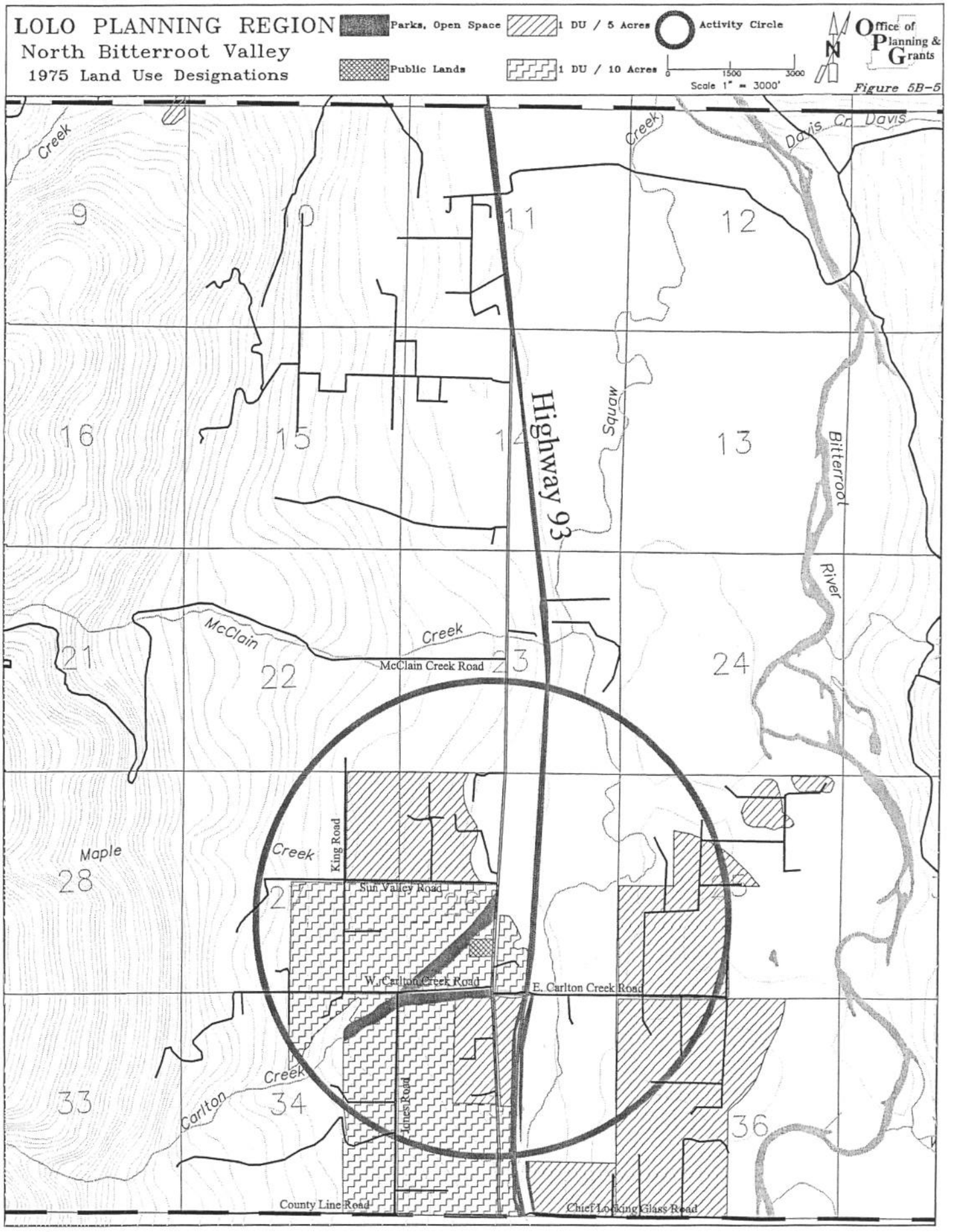
LOLO PLANNING REGION
Existing Zoning

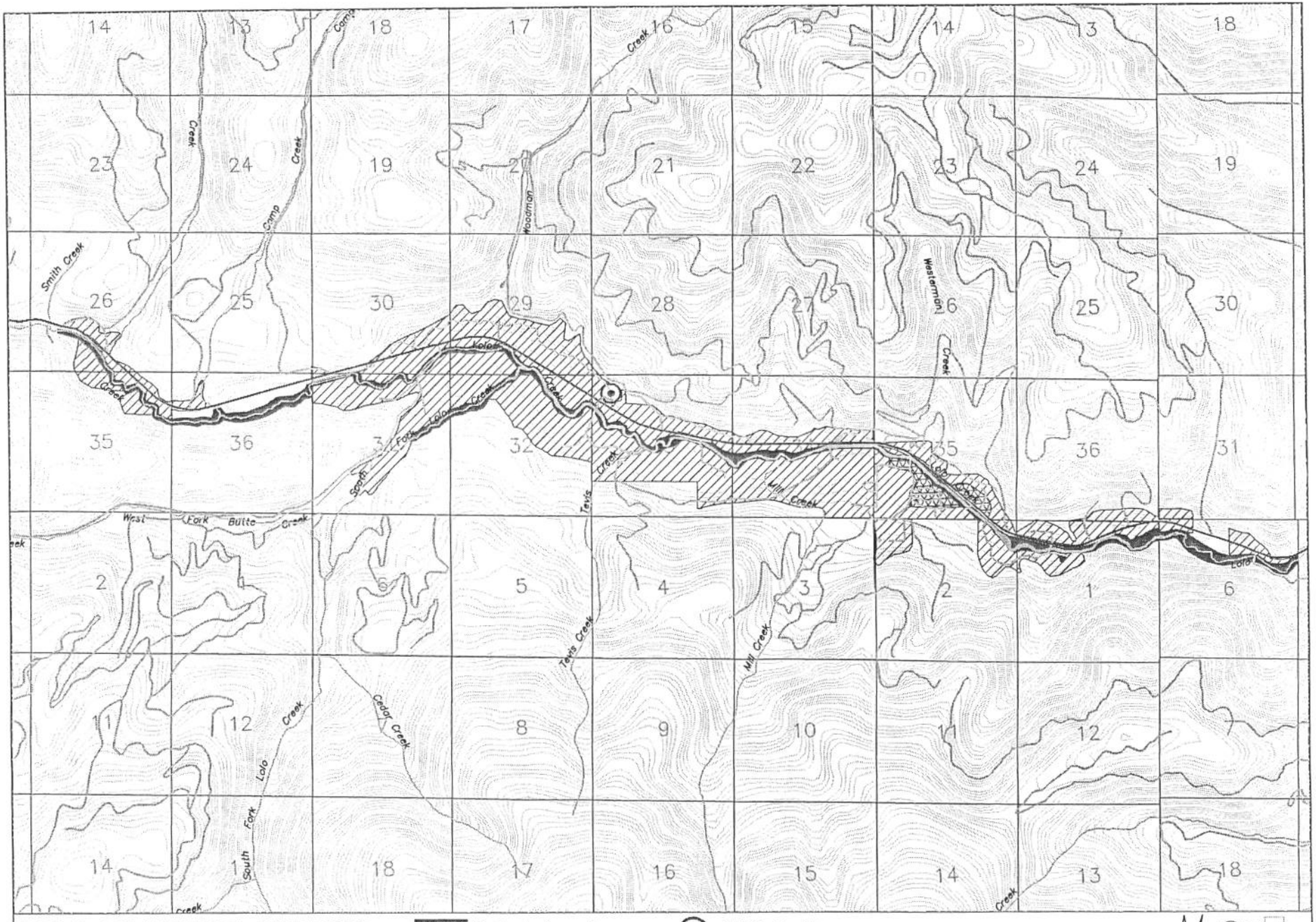
Office of Planning & Grants

Scale 1" = 6000'

Figure 5B-4




LOLO PLANNING REGION
North Bitterroot Valley
1975 Land Use Designations
Parks, Open Space
Public Lands
1 DU / 5 Acres
1 DU / 10 Acres
Activity Circle
Scale 1" = 3000'
Office of Planning & Grants
Figure 5B-5
Highway 93
Squaw Creek
Davis Cr
Davis Creek
