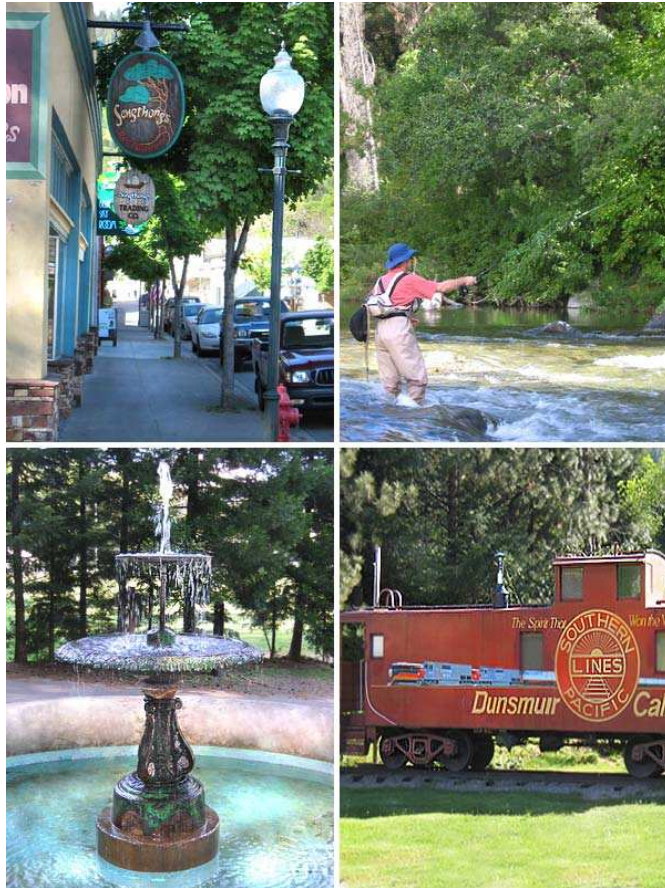


CITY OF DUNSMUIR GENERAL PLAN DECEMBER 2006



PMC



CITY OF DUNSMUIR GENERAL PLAN 2006-2025

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~ Adopted by City Council Resolution 2006-73 on December 15, 2006 ~

1.1 PURPOSE

This document is the General Plan for the City of Dunsmuir. It incorporates by reference the Housing Element (prepared and periodically updated separately), and any future elements to be adopted by the City as an element of the General Plan.

The General Plan, simply described, is the City’s “constitution” for development. It is an effort by the City to consider and respond to the needs and expectations of its residents concerning future development. This “constitution” is formatted within the legal framework established by the State and is based on knowledge of existing physical and social potentials and limitations concerning the City of Dunsmuir. The General Plan is developed by establishing basic “goals” and “programs” to resolve and/or direct significant community issues. Once a draft is completed, it is reviewed by the community and adopted by the City Council as the general plan for the City. This document is then used regularly by the City Council, Planning Commission and staff when dealing with matters affecting the physical, economic and social development of the community.

The General Plan is also regularly referred to by individuals or businesses contemplating potential development activity within the community. The document explains what the community expects from new development and where development should occur. Goals in the General Plan also aid the Council in seeking grants and other funding to address local issues and needs.

1.2 PHYSICAL DESCRIPTION & LOCATION

The City of Dunsmuir is located in Northern California near the southern border of Siskiyou County on Interstate 5 (see **Figure 1-1**). It is situated at the upper end of the Upper Sacramento River Canyon with the Cascade Mountains generally to the east and the Klamath Mountains to the west. The Shasta-Trinity National Forest is near the City both to the east and west. Situated in a steep and relatively narrow canyon, the City parallels the Sacramento River, the Union Pacific Railroad and Interstate 5. The elevation of the City on the south is 2,250 feet above sea level and 3,270 feet at the airport on the north end. According to the U.S. Census, the population of the City of Dunsmuir in 2000 was 1,923. The California Department of Finance estimates that the 2005 population of Dunsmuir was 1,897.

1.3 STATE MANDATES FOR THE GENERAL PLAN

Local planning and land use powers are granted to cities and counties by the State Constitution. However, State legislation shapes the manner in which these powers are exercised. California state law requires that every city and county adopt a General Plan to guide the physical development of the land within the jurisdiction’s boundaries (California Government Code §65300). The general plan is intended to serve as the “constitution” for the jurisdiction concerning development and establishes guidelines for land use and development.

State law requires that the Plan be comprehensive and that specific subjects or “elements” be addressed in the Plan. The required elements as specified by Government Code §65302 (a) through (g) are:

- Land Use
- Housing
- Open Space
- Safety
- Circulation
- Conservation
- Noise

Some elements like the Open Space Element encompass a number of planning issues while others, such as the Noise Element, address a more specific topic. Because local conditions vary, the relevance and importance of each issue will differ from city to city. The General Plan needs only to address each required element to the extent that it is applicable to the City, as long as the minimum requirements of the law are satisfied.

State law also allows the local jurisdiction to include additional, or “optional” elements, to address specific issues of concern, as well as combining required and optional elements as deemed appropriate (Government Code §65303). The Dunsmuir General Plan, for example, combines the Open Space and Conservation Elements. It also contains an optional “Historic Preservation Element”.

1.4 TERM AND SCOPE OF THE GENERAL PLAN

Since the General Plan affects current and future generations, State law requires the Plan to take a “long-term” perspective, typically 10 to 20 years into the future. This Plan addresses planning for Dunsmuir through the year 2025.

In addition to addressing the mandatory planning topics, the General Plan must also have the following characteristics:

Long-range: The General Plan is intended to be long-range to avoid incremental planning decisions that may occur over many years and that may eventually conflict with each other. This General Plan considers issues that may impact the City throughout the next two decades.

Comprehensive: The Plan must coordinate all major components of the community’s development, covering the entire incorporated area of the City as well as any other land that bears relation to the City’s planning issues. In addition, the Plan must address the full range of issues associated with the City’s physical development including possible annexations and activities within the City’s sphere of influence.

General: Because it is long-range and comprehensive, the Plan must be general in nature. The Plan’s purpose is to serve as a broad framework for detailed public and private development.

Internally Consistent: All parts of the Plan (text, diagrams and figures in all elements) must be fully integrated and not in conflict with each other.

1.5 USE OF THE GENERAL PLAN

The City of Dunsmuir General Plan is intended to serve as a tool to assist the City Council, Planning Commission, staff and other commissions and committees in formulating and implementing community guidelines and programs.

The General Plan has the following main purposes:

- To enable the City Council and Planning Commission to reach agreement on long-range development policies.
- To provide consistency in community development policy over the life of the plan. This allows for changes in the plan, but only after reasonable study and consideration.

- To provide a basis for judging whether specific private development proposals and public projects are in harmony with the City's long-range policies.
- To allow other public agencies and private developers to design projects that are consistent with the City policies, or to seek changes in those policies, when warranted, through the process of amending the General Plan.
- To provide an agreement among different agencies for development in unincorporated portions of the Planning Area.

Uses and Standards: The General Plan's land use classifications, as outlined in the Land Use Element, are not as specific as zoning ordinance classifications. For example, multiple zoning districts may be consistent with a single General Plan land use classification, as long as the densities and unit types allowed in each zoning district are also permitted in the relevant General Plan category. Further, zoning district standards will typically address building setbacks, building height, fencing and parking, while these details typically are not addressed in the General Plan.

Spatial Correlation: The Zoning Map should reflect the general pattern of land use depicted on the General Plan land use map. However, the two need not be identical. Boundaries of land use classifications depicted on the Land Use Map are intended to be generalized; zoning boundaries are more precise and parcel specific.

Timing: State law allows a "reasonable time" for reconciling any inconsistencies between the City's General Plan and the City's Zoning Ordinance. The City anticipates that all zoning and General Plan inconsistencies will be addressed within the first five (5) years following adoption of the General Plan.

1.6 DUNSMUIR GENERAL PLAN HISTORY

Dunsmuir began its long-range planning program almost 50 years ago in 1957. This program has continued with updates at intervals to the present. The following discussion summarizes these activities:

- The "1957 Master Land Use Plan" reviewed and categorized land use and population distribution in the City. The population during that period (1954 estimate) was 3,984.
- The "1963 Master Plan Report" reviewed the changes caused by the construction of the major segments of Interstate 5 in Dunsmuir and also included the following:
 1. Land use, streets, park and public building standards.
 2. Land Use Plan.
 3. Street Plan.
 4. Community Facility Plan.
 5. Zoning Ordinance review.
- The "1973 Economic Survey" reviewed various demographic and environmental statistics and focused on economic conditions, City services and transportation. The survey noted that "tourism and recreation is by far the strongest economic potential of the area."
- The "1979 Land Use and Housing Elements" were the two most ambitious planning efforts at that time. This document took into account additions to the City up to Mott Airport and the washout of the Prospect Avenue Bridge. This effort, for planning purposes, divided Dunsmuir into four planning areas and followed the State mandate to categorize and designate land uses within the

City. This 1979 planning document also served as the genesis for the major structural rehabilitation and historic preservation efforts that have taken place since that time.

- The “1985 General Plan” was the most thorough of these planning efforts. It placed greater emphasis on specific planning goals, development policies and proposed implementation measures.
- In March 2004, the City adopted an updated Housing Element as part of the General Plan. Later that spring the City Council authorized the update of the City’s General Plan as a means to reflect current issues, address related legal requirements and to reevaluate and consider the shifting attitudes and expectations of its citizens.

1.7 THE PLANNING AREA

A general plan must include all territory within the boundaries of the jurisdiction for which the plan is being adopted. It should also include any area outside the jurisdiction which, in that jurisdiction’s judgment, bears a relation to its planning concerns. Since many planning and development issues cross over political boundaries, California planning law provides for extraterritorial planning. This is a process by which the City can indicate to its neighboring jurisdictions its concern for the future use of land and resources adjacent to the current city limits. In the case of Dunsmuir, adjacent lands are primarily under the jurisdiction of Siskiyou County. Some land in the vicinity is managed by the U.S. Forest Service.

The Siskiyou County Local Agency Formation Commission (LAFCO) has adopted a sphere of influence for the City. The boundary of the sphere of influence basically circles the City and recognizes the area of anticipated future City expansion as well as an area of special concern due to its proximity to the city. The current area of the City is approximately 1,800 acres. The area of the sphere of influence outside the city limits is about 4,600 additional acres. Therefore, the total planning area encompasses approximately 6,400 acres, or 10 square miles. **Figure 1-2** depicts the planning area for the Dunsmuir General Plan.

1.8 SOCIAL AND ECONOMIC CONCERNS

The State has mandated General Plan requirements to emphasize planning for the physical and environmental development of the City. However, there is another important aspect of planning for the future, and that is the need to address the social and economic concerns of the citizens. Policy and implementing programs have been developed with consideration given to the impacts on low- and moderate-income households as well as on business development, employment, and the costs and revenues of the City.

1.9 CONTENT OF THE GENERAL PLAN

Each issue addressed in the General Plan should include three basic steps: data and information gathering and analysis; formulation of appropriate policy; and recognition of implementation measures that will support the policies of the Plan.

Data and Analysis: State planning law stipulates that specific background information be adopted for certain mandatory elements (e.g., Housing Elements) as part of each General Plan.

Background information on the other elements may be adopted by reference or summarized in the Plan, but should be readily available to the decision-makers and citizens alike.

Policy Development: Policy consists of those parts of the General Plan that direct private and governmental action. For a policy to be useful, it should be clear and unambiguous. The decision-makers need to be aware of the difference between “shall” and “should”. “Shall” indicates an unequivocal directive, whereas “should” (and words such as “may” and “possibly”) signifies a less rigid directive to be applied in the absence of compelling considerations.

Implementation: An implementation program is an integrated set of specific measures and actions that the City intends to take to support and/or carry out a policy of the General Plan. Similar to the required background data, the Open Space, Housing and Noise Elements require specific implementation measures or programs. The programs for the other elements must be developed by the City to reflect local concerns rather than a set of general statements. It has been observed that a few well-conceived measures will usually accomplish more than a long list of possibilities.

1.10 CONTENTS OF GENERAL PLAN ELEMENTS

Each element of this General Plan contains: 1) the legal basis for the element; 2) a narrative discussion of background issues to provide an understanding of issues being addressed; and 3) goals, objectives, policies and implementation measures to address identified planning topics. Goals often have multiple objectives, policies and implementation measures.

The following terms apply within this General Plan:

Goal: A declaration of the ideal future state of the community with regard to the issue being addressed (e.g., “An economically vital downtown commercial district”).

Objective: A statement that provides for an attainable, and preferably measurable and time-specific, intermediate step toward achieving a previously stated goal (e.g., “The City would like to see 75% greater occupancy of vacant storefronts along Main Street within the next five years”).