Bitterroot River
McClain Creek
McClain Creek Road
Maple Creek
King Road
Sun Valley Road
W. Carlton Creek Road
E. Carlton Creek Road
Carlton Creek
Jones Road
County Line Road
Chief Looking Glass Road
9
10
11
12
13
14
15
16
21
22
23
24
28
33
34
36



LOLO PLANNING REGION
Lolo Creek Valley
1975 Land Use Designations

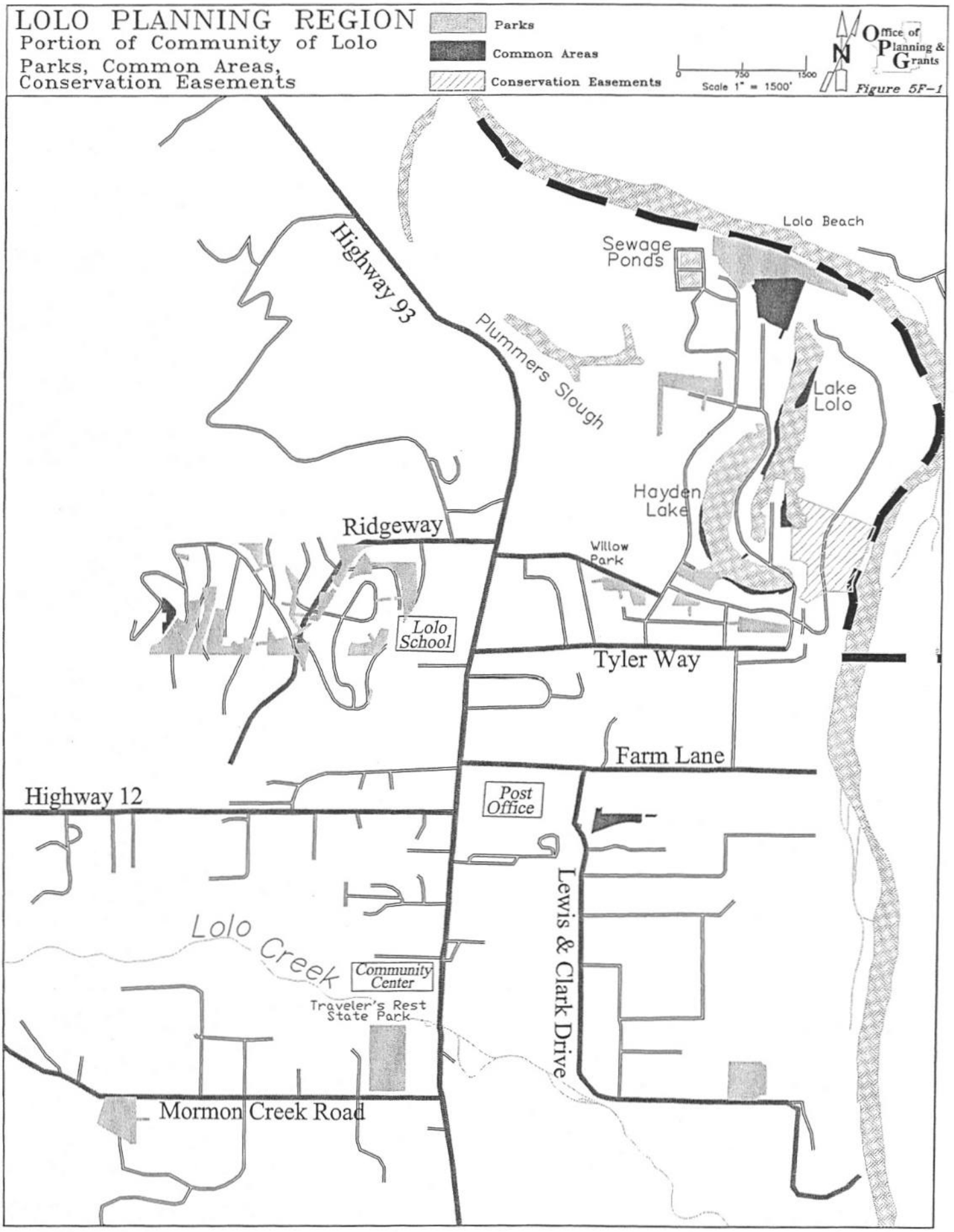
Parks & Open Space
1 Dwelling / 5 Acres
2 Dwellings / 1 Acre
Public Lands