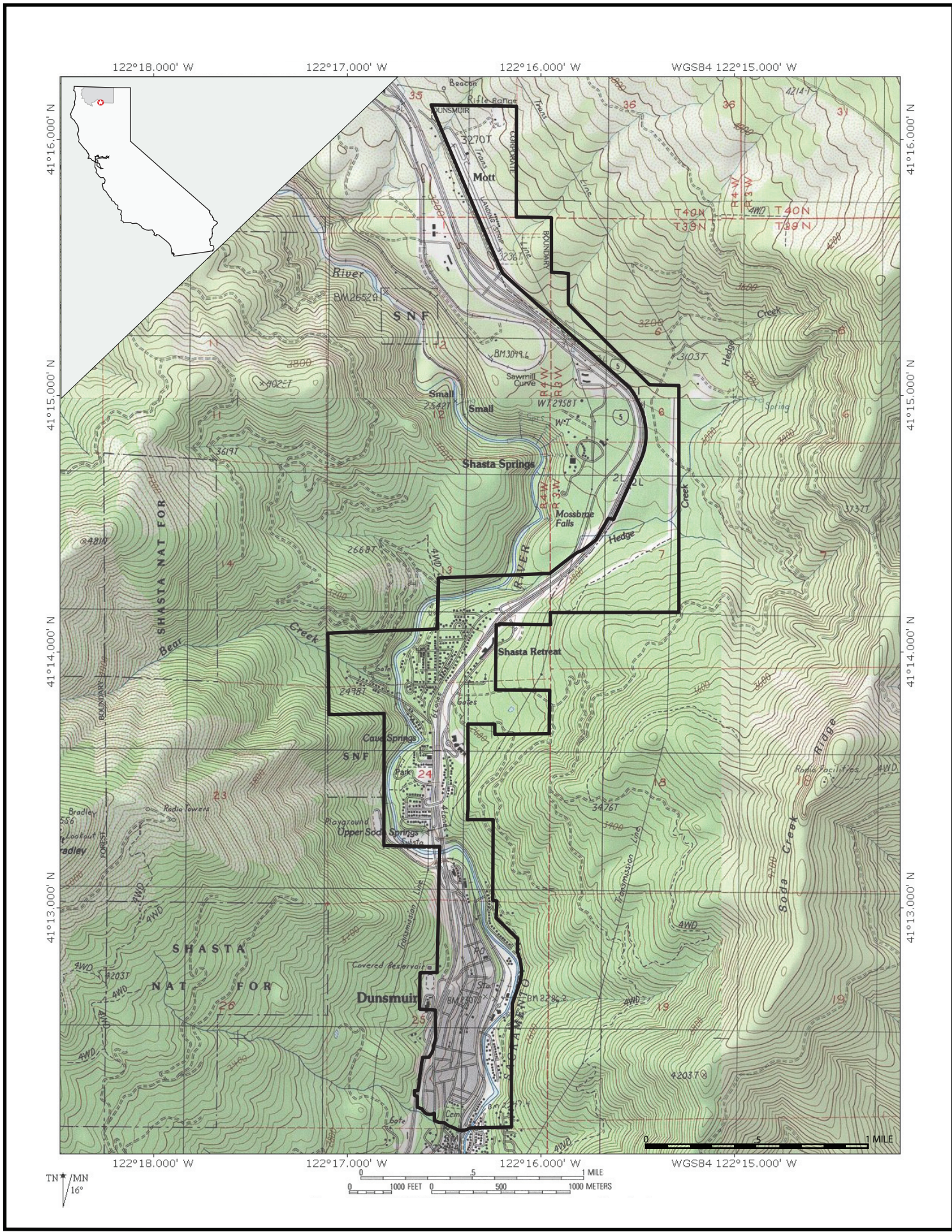
Policy: A specific statement that guides decision-making. It is based on and helps implement a previously stated objective (e.g., “In order to attract new businesses to the downtown commercial district, the City shall provide a variety of economic incentives to owners of properties located along Main Street for the improvement of building facades and interior retail spaces”).

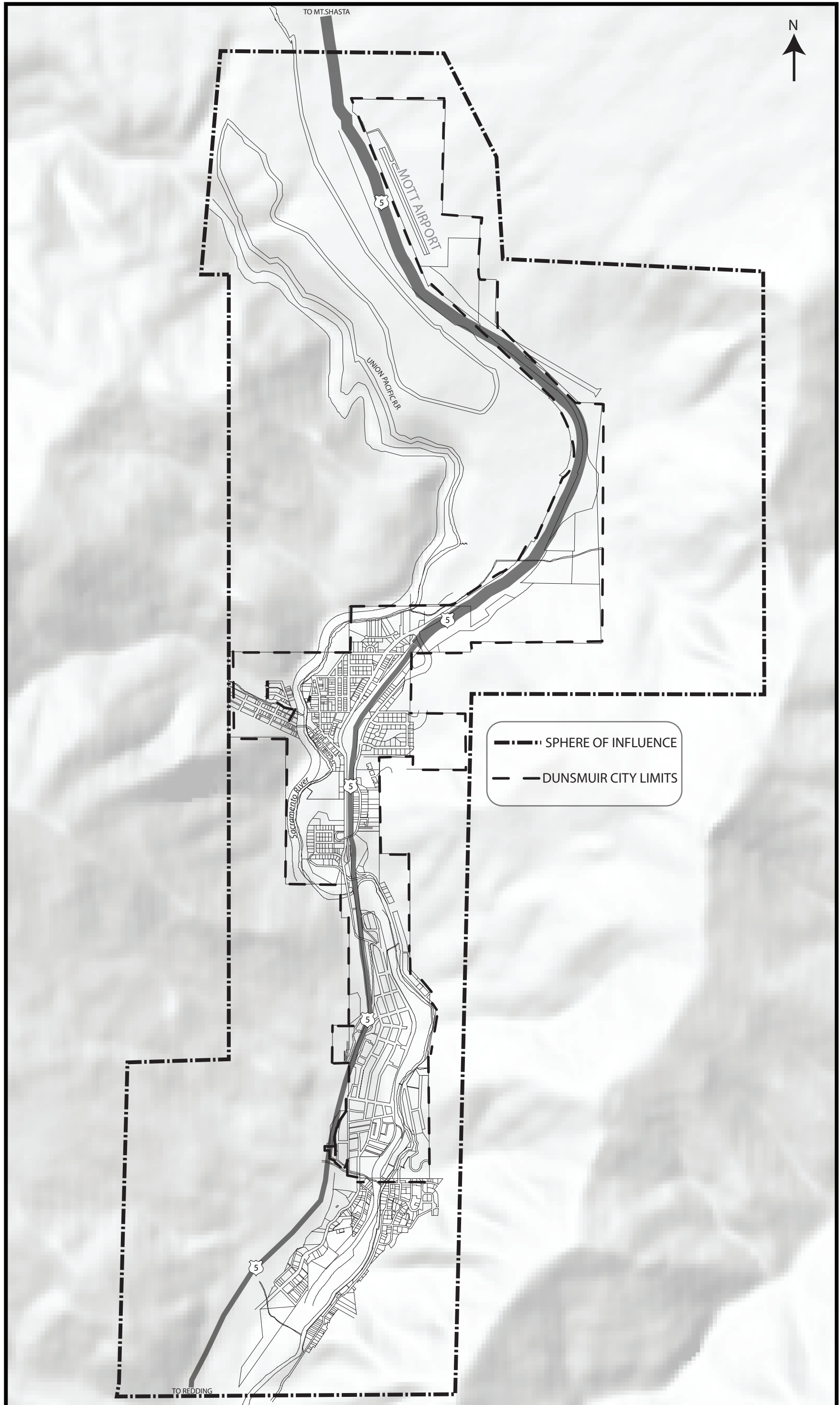
Implementation Measure: An action, procedure or program that can be adopted by the City in order to facilitate the respective policy (e.g., “In order to attract new retailers to the downtown commercial district, the City shall provide low-interest loans to businesses located along Main Street for the improvement of retail spaces”).

1.11 KEY PLANNING ASSUMPTIONS

Assumptions are statements of apparent facts and observations concerning development issues and trends in the planning area. These assumptions, along with the goals, policies and implementation measures, provide the basic framework for the General Plan. The following assumptions serve as the basis upon which the Dunsmuir General Plan is framed:

- Residents of Dunsmuir locate or remain here primarily due to the small town atmosphere, the mountainous environment, affordable housing and overall quality of life.
- Population growth will remain slow and constant during the life of the Plan until such time that new development occurs in the northernmost area of the City or possibly through annexation to the south.
- Employment opportunities will show some limited expansion in response to an increase in tourism and demand for local services.
- There will be a continuing demand for affordable single-family housing and increased demand for multifamily housing.
- The primary means of transportation will be the automobile due to the need to access a greater variety of commercial and professional services and jobs in the Mt. Shasta/Weed area or, more regionally, in the Redding area or Yreka and other areas of Siskiyou County. There will be no major construction or reconstruction of County roads or State highways in the area during the life of the Plan.
- Tourism and cottage industries will most likely lead employment growth in Dunsmuir. Historically, the loss of significant employment in logging and railroad industries are being replaced by recreation, tourism and public service jobs, and by persons who are employed in other communities and/or telecommute.
- Due to lack of land with relatively level topography, few large industries are expected to move to Dunsmuir. The most likely industries will be small businesses that employ less than twenty people.
- Due to limited employment opportunities in Dunsmuir, many new residents moving into the community will tend to be either retired, or the heads of the household will be employed elsewhere and commuting to work, or they will frequently telecommute to a job located out of the County.
- The historic small town character of Dunsmuir, coupled with the wealth of natural resources in the area, especially the Sacramento River, are among the strongest assets of the City for healthy development and sustainable economic growth.





2.1 INTRODUCTION

As described in the California General Plan Guidelines, the land use element functions as a guide to planners, the general public and community decision makers as to the ultimate pattern of development for the city. In practice, it is the most visible and often-used element in the local general plan. Although all general plan elements carry equal weight, the land use element is often perceived as being most representative of the general plan.

The land use element also has the broadest scope of the seven required general plan elements. It integrates most of the concerns of the other elements and plays a critical role of balancing land use needs and issues with identified constraints and opportunities.

2.2 POPULATION TRENDS

Population projections play a major role in the formulation of a general plan. The distribution and extent of designated land uses is largely based on the expected demands of a projected population. This includes the need for supporting public facilities and services. Table 2-1 below shows historic population trends.

Table 2-1: Population Trends, City of Dunsmuir

	<u>Population</u>	<u>Percent Change</u>
1970	2,214 ⁽¹⁾	
1980	2,253 ⁽¹⁾	+1.8%
1990	2,129 ⁽¹⁾	-5.5%
2000	1,923 ⁽²⁾	-9.7%

1) 1970, 1980 and 1990 data from 1996 Housing Element
 (2) Census 2000 Summary File (SF1), Table DP1

As noted in Table 2-1, between 1990 and 2000 the City of Dunsmuir experienced a 9.7 percent decline in population. During this same time period, for comparison, Siskiyou County experienced a 1.8 percent increase in population. The decline in the City's population has primarily been the result of the loss of timber and railroad-related jobs and the relocation of many families who were employed in those industries. There has also been an increase in the number of dwellings that are being used primarily as seasonal homes. The new population, as noted by Table 4 and Table 7 of Dunsmuir's Housing Element (updated, 2004), is generally older with smaller families as indicated by a decline in the number of persons per household between 1990 and 2000. The average household size in Dunsmuir, according to the 2000 Census, is 2.22 persons per household.

With the past declining population trend, it is difficult to project the future population of Dunsmuir for the next twenty years with much reliability. However, with a growing economy in southern Siskiyou County, it is logical to assume that Dunsmuir will eventually benefit from this activity and the past trends of declining population will cease.

One significant limitation to growth in Dunsmuir is the lack of vacant land suitable for development. Most vacant lands in the City have either substantial topographic constraints or lack adequate access. While developable lands do exist between the north Dunsmuir Avenue interchange and the airport, these lands have not yet been subject to much development pressure.

On the positive side, the community of Dunsmuir is growing gradually with a few new dwellings added each year. It has been recognized as an attractive place for retired and semi-retired individuals and couples seeking the lifestyle of a small community.

Given these circumstances, it is presumed that the historic decline in population will cease and modest increases will begin to be recorded during the current planning period. Table 2-2 projects population changes in Dunsmuir for the next twenty years.

Table 2-2: Population Projections, City of Dunsmuir

<u>Year</u>	<u>Projection</u>
2006	1,888 (Dept. of Finance)
2010	1,910
2015	1,958
2020	2,033
2025	2,110

Projection Assumptions:

- (1) 2006-2010: Those factors causing past population decline will cease and the population will increase slightly.
- (2) 2011-2015: Growth will occur at 0.5% annually
- (3) 2016-2025: Growth will increase slightly to 0.75% annually

2.3 LAND USE ANALYSIS

Residential Land Use: The single-family dwelling is the most typical housing type available throughout the community. As noted in Dunsmuir's Housing Element, 61 percent of all dwellings in the City were constructed before 1950. Residential development typically occurs on lots ranging in size from 5,500 to 6,500 square feet. The small size of many parcels and the topographic constraints caused by slopes that often exceed 15 percent limit the size of a dwelling that can be constructed. In many instances these constraints have also made the construction of garages impractical, resulting in extensive street parking. Only six new single-family dwellings were constructed in the City during the period of January 2001 to March 2004.

As noted in the 2000 Census, of the 1,168 dwelling units in the City at that time, 384 (32.9 percent) were rented. Although not identified therein, nearly all of these rented dwelling units are single-family dwellings. Multifamily units in Dunsmuir are limited and include typical two-story apartments, apartments over commercial development in the downtown area, and duplexes scattered throughout the community.

The City in the year 2000 had a 25.9 percent vacancy rate with 303 vacant units. Of this total, 133 dwellings were considered to be seasonally occupied dwellings that were vacant at the time of the 2000 Census (i.e., April 1, 2000). These seasonal dwellings represent 11 percent of the total housing stock; an uncharacteristically high number suggesting the desirability of Dunsmuir as a second home community.

Mixed Use: The city has two primary mixed-use areas. These are the downtown and related Historic District and the north Dunsmuir Avenue area. The downtown contains a variety of retail, personal services, offices, lodging, restaurants, entertainment, residential and other uses. Residential use occurs on the upper floors of commercial buildings, in live-work units, and in single-family and multifamily structures. The Historic District, located downtown on both Dunsmuir Avenue and Sacramento Avenue, contains numerous commercial buildings representing the architecture of the early to mid-1900s. The City has adopted development standards for this area as a means to maintain the historic character and increase the area's attractiveness. With use of the old hotel and other three-story and larger buildings for residential use, the area once accommodated a significant residential population.

The north Dunsmuir Avenue area, which includes portions of north Siskiyou Boulevard as well, provides for a variety of compatible residential and nonresidential uses. Businesses in this area include a hotel, motels, a gas station, restaurants, and stores. Residential uses are common throughout the area, and a few former motels long ago converted to residential use. It is anticipated that once a public trail to Mossbrae Falls has been developed, commercial interest in this area will increase. As it does, safeguarding the character of existing neighborhoods and maintaining land use compatibility will be of paramount importance.

The MU land use designation was introduced in concert with the 2023 Zoning Code update. It more appropriately reflects existing development and land use patterns in the areas it is applied to, and it provides for future integration of compatible residential and non-residential uses in these areas. The intent of the land use designation is to promote economic investment, redevelopment, and revitalization; improve access to housing, jobs, services, open space, and other destinations through non-vehicular transit modes; encourage a compact urban form; and safeguard the character of existing neighborhoods.

Commercial: The Dunsmuir Zoning Code includes a S-C, Service Commercial, zoning district. This district is intended to be applied to areas suitable for a wide range of commercial, office, retail, service and entertainment uses, as well as "heavier" commercial uses than typically allowed in a mixed-use area. While "heavier" commercial uses in the city are fairly limited, the addition of water, sewer and other services north of the north Dunsmuir Avenue interchange may provide further opportunities for commercial activities served by this category.

Industrial Land Use: Uses that may be categorized as industrial are extremely limited and scattered in the City of Dunsmuir. There is no single location where a concentration of industrial uses exists. The largest industrial parcel in the City is land accommodating the railroad and its related activities.

Public Agency: Schools, government offices and the airport are the most typical uses within this category. Public agency lands may also include lands that house public utilities, but that are not publicly owned.

Open Space: Recreation and open space lands are described in more detail in the Open Space and Conservation Element. Briefly, however, it should be noted that open space land uses include parks and public recreation facilities. The Sacramento River also provides unique and valuable open space and recreation opportunities through the City of Dunsmuir.

Resource Lands: Resource lands are lands that are identified as containing natural conditions or resources that may be suitable for timber production, provide substantial wildlife habitat, and/or serve to protect portions of the watershed. Much of the resource lands surrounding the City also have valuable scenic resources that are an important element of the City's viewshed. Resource land typically contains slopes greater than 30 percent that inhibit development. Resource lands may also include private and public open space areas, including lands within the National Forest.

Future Growth: A city's sphere of influence typically includes the area that the city will conceivably annex and expand into, but it may also include areas of particular concern to city planning, even if it is unlikely that the city would ever annex those lands. Much of Dunsmuir's sphere of influence contains steep slopes ranging from 20 to 50 percent. These areas are generally too steep to accommodate urban development. These canyon hillsides represent the City's viewshed and, in that context, are of concern to the City. They will likely remain as open space or resource lands. Approximately 1,500-2,000 acres of the sphere of influence contain slopes under 20 percent, which could theoretically be developed for urban uses with the extension of roads and infrastructure. This area is almost entirely located north of the north Dunsmuir Avenue interchange on both sides of Interstate 5 to a point approximately one-half mile north of the airport.

Portions of the city-owned airport property could possibly accommodate some additional residential development. The *Airport Master Plan* contemplated "aviation compatible residential" development on the eastern side of the 126-acre site on which the airport is located. Consideration of land use issues at and around the airport are addressed later in this Land Use Element.

There are a variety of constraints to development in the North Dunsmuir area. Constraints include: lack of good through access, especially on the east side of the freeway; heavy freeway noise from Interstate 5; lack of water supply, storage and distribution; lack of wastewater infrastructure; and heavy forest cover. These constraints do not preclude development, but would require the combined efforts of the City and major property owners in the area to plan and prepare this area for development.

Due to the potentially large capital expenditures for infrastructure, timing of development will be critical. It will be necessary to have a sufficient demand for housing and support uses to accommodate a large project that will be capable of

financing necessary up-front costs with the expectation of sufficient sales to cover development costs and generate acceptable profit for the developer.

The provision of adequate access is a constraint to development, especially the need to provide multiple accesses for public safety in the event of wildfire. Basic access is available to the west area from the Mott Road interchange and Mott Road, which connects to Dunsmuir Avenue and the north Dunsmuir Avenue interchange to the south. The east side has Old Highway 99 serving much of the area, but needs to be better connected to the north Dunsmuir Road interchange.

With the airport, freeway and, to some extent, the railroad in the area, lands on the west side of the freeway with gentle topography also have the opportunity to attract industrial and commercial users. This would also require adequate water and wastewater infrastructure.

To accommodate a variety of land uses and plan for needed infrastructure, it may be desirable to develop a special development plan or “specific plan” for the area. A specific plan, which is typically a step between general plan land use designations and a more detailed subdivision map, is very appropriate for a large area affecting more than one property owner. Normally this level of planning is initiated and financed by property owners, but it could also be initiated by a city or in cooperation with a city. Besides establishing a detailed development plan and development standards for the area, a specific plan would also provide plans for infrastructure staging and financing.

Annexations of land to a city are typically initiated by property owners as they desire to develop their land or otherwise need city services. On the part of cities, annexations must be approached cautiously to ensure that the future cost of providing services to annexed lands will not become a financial burden to the city. For this reason, cost of providing services must be fully evaluated prior to annexation. In many instances, the cost of services to the potential annexation can be offset through annexation agreements that ensure that the city will receive a healthy share of sales tax, transient and occupancy taxes (i.e., TOT), and other tax sources.

Mixed Use-Planned Development: Due to the complexity of planning issues surrounding the airport, the area surrounding it has been designated Mixed Use-Planned Development (MU-PD). The MU-PD land use designation is typically applied to lands that are suitable for a compatible mixture of land uses including, but not limited to, light industrial, commercial, residential, and/or public uses. Prior to development of properties designated MU-PD, projects shall be subject to approval of a Development Plan that, when approved, will be incorporated into a Planned Unit Development (PUD) Ordinance for the site, if appropriate. Approved Development Plans and related PUD ordinances for particular sites shall specify the appropriate development standards, code regulations and performance standards to be applied to development of the site.

2.4 DESCRIPTION OF LAND USE DESIGNATIONS

One of the fundamental sections of a general plan's land use element is the description of land use categories and designations. Descriptions of land use categories must include statements of the standards of population density and building intensity that are appropriate for the various districts and other territory covered by the plan. For the City of Dunsmuir, these descriptions are provided in **Table 2.3** below. **Figures 2.1a** and **2.1b** are visual depictions of planned land uses throughout the City and serve as the City's General Plan Land Use Maps. Since it is a requirement of law (California Government Code §65860) that a city's zoning ordinances be consistent with the general plan, it is also wise to describe the zoning districts that are typically associated with particular general plan land use designations. This is done in **Table 2.4** following the land use maps.

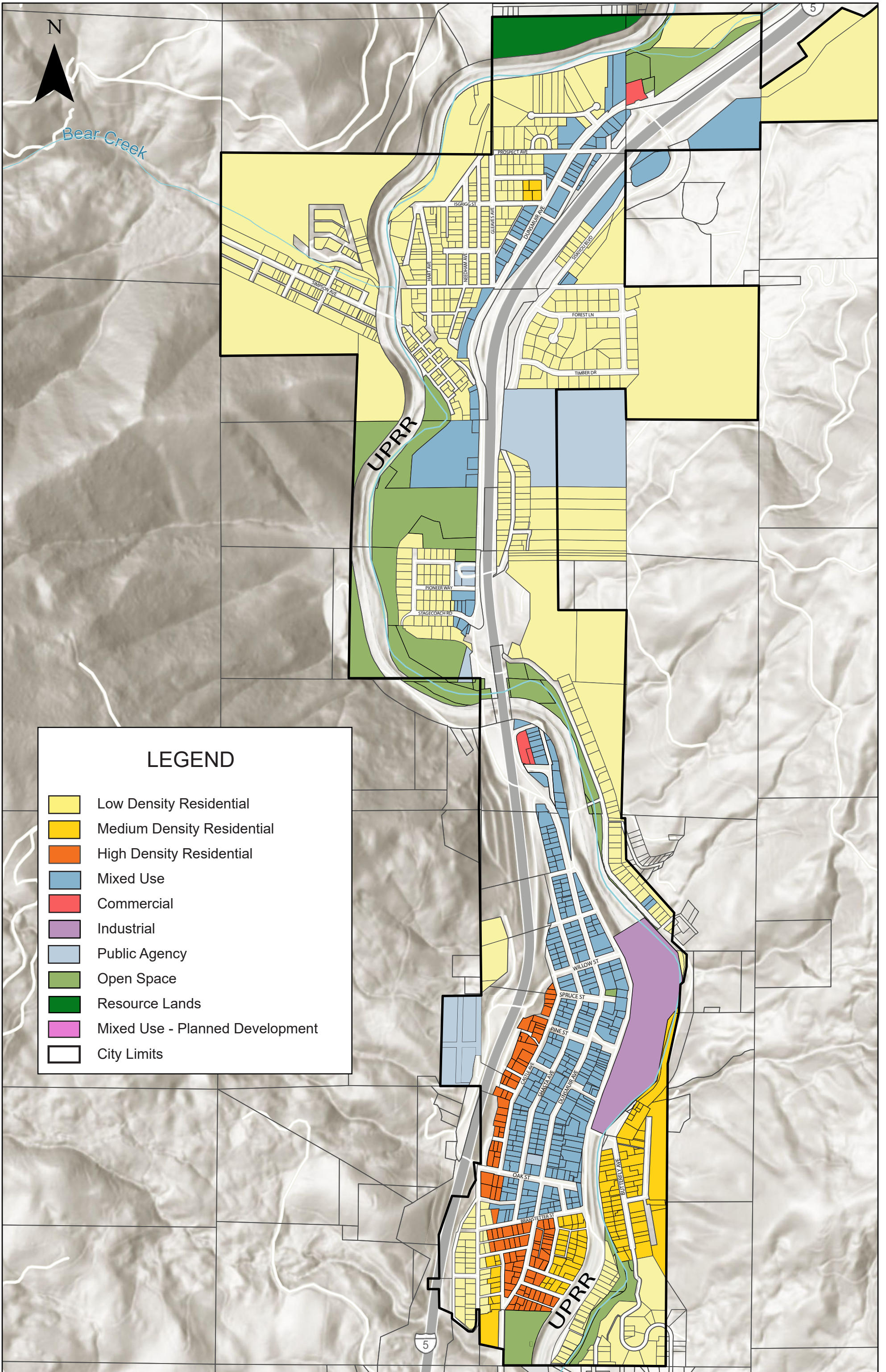
The following table provides a general description of the land use designations that are used by the City of Dunsmuir. The City may, in the future, adopt additional classifications that are not included in this list.