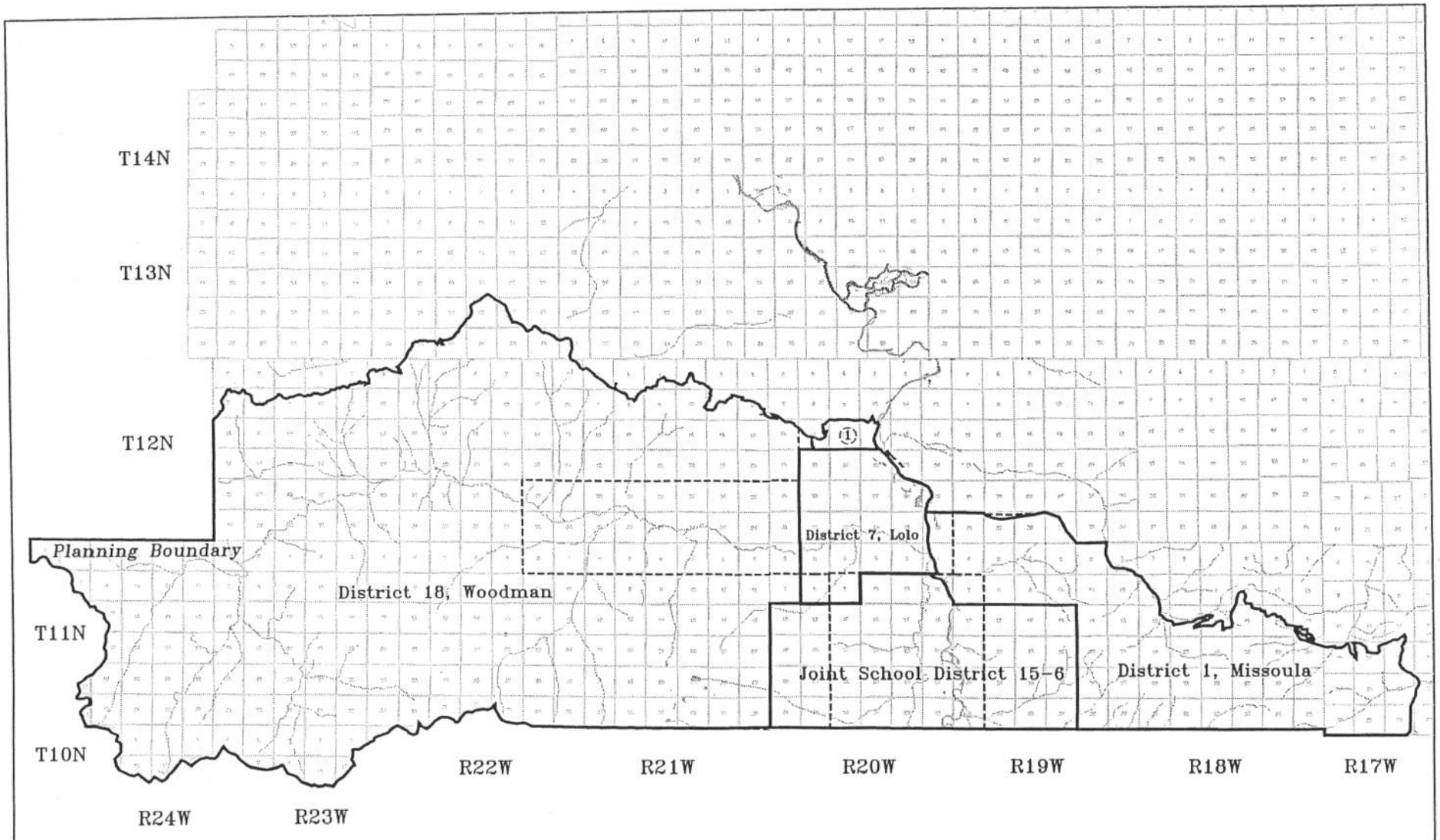
0 2500 5000
Scale 1" = 5000'