Table 2.3: Land Use Designations and Standards

Land Use Designation	Units/Acre Persons/Acre*	Max. Lot Coverage	Description of Typical Uses
Low Density Residential (LDR)	1-6 units/acre 3-18 persons/acre	40%	Single-family residential dwellings.
Medium Density Residential (MDR)	1-12 units/acre 3-36 persons/acre	50%	Single-family residential dwellings, and duplexes.
High Density Residential (HDR)	1-40 units/acre 3-120 persons/acre	75%	Single-family dwellings, duplexes, triplexes, multifamily dwellings, elder housing, group homes, etc.
Mixed Use (MU)	1-40 units/acre 3-120 persons/acre	Variable	This designation allows for a compatible mixture of residential and nonresidential uses adjacent to and in close proximity to primary roadways and public transit.
Commercial (C)	NA	75%	This category provides for a wide range of commercial, office, retail, service and entertainment uses, as well as "heavier" commercial uses than typically allowed in mixed-use areas..
Industrial (I)	NA	75%	Light and heavy industrial uses, such as manufacturing, fabrication and storage.
Open Space (OS)	NA	NA	Public lands such as parks and playgrounds, the river, and other lands that provide recreational opportunities.

Land Use Designation	Units/Acre Persons/Acre*	Max. Lot Coverage	Description of Typical Uses
Public Agency (PA)	NA	NA	Public lands that house schools, airports, public and non-public utilities, government offices and other public and quasi-public facilities.
Resource Lands (RL)	.05 units/acre .15 persons/acre	.05%	Public and private lands that may be suitable for timber production, offer substantial wildlife habitat, serve to protect portions of the City's watershed and/or contain valuable scenic resources. Resource Lands often include areas with slopes greater than 30 percent. This designation does not support subdivision of land for residential purposes. The minimum parcel size is 20 acres, although it is encouraged that parcel sizes be retained as large units for efficient resource management.
Runway Protection Zone (RPZ)	0 units/acre 10 persons/acre	NA	Lands immediately adjacent to the ends of the airport runway. Only structures with location set by aeronautical function are allowed.
Airport Approach/Departure Zone (ADZ)	<u>Residential</u> 0.2 units/acre 0.6 persons/acre <u>Non-residential</u> 25 persons/acre	Variable	An overlay designation for Mixed Use-Planned Development and Public Agency lands surrounding the airport. The ADZ overlay identifies allowable densities and intensities of development in order to protect airport operations and provide for public safety.
Mixed Use-Planned Development (MU-PD))	<u>Residential</u> 0.2-0.4 units/acre 0.6-1.2 persons/acre <u>Non-residential</u> 25-75 persons/acre	Variable	Applied to mostly undeveloped areas of north Dunsmuir in the vicinity of the airport. Serves as a holding category until development of a specific plan or planned development. Allowable densities and intensities will be determined by properties' relationship to the Airport Approach/Departure Zone, and development must be consistent with the <i>Siskiyou County Land Use Airport Compatibility Plan</i> .

* For the purpose of specifying population density in this table, an average of three people per household is assumed.



LEGEND

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Commercial
- Industrial
- Public Agency
- Open Space
- Resource Lands
- Mixed Use - Planned Development
- City Limits

Figure 2.1a
Land Use Map, Central Dunsmuir

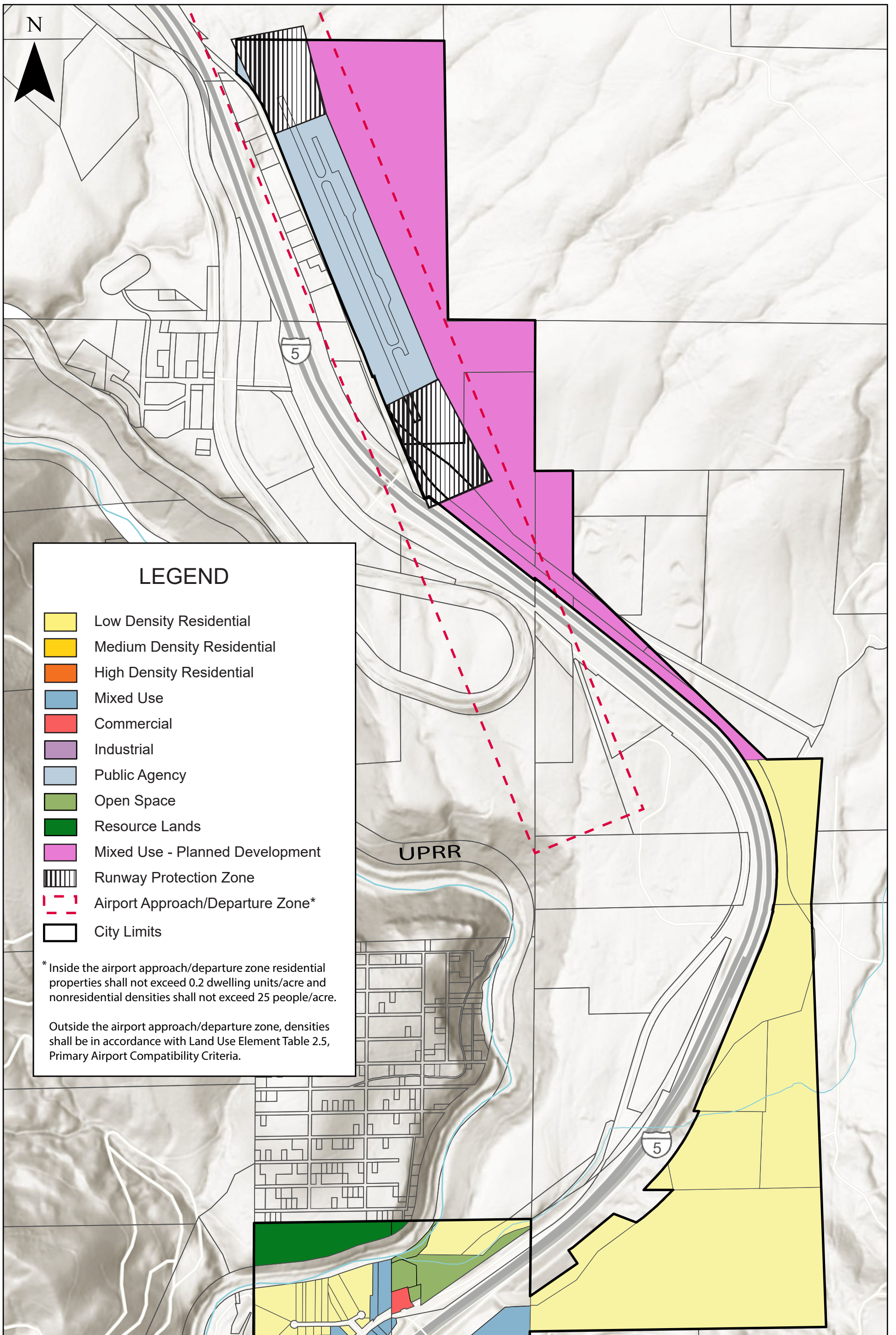


Figure 2.1b
Land Use Map, North Dunsmuir and Airport

The following table compares the General Plan land use designations with the zoning districts that are used in Dunsmuir to comply with and implement the designations:

Table 2.4: General Plan Designation & Zoning District Consistency

	Land Use Designation		Possible Zone District
LDR	Low Density Residential	R-1	Low Density Residential
MDR	Medium Density Residential	R-1	Low Density Residential
		R-2	Medium Density Residential
HDR	High Density Residential	R-1	Low Density Residential Medium Density Residential
		R-2	High Density Residential
		R-3	
MU	Mixed Use	MU-1	Residential Mixed Use
		MU-2	Neighborhood Mixed Use
		MU-3	Central Mixed Use
		T-C	Town Center
C	Commercial	S-C	Service Commercial
I	Industrial	L-M	Light Manufacturing
		M	Manufacturing
OS	Open Space	O-S	Open Space
PA	Public Agency	P-F	Public Facilities
RL	Resource Lands		(No Current Zoning District)
RPZ	Runway Protection Zone		(No Current Zoning District)
ADZ	Airport Approach/ Departure Zone		(No Current Zoning District)
MU-PD	Mixed Use-Planned Development	All Zones except T-C after adoption of a Specific Plan or Planned Development.	

2.5 LAND USE ELEMENT SPECIAL SECTIONS: HILLSIDE DEVELOPMENT AND AIRPORT LAND USE

The Dunsmuir Land Use Element includes the following discussions of two particular special land use issues: 1) Hillside Development and 2) Airport Land Use.

2.5.1 HILLSIDE DEVELOPMENT

Background:

Development in the City of Dunsmuir is significantly constrained by topography. Being located in a river canyon with steep canyon walls, opportunities for further development and City expansion are limited. Initial development of the City occurred along the relatively flat areas near the railroad, the Sacramento River and Sacramento Avenue, gradually moving up the side of the canyon as more land was needed. The canyon floor following the river is fairly narrow. Most of the developed area of the City lies in a strip ranging from 1,000 to 2,000 feet wide within the canyon. Even then, existing development, especially in central Dunsmuir, is located on slopes of 12 to 15 percent or greater. Development in the City typically stops when slopes dramatically increase to 30 to 50 percent on both the east and west sides of the canyon.

Little undeveloped land remains in the City with slopes of less than 30 percent. One single large parcel of approximately 38 acres lies northeast of the Dunsmuir Elementary School and easterly of the Mountain Estates Subdivision. Lack of water pressure in this area (another consequence of steep topography) is currently a significant development constraint. However, work on a new water tank, which will ultimately provide water pressure to the area has been initiated. Slopes on this parcel range from 14 to 30 percent and, with appropriate standards and density limitations (2-3 units per gross acre), could generate 76 to 114 new dwelling units.

As a comparison, slopes in the Mountain Estates Subdivision to the west of this vacant parcel, range from 10 to 16 percent. As experienced within this project, parcels from 0.25- to 0.50- acre lots can be accommodated on slopes in this range without significant problems. Most of the homes are constructed on the natural grade, using split-level designs and/or moderate grading. Some natural vegetation remains on most lots since the lot size is large enough to allow the construction of the dwelling plus some limited level area without affecting the entire parcel. However, some street grades within the subdivision do begin to approach, and possibly exceed, the maximum desired limits of 10 to 12 percent, particularly near the intersection with Siskiyou Avenue. Street grades at this degree become a challenge for emergency equipment even in good weather conditions. Snow and ice make the road and intersections on steep grades extremely hazardous for all drivers.

When topography is steeper than 10 to 16 percent, there is greater pressure to create padded lots with buildable areas and usable yards. This grading removes most vegetation and results in artificially created slopes which increase the potential for erosion. Fortunately, within the Mountain Estates Subdivision, the smallest lot is approximately 11,000 square feet, with most of the lots being somewhat larger. This

allows for greater flexibility and is more environmentally sensitive than the minimum 5,500 square foot lots allowed in the R-1 residential zone district.

Within the City's sphere of influence, there is a considerable area north of the north Dunsmuir Avenue interchange, and northerly to and past the airport, that contains slopes under 20 percent. The slopes on the west side of Interstate 5 are more moderate than the slopes on the east side. Slopes with grades of 20 percent or less can, with appropriate standards, be developed with limited impact to the terrain, and at the same time allow for the construction of roads that can accommodate vehicles safely without excessively steep grades. Development can occur on slopes up to 30 percent but only with more restrictive development controls. When topography exceeds a 10 percent grade, site development becomes more complicated and costly. These slopes typically require steeper road grades and an increase in the size of cut and fill slopes. Development of these slopes also often results in increased erosion and the loss of natural vegetation. These complications and development costs will typically increase proportionately as topographic grades increase up to 20 percent and greater.

Development Standards:

The most significant issues related to hillside development are fire prevention and emergency accessibility, erosion control, and preservation of natural terrain and vegetation. Another concern is the visual impact related to the type and extent of development to occur on each lot. Ordinances adopted to address these issues usually contain standards addressing the following:

- Definition of a hillside, (those lands where special development standards apply);
- Restrictions prohibiting division of land with excessive slopes;
- Standards to retain part of each lot in a natural state;
- Erosion control standards;
- Limitations on the maximum height of cut and fill slopes;
- Requirement for identification of building pads on each lot;
- Emergency accessibility; and
- Fire prevention standards.

The following discussion comments on some of the issues related to these standards:

Definition of Hillside: Since hillside developments require standards that are different from those on more level land, it is necessary to establish a threshold clearly determining when hillside standards are applicable. It is common to set a standard defining all lands with an average grade of 10 percent or greater as hillside lands. The average grade is determined by taking cross sections of the existing topography, perpendicular to the topographic contours, approximately every 100 feet across the site. Applying this approach, it is possible that only a portion of a project site might meet the criteria and be subject to hillside standards, with the remainder meeting normal development standards. However, in Dunsmuir, most land will exceed 10 percent and would be subject to hillside standards.