N

Office of Planning & Grants

Figure 5B-6


LOLO PLANNING REGION
Portion of Community of Lolo
Parks, Common Areas,
Conservation Easements
Parks
Common Areas
Conservation Easements
0 750 1500
Scale 1" = 1500'
N
Office of Planning & Grants
Figure 5F-1
Highway 93
Plummers Slough
Sewage Ponds
Lolo Beach
Lake Lolo
Hayden Lake
Ridgeway
Willow Park
Lolo School
Tyler Way
Farm Lane
Highway 12
Post Office
Lewis & Clark Drive
Lolo Creek
Community Center
Traveler's Rest State Park
Mormon Creek Road

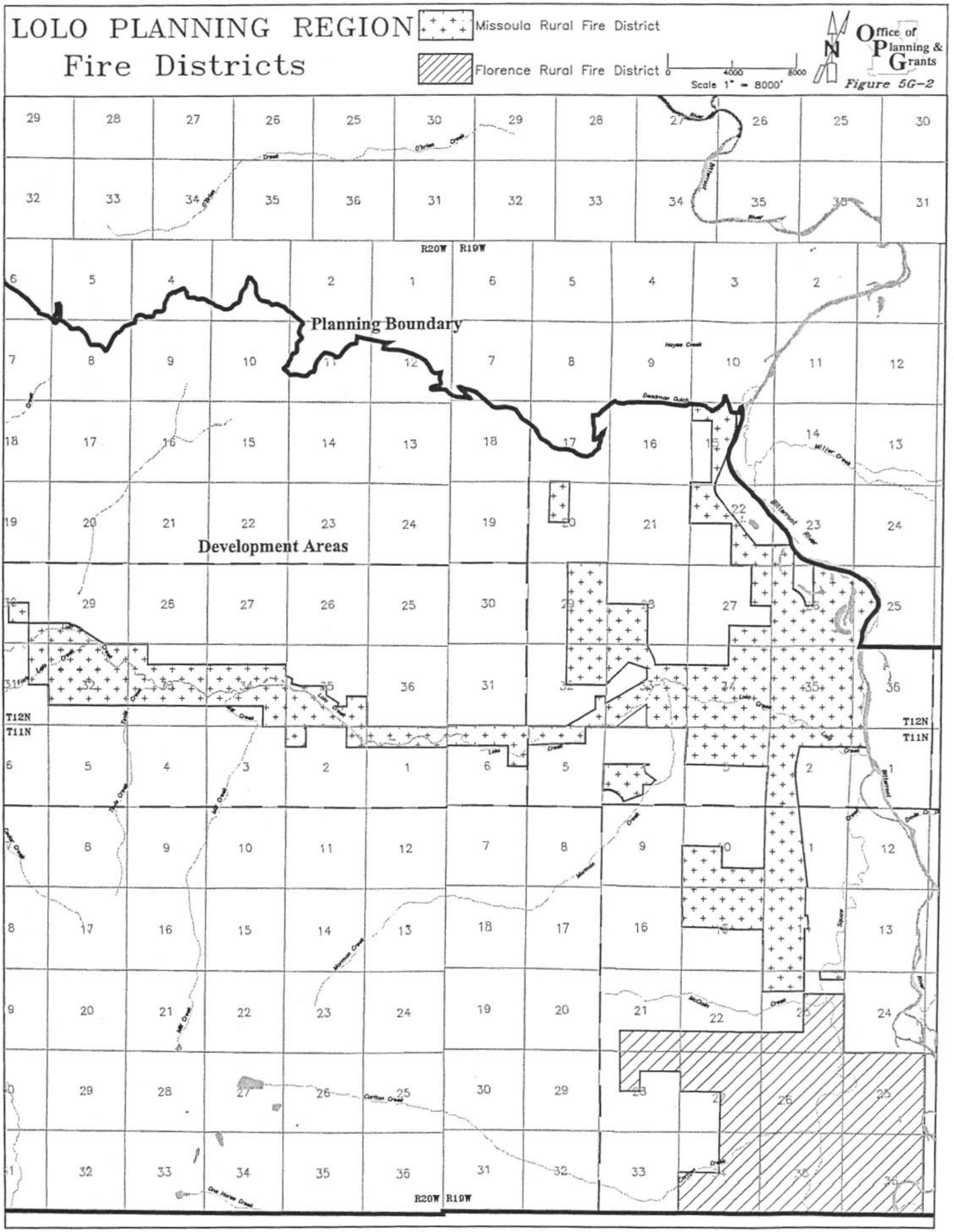


LOLO PLANNING REGION
School Districts

For more detail, please refer to the large maps located at OPG.