Only one provision of the City Code currently addresses hillside standards. Section 16.20.020 defines street design standards and allows a narrower street and options for curb, gutter and sidewalk when “approved average street grade exceeds fifteen (15) percent, and where zoning and deed restrictions prohibit future reduction of lot widths or areas.” Adoption of a 10 percent standard for defining “hillside development” would require modification of this ordinance standard.

Excessive Slopes: Dunsmuir is surrounded by slopes that are considered to be too excessive to permit safe and environmentally sound development. Many hillside slopes are 30 to 50 percent and are nearly impossible to develop without causing severe impacts on the environment (e.g., erosion hazard, loss of habitat) and creating situations that are dangerous due to poor or inadequate emergency assess. Slopes exceeding 30 percent should be designated as excessive slopes, unless they are small areas and the predominant slope is considerably less than 30 percent. These steep slopes are best recognized as resource lands and left undeveloped, or are only allowed to be developed when kept in large acreage parcels with appropriate building pads and access routes specified, and fire safe standards can be satisfied.

Erosion Control and Natural Environment Preservation: These two issues are closely related and affected by hillside development. The construction of roads and related infrastructure requires increased use of cuts and fills. As cross slopes increase, the size of cuts and fills also increase. As these slopes are constructed, all natural vegetation within the cut and fill profile is lost, including adjacent vegetation in many instances due to effects on roots and drainage. The loss of vegetation cover and the exposure of unprotected soils on steep slopes dramatically increases the potential for erosion, siltation, and the possible undermining of the road structure should slopes fail due to excessive erosion.

Standards should be provided that will limit the extent of cuts and fills, retain as much of the site in its natural state as possible to reduce stormwater runoff and reduce the impacts of erosion. These standards typically include limitations on the maximum height of allowed cuts and fills, and require larger lots with undisturbed areas as the average slope increases. Since the Mountain Estates Subdivision has slopes ranging from approximately 10 to 16 percent, and lots range from approximately 10,000 to 15,000 square feet (or more), and since this density seems to work well without significant site impacts, the following example could apply: A 10,000 square foot lot would be required when the average cross slope is 10 percent, a 11,000 square foot lot if the average cross slope is 11 percent, etc., continuing to increase the lot area an additional 1,000 square feet with each one percent slope increase.

Coupled with this formula could also be a natural area requirement where, for example, each lot is required to maintain a minimum of 25 percent of the lot in a natural state. As the slope of the lot increases, the amount of land kept in an undisturbed state should also increase. One approach is to increase the 25 percent minimum requirement by the average slope of the land. For example, if the slope of the land is 20 percent, the 25 percent minimum requirement would be increased another 20 percent, i.e., 25 percent plus 20 percent would require 45 percent of a lot with a 20 percent slope to be left in a natural state.

Coupling the above standards with limitations on the maximum height of cut and fill slopes, along with measures to stabilize these slopes, will significantly reduce erosion potential and reduce environmental impacts of hillside development. To ensure that these criteria can be met when reviewing a project, the development plan (tentative subdivision map, parcel map, etc.) should identify building pads on each proposed lot. The area outside of the building pad would be the area that is required to be left natural. To determine the size of both the lot and building pad, the development plan would also need to identify the average cross slope of the lot.

Fire Prevention and Emergency Access: Fire protection and accessibility for emergency vehicles are essential elements of proper hillside development. This is especially important when the project area has a heavy brush and timber cover. To reduce the impact of wildfires within a hillside project, care must be taken to provide an ample supply of water; minimize the use of dead-end roads or keep them very short; keep roads of sufficient width to accommodate two-way traffic; and clear brush and trees around structures. Title 14 of the California Code of Regulations comprises the basic wildland fire protection standards of the California Board of Forestry. These "Fire Safe

Regulations" are used whenever the Board reviews projects proposed in State Responsibility Areas. However, these standards can easily be adopted for use by local fire districts as well. These regulations are considered to be minimum standards and, in some instances, are not applicable to an urban environment. A few of the applicable minimum standards are:

- Minimum street width: Two nine-foot traffic lanes
- Maximum street grade: 16 percent
- Maximum length of dead-end road: Based upon parcel size

For example, Title 14 states that the minimum length of a dead-end road shall not exceed 800 feet for parcels zoned for less than one acre. As parcel sizes increase, so do the allowable dead-end road lengths. For example, for parcels zoned one to 4.99 acres, the maximum dead-end road length is 1,320 feet. Other standards apply to parcels zoned five acres and larger.

2.5.2 AIRPORT AREA LAND USE

Background

The Dunsmuir Municipal Airport and immediate area was acquired from Siskiyou County in January 1964 and was annexed to the City at that time. The airport was originally operated by the County in the 1930s as an emergency landing facility for civilian airlines. At that time it was a dirt runway. Over the years it has been improved, correcting humps and elevating the south end, and eventually paving the runway. The airport is used by the U.S. Forest Service, local residents and tourists. In 1991, the City adopted the *Airport Master Plan 1990-2010*, which identified aviation forecasts, identified impacts on adjacent land uses, and determined facilities and improvements needed to meet future needs.

It is the intent of this portion of the Land Use Element to focus on land use issues at the airport and on lands adjacent to that facility to acknowledge related constraints and opportunities and to consider alternatives for appropriate land uses.

The airport and surrounding City lands are comprised of approximately 126 acres. The single 2,700-foot runway and related uses affect 46.2 acres of this total, leaving approximately 80 acres available for non-airport activities. Forecasts for airport use neither anticipate the need for additional runways or lengthening of the current runway.

The Airport Master Plan suggested that much of the surplus lands could be developed with other non-airport land uses. Since most of this land lies outside of the 60 dB noise contour, airport noise was not considered to be a significant factor affecting land use. (It should be noted, however, that the Airport Master Plan was prepared before the County adopted the *Siskiyou County Airport Land Use Compatibility Plan*, discussed below.) A small area east of the north end of the runway could be affected by noise and would best be used for non-residential purposes. The remaining site is constrained primarily by topography, access limitations, existing easements and heavy forest

vegetation. The slopes in this area range from about 6 to 17 percent. While these slopes would influence the size of lots and basic practical density of development, the topography is not generally a severe constraint for potential development.

A major issue and constraint concerning development in the vicinity of an airport is concern that development could, in turn, be a constraint to continued or expanded operation of the airport. Homeowners in the vicinity of airports often complain about noise and potential aircraft safety issues and sometimes demand curtailment of airport operations or closure of the facility. In order to protect the viability of the airport, the City should be cautious about allowing land uses in the vicinity that may, in the future, threaten the continued use of the airport. Additionally, the City of Dunsmuir receives Federal Aviation Administration (FAA) grants periodically for the continued operation of the Dunsmuir Mott-Municipal Airport. As a condition of the grants, the City gives the FAA assurances that no conflicting uses will be allowed in the vicinity of the airport for 20 years from date of grant issuance.

Another significant development constraint at this time is the lack of public sewer and water in the area. An existing well provides water to a small reservoir that supplies water to the airport in a two-inch line. A line of this size is too small to be of much aid should water be needed for fire protection in the area. The airport is currently served by a septic system. There are no sewer facilities in or near the area. Providing a sewer system to serve this and other lands in the area could be a significant task. Due to the population that could be accommodated in the area east, south and west (across the freeway) of the airport, and the distance from the existing sewage treatment plant, an entirely new treatment system may be necessary, and/or major changes to the existing plant and collection system will be needed. At the very least, a master sewage collection system for the area north of the north Dunsmuir Avenue interchange will likely be required.

The 1994 Dunsmuir Master Water Plan notes the need for a new 0.8 million-gallon reservoir above the potential residential area to the east, to be supplied by two wells. This system would provide service to the airport and lands both east and south of the airport.

Airport Land Use Compatibility Plan

The Siskiyou County Airport Land Use Commission adopted the *Siskiyou County Airport Land Use Compatibility Plan (ALUCP)* in July 2001. The basic function of the ALUCP is to promote compatibility between the airports in Siskiyou County and the land uses that surround them. One of the seven airports addressed in the plan is the "Dunsmuir Municipal – Mott Airport".

The ALUCP was adopted by the Siskiyou County Airport Land Use Commission as a tool in fulfilling its duties to review land use proposals at public airports and on land adjacent to those airports. The plan also sets compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances, and to land owners in their design of development proposals.

In brief, California statutes (Public Utility Code Sections 21670 et seq.) give county airport land use commissions (ALUCs) two principal powers. First, ALUCs must prepare and adopt an airport land use plan for public airports in their jurisdiction. Secondly, they are responsible for reviewing plans, regulations and other actions of local agencies and airport operators for consistency with that plan. Current law emphasizes local general plans as the primary mechanism for implementing the compatibility policies set forth in an airport land use plan. The county and each affected city is required to make its general plan consistent with the ALUC's plan or, if in disagreement, systematically override the commission's plan.

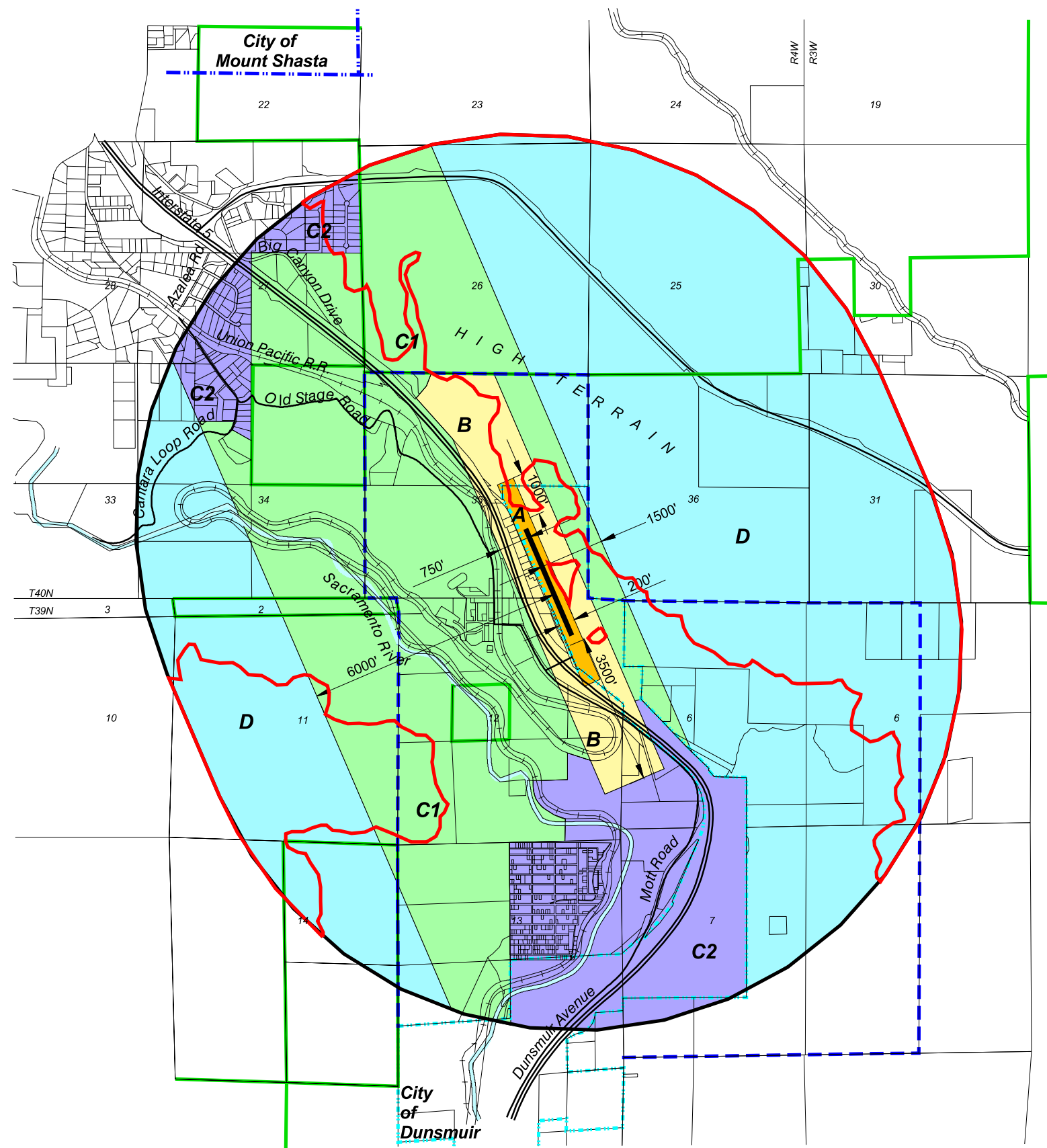
The *Siskiyou County Airport Land Use Compatibility Plan*, as it applies to the Dunsmuir Airport, was based on the airport master plan for that airport prepared in 1990. The ALUCP describes the distinctions between an airport master plan and an airport land use compatibility plan. Issues addressed by an airport master plan are primarily on-airport issues to guide the development and management of the facility. An airport master plan is prepared by the agency that owns and/or operates the airport. The land use compatibility plan, however, addresses land use issues outside and around the airport with the purpose of ensuring the orderly expansion of airports and to adopt land use measures that minimize the public's exposure to excessive noise and safety hazards.