Office of Planning & Grants

Figure 5G-1

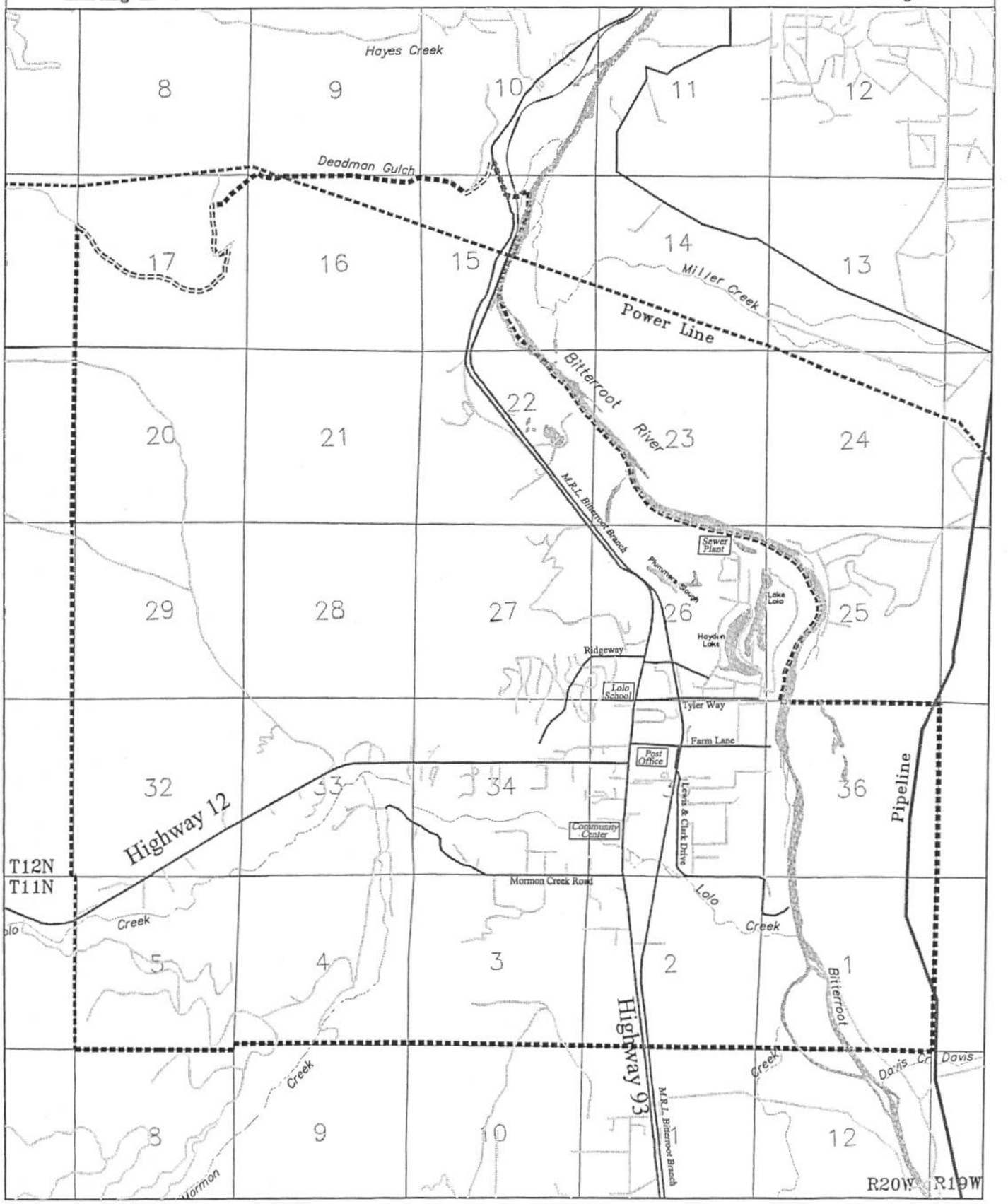

LOLO PLANNING REGION
Fire Districts
Missoula Rural Fire District
Florence Rural Fire District
Scale 1" = 8000'
Office of Planning & Grants
Figure 5G-2
Planning Boundary
Development Areas
R20W R19W
T12N
T11N

LOLO PLANNING REGION
Community of Lolo
Community Facilities & Existing Infrastucture