As described in ALUCP Section 2.4, Review Criteria for Land Use Actions, the primary criteria for assessing whether a land use plan, ordinance or development proposal is compatible with a nearby airport are set forth in the ALUCP's Primary Compatibility Criteria matrix, Table 2A. These criteria are to be used in conjunction with the compatibility map and policies for each airport as presented in ALUCP Chapter 3. The ALUCP includes a Compatibility Map for the Dunsmuir Municipal-Mott Airport. This figure is reproduced in the Dunsmuir General Plan as **Figure 2-2**. Table 2A from the ALUCP is also included as **Table 2.5**.

Appendix G of the ALUCP includes an initial review of the land use policies of each jurisdiction affected by that plan; namely, the County of Siskiyou and the cities of Montague and Dunsmuir. As described in the ALUCP, typically the emphasis in such a review would be on comparing adopted general plan land use designations with the compatibility zone criteria set forth in the ALUCP. However, according to the plan, since these jurisdictions rely more on zoning than their general plans as the basis for determining which types of land uses are allowed in a given location, Appendix G provided a review of the consistency between the local zoning designations and the ALUCP criteria. In the discussion of "Individual Airport Environs" (page G-3), the ALUCP included the following assessment concerning the Dunsmuir Municipal-Mott Airport (refer to **Figure 2.2** for information concerning the zones):

- (1) The 5-acre minimum parcel size requirement in Zone B will prohibit future lot splits within the existing rural residential strip lying between Mott Road and Interstate 5. New construction on existing residential lots would be allowed, however.
- (2) Development of high-intensity uses should be avoided on the northern part of the St. Germain property situated within Zone B south of the airport.
- (3) The areas zoned for neighborhood commercial development along Interstate 5 northwest and southwest of the airport preferably should be changed to a more compatible use. If commercial uses are allowed, the Compatibility Plan requires they be limited to a maximum of 25 people per acre in accordance with the criteria for Zone B.
- (4) Commercial and industrial zoned property along the railroad line west and northwest of the airport lies within Zone C1 and thus is restricted to activities with 75 people per acre or less. Existing development in this area appears to be consistent with this limitation and future development, assuming that it is similar in character, would also be compatible.

It is not practical to quote all of the provisions of the ALUCP that may be relevant to the Dunsmuir General Plan and subsequent consideration of proposed projects by the City of Dunsmuir. The *Siskiyou County Airport Land Use Compatibility Plan* should be consulted for a more comprehensive understanding of provisions that may be relevant.



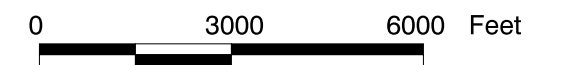
Compatibility Zones

- Zone A
- Zone B
- Zone C1
- Zone C2
- Zone D

Boundary Lines

- Airport Property
- Airport Influence Area
- Dunsmuir City Limits
- Shasta National Forest Boundary
- Dunsmuir Sphere of Influence
- Height Review Overlay Zone

Note: Longitudinal dimensions measured from end of primary surface, 200' from runway end.



Siskiyou County Airport Land Use Compatibility Plan (Adopted July 10, 2001)

Figure 2-2
Airport Land Use
Compatibility

Table 2.5: Primary Airport Compatibility Criteria

Zone	Location	Maximum Densities		Additional Criteria	
		Residential (du/ac) ¹	Other Uses (people/ac) ²	Prohibited Uses ³	Other Development Conditions ⁴
A	Runway Protection Zone or within Bldg. Restriction Line	0	10	<ul style="list-style-type: none"> ▶ All structures except ones with location set by aeronautical function ▶ Assemblages of people ▶ Objects exceeding FAR Part 77 height limits ▶ Aboveground bulk storage of hazardous materials ▶ Hazards to flight ⁵ 	<ul style="list-style-type: none"> ▶ Avigation easement dedication
B	Approach/ Departure Zone and Adjacent to Runway	0.2 (5-acre parcel)	25	<ul style="list-style-type: none"> ▶ Children's schools, ⁶ day care centers, ⁷ libraries ▶ Hospitals, nursing homes ▶ Highly noise sensitive uses (e.g. outdoor theaters) ▶ Aboveground bulk storage of hazardous materials ⁸ ▶ Hazards to flight ⁵ 	<ul style="list-style-type: none"> ▶ Locate structures maximum distance from extended runway centerline ▶ Airspace review required for all objects⁹ ▶ Avigation easement dedication
C1	Common Traffic Pattern (rural areas)	0.4 (2.5-acre parcel)	75	<ul style="list-style-type: none"> ▶ Children's schools, ⁶ day care centers, ⁷ libraries ▶ Hospitals, nursing homes ▶ Hazards to flight ⁵ 	<ul style="list-style-type: none"> ▶ Deed notice required ▶ Airspace review required for objects >50 feet tall
C2	Common Traffic Pattern (existing urbanized areas near low-activity airports)	5	75	<ul style="list-style-type: none"> ▶ Hazards to flight ⁵ 	<ul style="list-style-type: none"> ▶ Avoid children's schools. Day care centers, libraries, hospitals, nursing homes in areas closest to extended runway centerline ▶ Airspace review required for objects >50 feet tall

Zone	Location	Maximum Densities		Additional Criteria	
		Residential (du/ac) ¹	Other Uses (people/ac) ²	Prohibited Uses ³	Other Development Conditions ⁴
D	Other Airport Environs	No Limit	No Limit	▶ Hazards to flight ⁵	▶ Airspace review required for objects >150 feet tall
*	Height Review Overlay	Same as Underlying Compatibility Zone	Same as Underlying Compatibility Zone	Same as Underlying Compatibility Zone	▶ Airspace review required for objects >35 feet tall ⁹ ▶ Avigation easement dedication

Source: Table 2A, Siskiyou County Airport Land Use Compatibility Plan, 2001

Notes from Table 2-5:

1. Residential development should not contain more than the indicated number of dwelling units (both primary and secondary) per gross acre. With clustering, some parcels may be much smaller than others as long as the maximum overall density criterion is not exceeded. Clustering of units is encouraged.
2. The land use should not attract more than the indicated number of people per gross acre at any time, except for rare special events. This figure should include all people who may be on the property (e.g. employees, customers/visitors, etc.) both indoors and outside. Rare special events are ones (such as an air show at an airport) for which a facility is not designed and normally not used and for which extra temporary safety precautions can be taken as appropriate. These criteria are intended as general planning guidelines to aid in determining the acceptability of proposed land uses.
3. The uses listed here are ones which are explicitly prohibited regardless of whether they meet the intensity criteria, unless such prohibition is precluded by applicable state statutes. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective compatibility zones because they do not meet the usage intensity criteria.
4. Airport proximity and the existence of aircraft overflights should be disclosed as part of real estate transactions involving property within any of the airport influence area zones. Easement dedication and deed notice requirements apply only to new development.
5. Hazards to flight include physical (e.g. tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development which may cause the attraction of birds to increase is also prohibited. See the supporting compatibility policies on airspace protection in the ALUCP for details.
6. For the purpose of these criteria, children's schools include Kindergarten through grade 12.
7. Family day care homes (as defined by state law) are permitted in all Compatibility Zones except Zone A. Noncommercial day care centers ancillary to a place of business are permitted in Zone B and C1 provided that the overall use of the property meets the indicated intensity criteria.
8. Storage of aviation fuel, other aviation-related flammable materials, and up to 2,000 gallons of nonaviation flammable materials are exempted from this criterion in Zone B.
9. Objects 35 feet in height are permitted; however, the Federal Aviation Administration may require marking and lighting of certain objects.

Source: Table 2A, *Siskiyou County Airport Land Use Compatibility Plan, 2001*

Airport Vicinity Development Options

In addition to the need to ensure compatibility with the Airport Land Use Compatibility Plan, the lack of utility infrastructure in the airport area is expected to delay and complicate future development. Due to the magnitude of issues to be solved, and the cost of providing necessary urban-level infrastructure, a development project must be of sufficient size to provide for their share of development costs. At the same time, there would need to be reasonable assurances that further development is likely to occur in the area and share the infrastructure costs.

Growth in southern Siskiyou County is increasing and represents the greatest share of growth activity in the County. This is most likely occurring due to the scenic qualities and recreation resources of the area and new jobs that have been created in recent years. Should employment opportunities continue to increase in southern Siskiyou County, there will be greater incentives for the development community to seek out areas to provide a variety of housing opportunities. Additionally, with growth will come the increased demand for smaller support industries and businesses that may find a site near the airport to be attractive.

Since it could be some time before the economic factors are ripe for development in the airport area, it is desirable to maintain land use flexibility. The area may be appropriate for offices and light industrial use near or adjacent to the airport. Land set back from the runway may be appropriate for residential development as contemplated in the airport master plan. It is possible that all of these uses could be accommodated in a manner compatible with the airport and other development constraints in the area.

With slopes ranging from 6 to 17 percent, residential uses might reasonably range from half-acre lots to 2.5-acre lots. However, due to compatibility issues related to the airport, a minimum of 5-acre parcel size is required for residential lots in the immediate vicinity of the airport. Outside of this zone, residential development would be somewhat less restricted with 2.5-acre minimum lot sizes. The 2.5-acre and larger lots would typically accommodate a house and garage without the need to level the entire lot, potentially leaving much of the natural vegetation undisturbed.

While larger lots would likely result in the preservation of substantial tree cover, these larger lots would generate little financial return relative to the cost of installing infrastructure for community water and wastewater. The 2.5-acre and 5-acre lot sizes could allow for the area to be developed with septic systems, thereby eliminating the need for an extension of sewer service to the area. (The 2.5-acre minimum lot size is necessary to satisfy the requirements of the County Health Department, which has jurisdiction over the issuance of permits for on-site septic systems.) However, septic systems in this area could possibly contaminate the City's water supply; the source of which is downhill from the airport vicinity. This issue will clearly need further analysis as development interest in the area grows.

Water to serve this area could be provided via an independent water system developed specifically for the airport area. This would likely include a well or series of

wells with a single large storage tank, thereby providing necessary domestic water and fire protection flows.

Aside from low-density residential land use, there are numerous options for development of the airport area including office/light industrial and tourist/recreation activities. The actual option most likely to occur will depend on the economy, housing needs and creativity of developers at the time this area receives development interest. In the meantime, development of large parcels in the area should require special development plans or a specific plan to ensure that the area isn't sacrificed to haphazard sprawl.

Airport Vicinity Development Standards

The area around the airport is considered to be an area of high wildfire potential. To limit the degree of impact and hazard that a fire may have in this area, basic fire safe standards must be applied. The airport is currently located on a long, dead-end road. Any development on airport property would probably also need to use the same access road and, at this time, would be limited to one point of evacuation if a fire occurred. Given the terrain and the predominant wind direction from the south, an incident on I-5 below the property could rapidly spread fire into the area and block the only evacuation route to the I-5 interchange.

The distance from the Interstate 5/Mott Road interchange to the vacant land behind the airport is approximately 3,600 feet. It is another 2,900 feet to the hangars at the end of the proposed airport access road. Until better access is available for adequate evacuation routes in the event of wildfires, little development should occur on the airport property. The fire hazard is even made worse due to the lack of water storage for fire protection and the distance to the area from the City fire station. Fire safe standards also address the adequacy of roads in terms of width, structural strength and turn-a-rounds. Adequate clearance around structures is also very important.

The only apparent solution to the dead-end road is the extension of the airport access road south around the south end of the runway. The route may need to be near the existing powerline until it nears Old Highway 99 south of the Mott Road interchange approximately 1,000 feet. An intersection nearer the interchange would be desirable but may be difficult due to the steep topography on the east side of the road in that location. This southerly road extension would be located off of airport property, which would complicate right-of-way acquisition and development.

2.6 GOALS, OBJECTIVES, POLICIES AND IMPLEMENTATION MEASURES

GOAL LU-1: - A City which attracts tourists and accommodates their needs.

Objective: Being located on Interstate 5 and lacking lands for normal job-related industries, the City of Dunsmuir intends to improve the local business environment through the attraction of tourists. The scenic river canyon, river parks, waterfalls, Castle Crags State Park, Historic District and the nearness to Mt. Shasta and forest recreational activities all add to the attractiveness of Dunsmuir as a tourist destination. Protection

and enhancement of these qualities will help to further establish Dunsmuir as a desirable place to reside and visit. The City wishes to protect scenic resources and encourage tourist-related services in order to achieve a healthy economy.

Policy LU-1.1: The City shall protect and enhance the scenic and natural qualities of Dunsmuir, its watershed and the Sacramento River.