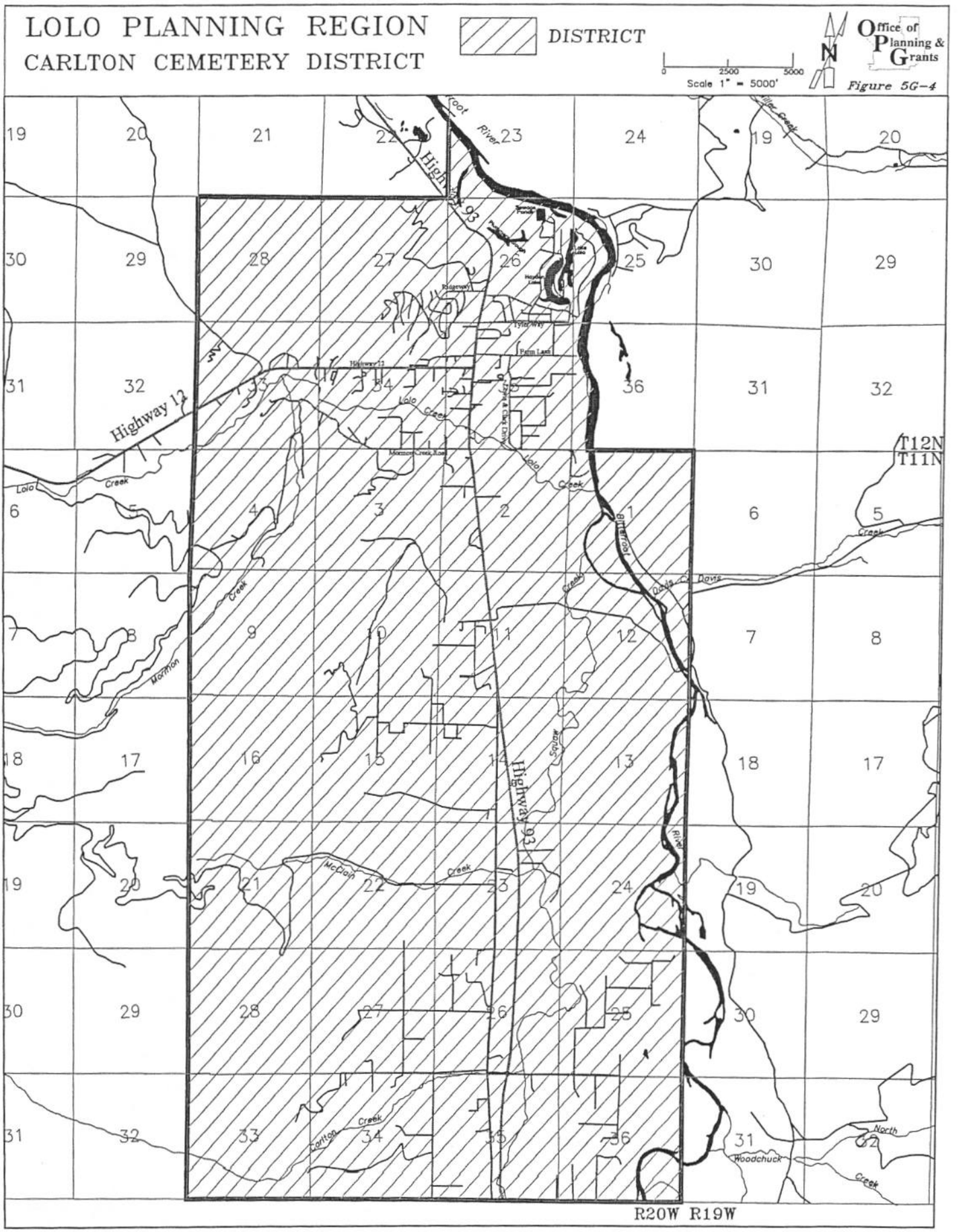
Office of Planning & Grants

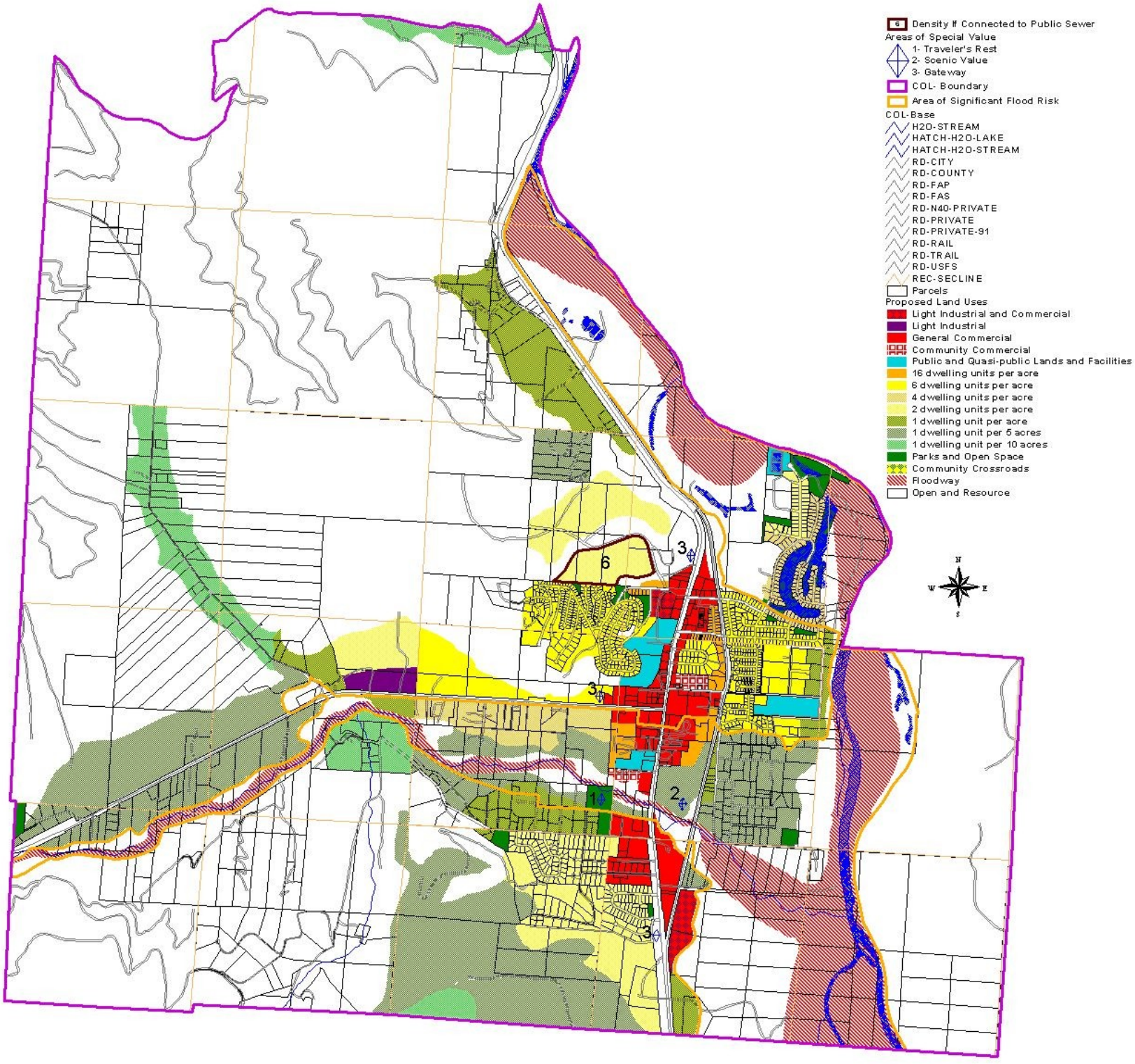
Scale 1" = 4000'