Implementation Measure LU-1.1.1: The City will support implementation of the implementation measures described in Section 3.0, Open Space and Conservation.

Policy LU-1.2: The City shall continue to improve, enhance and expand parks and increase public access.

Implementation Measure LU-1.2.1: The City will support implementation of implementation measures OC-2.1.1 through 2.1.3 in Section 3.0, Open Space and Conservation.

Policy LU-1.3: The City shall provide ample zoning to accommodate tourist support services.

Implementation Measure LU-1.3.1: The City shall review zoning along thoroughfares to ensure that there is adequate zoning for tourist support services. If there is inadequate zoning to support tourist services, the City shall consider additional parcels for commercial zoning.

Policy LU-1.4: The City shall encourage tourism within the Dunsmuir area.

Implementation Measure LU-1.4.1: The City shall work with the California Department of Transportation to secure and/or maintain all possible signing reflecting tourist services, historic qualities, historic Highway 99, etc.

Implementation Measure LU-1.4.2: The City will support implementation measures described in Section 7.0, Historic Preservation.

GOAL LU-2: - A sufficient mix and quantity of land uses to serve the needs of the community.

Objective: The City wishes to ensure that a sufficient variety of land uses are available to meet the housing, employment, service and social needs of the existing and future population.

Policy LU-2.1: The City shall provide for a compatible mix and quantity of land uses that will serve the needs of the community.

Implementation Measure LU-2.1.1: The City shall adopt the General Plan Land Use Map, Figures 2.1a and 2.1b, as the official Land Use Map for Dunsmuir.

Implementation Measure LU-2.1.2: The City shall implement the goals, objectives and programs of the Housing Element related to residential development.

Implementation Measure LU-2.1.3: The City shall allow for the development of commercial and industrial areas where suitable land exists with good access, adequate infrastructure and where such uses will have a minimum of conflict with current and future adjacent land uses.

Implementation Measure LU-2.1.4: The City shall amend its Zoning Ordinance to develop zoning districts that are consistent with and help implement the intent of the Open Space, Public Agency, Runway Protection Zone, Airport Approach/Departure Zone and Resource Lands land use designations.

Implementation Measure LU-2.1.5: The City shall maintain flexibility in the Zoning Ordinance by allowing opportunities for the development of appropriate uses not listed in particular districts through the Conditional Use Permit process.

Policy LU-2.2: As available housing becomes limited, the City will consider the annexation and development of suitable land adjacent to the City in the sphere of influence which can be readily served with water and sewer services.

Implementation Measure LU-2.2.1: When appropriate, the City should work with owners of property between the airport and the north Dunsmuir Avenue interchange to establish necessary land use and infrastructure plans and financing to open this area for community expansion and development.

Implementation Measure LU-2.2.2: In response to annexation proposals, lands within the sphere of influence should be pre-zoned in accordance with the General Plan Land Use Plan as a means to maintain a variety of land uses as may be needed as the community grows.

GOAL LU-3: - Responsible development on hillside areas that minimize significant impacts.

Objective: There are very few areas in Dunsmuir that are both undeveloped and reasonably level. A few areas in the sphere of influence have modest grades, but nearly all of the vacant land within the City and the sphere of influence are located on hillsides. For the City to expand, it must anticipate development to occur on these hillside areas. It is the objective of the City to allow for well-planned hillside development, but such development must only occur when it is safe for future occupants and fire-fighting personnel, and when development can occur without significant damage to the environment or impacts to the viewshed.

Policy LU-3.1: The City shall control development on hillsides to avoid or minimize significant environmental impacts and support public safety.

Implementation Measure LU-3.1.1: The City shall establish hillside development standards to be applied to all development projects in areas where cross slopes are 10 percent or greater. These standards should include:

- Minimum lot sizes that increase proportionately with the slope of the land. (i.e., 10 percent slopes require 10,000 minimum square foot lots, 11 percent slopes requires 11,000 minimum square foot lot, etc.);
- Significantly limit development on lots with slopes of 30 percent or greater with no more than one dwelling unit per twenty acres;
- Require a minimum of 25 percent of each lot to be left forested, with a larger area required depending on the percent slope of the lot. (For example, a lot with a 20 percent cross slope would be required to leave 45 percent forested, i.e., 25 percent minimum, plus 20 percent for the cross slope equals 45 percent.)
- Limitations on the height of cut and fill slopes;
- Erosion control and revegetation on all cut and fill slopes; and
- Application of fire safe and accessibility standards.

Implementation Measure LU-3.1.2: The City shall amend its zoning and development ordinances to apply hillside standards similar to those outlined in Implementation Measure LU-3.1.1 above.

Implementation Measure LU-3.1.3: To support public safety, the City shall coordinate approval of all development projects in hillside areas with the recommendations of the California Department of Forestry and Fire Protection.

Implementation Measure LU-3.1.4: The City shall require the identification of building pads and non-development areas on all lots in hillside areas.

GOAL LU-4: – Existing neighborhoods protected and the sense of community enhanced.

Objective: As a means to protect neighborhoods from added noise, traffic, light and other characteristics that may lower property values and adversely affect those neighborhoods, the City wishes to ensure that new development is compatible with adjacent land uses.

Policy LU-4.1: The City shall ensure that approval of all proposed land uses consider and support compatibility with existing uses.

Implementation Measure LU-4.1.1: The City shall zone lands consistent with the General Plan Land Use Element.

Implementation Measure LU-4.1.2: Standards shall be provided in the Zoning Ordinance to provide necessary separation, buffering, landscaping and/or other provisions as needed to ensure compatibility between normally incompatible land uses and vulnerable natural features.

Implementation Measure LU-4.1.3: Upon review of discretionary permits by the City, conditions shall be added to the project approval, when warranted, to support neighborhood land use compatibility.

Implementation Measure LU-4.1.4: Land use designations and zoning shall be applied in a manner that is consistent with the prominent existing development, taking care not to encroach upon an established neighborhood with potentially incompatible uses.

Implementation Measure LU-4.1.5: The City shall establish, as a high priority, the conservation of existing residential and commercial structures through preservation and rehabilitation, and will support appropriate grant applications when they are used to aid this effort.

Implementation Measure LU-4.1.6: Land uses not conforming to the Land Use Plan may continue, provided that the use is not substantially expanded and, upon termination of the non-conforming use, the use shall only be in accordance with the Land Use Element designation.

Implementation Measure LU-4.1.7: Provisions for protecting and enhancing the neighborhood in Dunsmuir's Historic District are addressed in the Historic Preservation Element of this General Plan.

GOAL LU-5: – A high-quality municipal airport with compatible development in the vicinity of the airport, including development of the City's adjacent property.

Objective: The City wishes to maintain and enhance the airport and supports productive use of land adjacent to the airport, provided that all development respects and adequately resolves development constraints.

Policy LU-5.1: The City shall require that development of land at and near the airport will provide adequate water and wastewater services with access that is appropriate for the project location.

Policy LU-5.2: In considering proposed land uses in the vicinity of the airport, the City's priority shall be to protect the safe, continued operation of the airport.

Implementation Measure LU-5.1.1: The City shall zone lands surrounding the airport consistent with the General Plan Land Use Element.

Implementation Measure LU-5.1.2: The City shall ensure that all development within the vicinity of Mott Airport is consistent with the *Siskiyou County Airport Land Use Compatibility Plan*.

Implementation Measure LU-5.1.3: Prior to the development of the City-owned airport property, the City shall require a special development plan or specific plan to determine the most appropriate use of the area.

Implementation Measure LU-5.1.4: Prior to the approval of project proposals or the sale or development of any properties in the vicinity of the airport, the City should ensure that assurances made to the FAA can continue to be met.

3.1 INTRODUCTION

California Government Code §65564 requires the inclusion of an open space element in the General Plan and defines open space as: "... any parcel or area of land or water which is essentially unimproved and devoted to an open-space use ..."

The Government Code also describes four types of open space: 1) Open space for the preservation of natural resources; 2) Open space used for the managed production of resources; 3) Open space for outdoor recreation; and 4) Open space for public health and safety. Section 65564 mandates an "action program consisting of specific programs which the legislative body intends to pursue in implementing its Open Space Plan."

Government Code §65302(d) calls for the preparation of a conservation element for the conservation of natural resources including water, forest, soils, rivers, fisheries, wildlife, minerals and other natural resources. General plan guidelines note other issues that may be addressed in conservation elements that may apply to the City of Dunsmuir, including:

- Prevention and control of pollution of streams;
- Regulation of the use of land in stream channels;
- Prevention, control and correction of erosion of soils and shores;
- Protection of watersheds;
- Location, quantity and quality of rock, sand and gravel resources;
- Flood control.

The Open Space and Conservation Elements are closely linked in Dunsmuir due to the proximity of the Sacramento River, the steepness of forested canyon walls on either side of the City, and the role open space and natural resources play in supporting Dunsmuir's tourist economy. Without preservation and protection of these resources, the health, safety and economic vitality of the community could be greatly impacted.

Government Code §65301 states that the general plan may be adopted in any format deemed appropriate or convenient, including the combining of elements. Consequently, as has been done in many jurisdictions, the Open Space Element and the Conservation Element for the City of Dunsmuir have been combined into a single element that addresses both subjects.

3.2 BACKGROUND

Open Space

The Sacramento River and other natural features in and around Dunsmuir have had a significant effect on the physical layout and development of the community. The walls of the Upper Sacramento River Canyon, in which the City of Dunsmuir is located, are often steep with a fairly narrow canyon floor on which the City has been constructed. Indeed, most of the City's developed area lies in a strip ranging from 1,000 to 2,000 feet wide. Much of this development, especially in central Dunsmuir, is located on slopes with 12 to 15 percent grades or greater. Most development on both the east and west sides of town stops rather abruptly when slopes reach grades of 30 percent or more. The north-south oriented streets typically rise in elevation more gently with a gain of 400 feet from the south end of Dunsmuir to the City's north Interstate 5 interchange.

Most notable of the open space resources in and around the City is the Sacramento River and the forested canyon walls that surround the community. While the canyon’s topography limits development, it offers numerous opportunities for scenic vistas and abundant open space resources. While several attempts have been made to extend development further up the sides of the canyon, nearly all efforts have been unsuccessful. These attempts have often resulted in lots that are too steep or narrow to develop effectively. Steep, dead-end streets are common, which are frequently difficult to negotiate in the winter and are potentially hazardous in the event of fires.

Canyon walls with slopes greater than 30 percent are likely candidates for designation as open space in the form of Resource Lands (see Section 2.0, Land Use Element). Outside of areas that have already been developed, much of the City’s sphere of influence is comprised of slopes in the 30 to 50 percent range, especially in the southern half of the sphere. One of the City’s primary objectives with regard to open space will be to maintain the forested views and open space values that currently exist in these areas. It should also be noted that much of Dunsmuir’s forested viewshed is actually outside the City and its sphere of influence. As the entire viewshed is essential to the “small mountain town” charm of Dunsmuir, it would benefit the City to pursue a policy of cooperation with public and private landholders to protect the viewshed from impacts that may adversely affect the City.

The Sacramento River provides significant open space resources, recreation opportunities and marvelous views as it winds its way through the City. The establishment of parks and other access points along the river serves to provide desired public access to this valuable open space resource. While essential to recreation in Dunsmuir, the river can also be an area of concern during flood season. Some residential areas in the southeastern part of the City are located in the 100-year floodplain. (See the Safety Element for additional discussion of flood issues.)

Table 3.1 below provides an inventory of public and quasi-public open spaces in the City:

TABLE 3.1: OPEN SPACE AREAS IN DUNSMUIR

<u>Open Space Area</u>	<u>Acres</u>
City Park	14.83
Tauhindauli Park	0.70
Coyote Park	0.40
North Dunsmuir Ave. playground	0.15
Dunsmuir Pool	0.50
Playground west of river	3.00
Elementary School	7.30
High School	7.50
Cemetery	3.60
Wells Addition Open Space	5.50
Sacramento River	<u>20.00</u> + *
TOTAL	63.48

* Assumes 50-foot width through the city.

It is also estimated that approximately 75 acres of steep hillside property, almost all of which is privately owned, provides open space around the City.

The Union Pacific Railroad, with a 200-foot right-of-way through most of the City, provides “open space” in a different form. This 200-foot wide band is basically undeveloped except for the railroad tracks themselves. The trains, as users of this space, have only a temporary presence as they periodically pass through. Since the railroad right-of-way provides a space separation between urban uses in the community, and in many instances contains various natural features (trees, shrubs and rock formations), it functions as open space. Being located along the river also enhances the open space values of the railroad right-of-way.

Open Space Lands for the Preservation of Natural Resources

It is desirable through the General Plan process to identify lands or areas that contain natural resources that are an asset to, or are a product of, open space. The 1985 General Plan identifies the Sacramento River as Dunsmuir’s “greatest natural resource”. The course of the river contributes at least 20 acres of open space within the city limits and is a major attraction for both residents and tourists alike. This is due in part to the river’s status as one of the state’s premier trout fisheries.