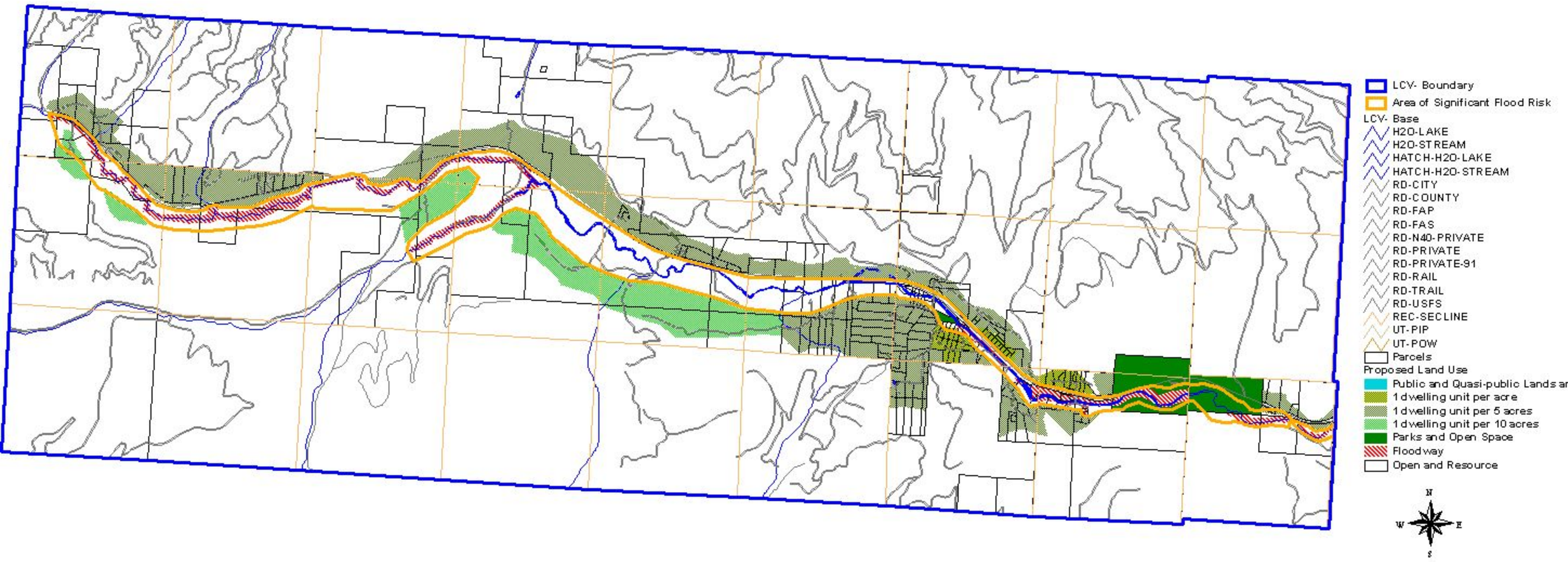
Figure 5G-3

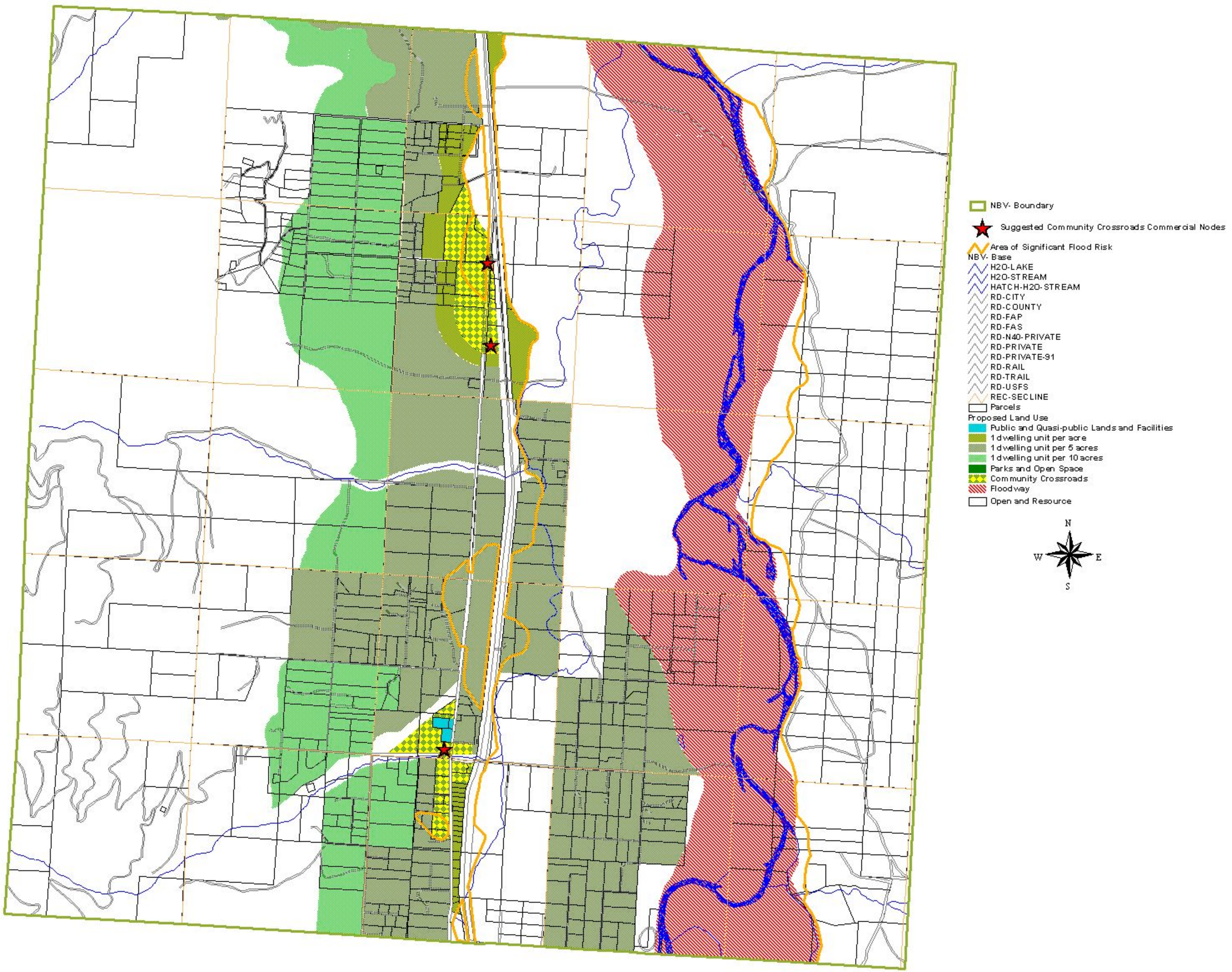


LOLO PLANNING REGION
CARLTON CEMETERY DISTRICT




6 Density If Connected to Public Sewer
Areas of Special Value
1- Traveler's Rest
2- Scenic Value
3- Gateway
COL- Boundary
Area of Significant Flood Risk
COL-Base
H2O-STREAM
HATCH-H2O-LAKE
HATCH-H2O-STREAM
RD-CITY
RD-COUNTY
RD-FAP
RD-FAS
RD-N40-PRIVATE
RD-PRIVATE
RD-PRIVATE-91
RD-RAIL
RD-TRAIL
RD-USFS
REC-SECLINE
Parcels
Proposed Land Uses
Light Industrial and Commercial
Light Industrial
General Commercial
Community Commercial
Public and Quasi-public Lands and Facilities
16 dwelling units per acre
6 dwelling units per acre
4 dwelling units per acre
2 dwelling units per acre
1 dwelling unit per acre
1 dwelling unit per 5 acres
1 dwelling unit per 10 acres
Parks and Open Space
Community Crossroads
Floodway
Open and Resource
N
W
E
S
6
3
3
1
2
3


LCV- Boundary
Area of Significant Flood Risk
LCV- Base
H2O-LAKE
H2O-STREAM
HATCH-H2O-LAKE
HATCH-H2O-STREAM
RD-CITY
RD-COUNTY
RD-FAP
RD-FAS
RD-N40-PRIVATE
RD-PRIVATE
RD-PRIVATE-91
RD-RAIL
RD-TRAIL
RD-USFS
REC-SECLINE
UT-PIP
UT-POW
Parcels
Proposed Land Use
Public and Quasi-public Lands and Facilities
1 dwelling unit per acre
1 dwelling unit per 5 acres
1 dwelling unit per 10 acres
Parks and Open Space
Floodway
Open and Resource
N
W
E
S


NBV- Boundary
Suggested Community Crossroads Commercial Nodes
Area of Significant Flood Risk
NBV- Base
H2O-LAKE
H2O-STREAM
HATCH-H2O-STREAM
RD-CITY
RD-COUNTY
RD-FAP
RD-FAS
RD-N40-PRIVATE
RD-PRIVATE
RD-PRIVATE-91
RD-RAIL
RD-TRAIL
RD-USFS
REC-SECLINE
Parcels
Proposed Land Use
Public and Quasi-public Lands and Facilities
1 dwelling unit per acre
1 dwelling unit per 5 acres
1 dwelling unit per 10 acres
Parks and Open Space
Community Crossroads
Floodway
Open and Resource
N
W
E
S