While federal and state regulations basically prohibit activities that significantly impact the river, accidents happen. In 1991, a Southern Pacific Railroad train derailed upriver of Dunsmuir in an incident known as the Cantara Spill. The accident spilled 19,000 gallons of herbicide into the river, which resulted in an evacuation of Dunsmuir residents located along the river, temporary destruction of virtually all aquatic life for more than 36 miles downriver, and a corresponding period of a depressed tourism economy in Dunsmuir. While it was an accident, accidents can often be prevented. In this case, the derailment was judged to have been the result of “stringlining”. Stringlining occurs when the middle of a train is pulled off the tracks as it rounds a curve. This is caused by having too many empty or light-weight cars placed near the locomotive while heavier cars are situated near the back of the train.

Lessons have been learned from the “Cantara Spill”. Unfortunately, however, derailments in the canyon have continued. According to California Trout, there have been 45 train derailments (albeit some fairly inconsequential) in the Upper Sacramento River Canyon since the spill of 1991. With regard to preservation of natural resources, the single most important issue for the City of Dunsmuir to address is protection of its “greatest natural resource”. Though neither the state nor local municipalities have any regulatory power over the railroad, the City should continue to participate in an active dialogue with both the owner of the railroad, currently Union Pacific, and the federal government to ensure that Dunsmuir’s concerns are heard.

There are also approximately 75 acres of private forested hillsides within the City, as well as hundreds of acres of forested slopes outside of city limits, that can be categorized as natural resource open space. The forested hillsides include lands with slopes that are typically 30 percent or greater. These slopes are too steep for normal urban densities and, in many places, are too steep for virtually any type of development. If development does occur at suitable sites, it should only occur at a very low density (no more than one dwelling unit per five acres) and with great caution to preserving vegetation and reducing erosion. Care must also be taken to ensure safe access, not only for the owners but also for emergency personnel in the case of wildfire. The Land Use Element addresses standards for hillside development.

Open Space Lands for Managed Production of Resources

As noted above, forested lands on steep slopes surround the City and comprise the majority of Dunsmuir's viewshed. These lands are in a combination of public management (i.e., lands managed by the Shasta Trinity National Forest) and private ownership. In either instance, they are subject to timber management practices and occasional harvesting. With proper management, both protection of the viewshed and selective harvesting can be accommodated. Proper management not only includes preventing unsightly clearcuts from occurring, but also entails reducing the potential for a catastrophic wildfire through periodic thinning and prescribed burns. Improper management of the forested slopes could result in severe impacts to Dunsmuir's viewshed, natural resources (including the river and its fishery) and economy.

Forest management practices require the processing of timber harvest plans with related environmental assessments designed to address issues such as access, grading, views and other factors that could result in adverse impacts on the forest lands and the adjacent environment. High management costs for forests on steep slopes may mean that these areas will not receive the progressive management that the City desires, and thereby fail to reduce the risk and severity of wildfires. Since most of these lands lie either within the City's sphere of influence or beyond its boundaries, it is incumbent upon the City to maintain a close relationship with the California Department of Forestry and Fire Protection, the U.S. Forest Service, and private landholders as a means to promote progressive management practices and protection of these open space lands.

Open Space for Recreation Purposes

There are an estimated 20 acres of open space in Dunsmuir (parks, playgrounds and pool) that have been established specifically for recreation. The Sacramento River, which offers another approximately 20 acres of open space, is one of the premier wild trout streams in California and draws anglers from around the world. During spring runoff when wading is dangerous at best, anglers stick to shore and the river becomes the domain of kayakers and rafters seeking class III thrills. Later in the summer, when river flows subside and the days grow hot, individuals seeking relief from the heat head to the river's many excellent swimming holes.

Trails are also an important element of outdoor recreation. There are a number of trails that provide access to open space resources in the Dunsmuir area. The Pacific Crest Trail, which spans 2,650 miles from Mexico to Canada, comes within three miles of Dunsmuir where it passes through Castle Crags State Park. There are also a number of scenic features in the vicinity, such as Hedge Creek Falls and Mossbrae Falls, that are accessible only by trail. The Hedge Creek Falls trail offers a winding path and short five-minute walk down to the falls. The most frequently used access to Mossbrae Falls requires following a route up the river along the Union Pacific Railroad tracks for approximately one mile. Concepts have been proposed for improved public access to the Mossbrae Falls, but development of a safer, more pleasant trail, which would not be as close to the railroad tracks as the current trail, has been blocked by the steep topography and private property issues in the vicinity of the falls. Trails and paths are also an important feature of the Dunsmuir Botanical Gardens, a fairly recent addition to City Park. While opportunities for walking longer distances off-road do exist in Dunsmuir along the railroad tracks, these are not hiking trails in the ordinary sense. For many people, it is an unnerving experience when confronted with a passing train, not to mention the legal concerns of accessing the tracks.

As the City and the number of visitors and tourists grow, more open space lands will need to be acquired to provide additional recreation opportunities. Development of a more comprehensive, accessible and safe trail system should also be considered.

Quimby Act: Local governments in California provide an important role in the establishment of parkland and open space for recreational purposes. The 1975 Quimby Act (California Government Code Section 66477) authorized cities and counties to pass ordinances requiring developers to set aside land, donate conservation easements, or pay in-lieu fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of existing park facilities, although they may be used for park rehabilitation.

The intent of the Quimby Act was to assist local municipalities in providing adequate open space for their citizenry by requiring developers to mitigate the impacts of residential development projects. The provisions give authority for passage of land dedication ordinances only to cities and counties. However, if an agency other than a city or county is responsible for providing recreational services, such as is the case with the Dunsmuir Recreation and Parks District, the agency ultimately is the recipient of the land dedication and/or in-lieu fees.

In 1982, the Quimby Act was substantially amended to: further define acceptable uses of, or restrictions on, Quimby funds; provide ratio standards for recreation acreage and population; and provide formulas for determining exactions. Local Quimby Act ordinances must include definite standards for determining the proportion of land to be dedicated and the amount of the fee to be paid.

In order for the City to be able enforce a Quimby Act ordinance, the ordinance must be in effect for a period of at least thirty days prior to the filing of the tentative map of the subdivision or parcel map. As the City of Dunsmuir has yet to pass an ordinance, it would be in the best interest of the City to do so prior to any future development projects. The City's Municipal Code does contain a few provisions that could be used by the City to require developers to contribute to the cost of parklands. However, one of the ordinances requires the developer to pay only \$100 per acre of subdivision area. Given the dramatic increase in land values over the past decade, this fee no longer seems to be able to satisfy the intent of the ordinance.

Open Space for Public Health and Safety

Lands typically addressed in this category include those that may be subject to landslides, flooding, high fire risks or watershed protection. With steep slopes, a major river and a climate characterized by warm, dry summers, it is only appropriate that the General Plan address each of these public health and safety issues. Many of these issues also receive further attention in **Section 5.0, Safety Element**.

There are a few steep, denuded slopes in various locations around the City where small landslides have occurred in the past during heavy rainfall events. The 1985 General Plan identified 11 such sites within the City as having a propensity for landslides or slippage. Fortunately, most of these sites appear to be rather small with the potential for destruction being slight. While the potential for further landslides does exist, these lands are not held as open space as a preventative measure. It would be prudent as a safety precaution, where needed, to maintain open space around these hazards or stabilize these slopes to ensure that any related damage will be avoided or minimized.

Lands subject to flooding primarily lie along the Sacramento River, especially in the south end of the community along Butterfly and Scherrer Avenues. The Federal Emergency Management Agency (FEMA) has established a floodplain map for Dunsmuir showing the area where properties may be subject to a 100-year flood (that level of flooding which is expected to occur once every 100 years, or has a one percent chance of being flooded in any given year). Within this area standards have been established by City ordinance to control development in a manner that will reduce the impact of flooding. Most of the land within the floodplain is privately owned and is currently developed, or is owned by the Union Pacific Railroad. If the private lands subject to flooding were not already developed, density standards could be lowered to reduce the risk and potential extent of flooding. Such lands could also possibly be purchased and added to the community's open space inventory. However, since these lands are developed, the cost of converting these parcels to open space is generally cost prohibitive. For a map of the lands located within the 100-year floodplain, please refer to **Figure 5-4** in **Section 5.0, Safety Element**.

Concerning fire safety, Dunsmuir has been identified as being in a "Very High Fire Hazard Severity Zone" pursuant to California Government Code §51178. Hillsides are particularly susceptible to high fire risks. Those forested hillsides within the City are typically in private ownership. As noted above, there are approximately 75 acres of such land that are highly susceptible to fire hazards and are currently undeveloped. Should these areas develop at a low density, fire safe standards such as those outlined in Title 14 of the California Code of Regulations should be applied to aid in the reduction of fire risk to structures and the reduction of danger to fire fighters in the event of wildfire. Density reduction is necessary as a means to place fewer persons within a high fire risk area, reducing both the possible incidence of fire and reducing the impact that fire would have should one occur in the area.

Resource Conservation

Most resource conservation issues are closely related to open space preservation. Protection of open space is a means of protecting the watershed, reducing pollution and conserving river and wetland resources. While there are no identified mineral resources within the City of Dunsmuir, there may be some gravel resources along the river. However, mining of these resources would be impractical due to the narrowness of the channel and the density of development along the river.

Watershed Protection

Dunsmuir's watershed, which is basically the drainage of the Upper Sacramento River above the city, is comprised of various drainages encompassing approximately 65,000 acres in size. Watercourses include Ney Springs Creek, Stink Creek, Wagon Creek, Castle Lake Creek, Big Springs Creek, Cold Creek, Big Canyon Creek, Scott Camp Creek and the Sacramento River, including the upper branches of the river (North, South and Middle forks). At least ten perennial or ephemeral creeks flow into the City. Hedge Creek and Bear Creek are the major tributaries within the City limits. Mossbrae Falls and the springs that supply Dunsmuir's drinking water are fed by springs off the Mt. Shasta highlands above the City. Dunsmuir's watershed is a valuable asset in that it provides an important economic resource (tourism) as well as the City's drinking water. Dunsmuir's drinking water is so pure that it does not require treatment, and it is a valued resource in the community. Protection and conservation of watershed resources, both groundwater and surface water, are essential.

Potential degradations to the watershed include those associated with logging operations: pesticides, siltation due to over-harvesting or poor soil management, and similar activities. Lands east of the City

are privately owned and subject to the California Forest Practices Act and the lands west and north are primarily public lands managed by the U.S. Forest Service. The state and federal governments play a major role in the protection of Dunsmuir's watershed.

In addition to logging operations, the Upper Sacramento River is periodically subject to adverse impacts from three major sources: upsets at the sewage treatment facility during high rainfall; toxic spills from railroad operations; and residences and facilities with failing septic systems. Each of these three problem areas have been addressed by City and/or state efforts as follows:

- a) Upsets at the sewage treatment facility is primarily due to excessive infiltration/inflow into the collection system due to old, deteriorated lines or direct drainage connections from domestic water sources into the sewer. This situation causes untreated sewage to enter the disposal ponds where it may overflow into the river. In 1981, the Regional Water Quality Control Board, Central Valley Region, issued a Cease and Desist Order to the City for Waste Discharge Requirement Violations. The City received funding to replace approximately 140 house sewer laterals and to replace approximately 3,000 feet of sewer mains. These projects were completed in 1985. The City was listed on the State Water Resources Control Board 1987 Clean Water Grant Priority list for renovations to the treatment facility.
- b) The RWQCB issued Waste Discharge Requirements to the Union Pacific Railroad governing yard operations in the City. This order prohibits the discharge of pollutants into the Sacramento River.
- c) A small number of residences in Dunsmuir are currently not connected to the community sewer system (Gill Avenue and "Blackberry Hill"). The Regional Water Quality Control Board has mandated that the approximately 25 residences connect to the City sewer system as soon as possible.

The vulnerability of the City's water system to contamination was also demonstrated by an incident that occurred in 1977 when sewage from the St. Germaine Foundation compound found its way into the springs that supply the City's water. It was learned that the rock strata above the springs had vertical features that were susceptible to channeling sewage from septic systems into the spring aquifer. The City had to chlorinate its water until the problem was resolved by connecting the St. Germaine facility to the City's wastewater treatment system. The incident illustrates that the City needs to be concerned with development proposed above its springs that could again contaminate its water supply, whether or not the development is in the city limits. If such development is proposed outside the city limits, the City needs to advocate its concerns and needs to Siskiyou County.

3.3 OPEN SPACE ACTION PLAN

Government Code §65564 states that every local open space plan shall contain an action program consisting of specific programs which the legislative body intends to pursue in implementing its open space plan. Thereafter, any action by the city by which open space land is acquired or disposed of, or its use restricted or regulated, needs to be consistent with the local open space plan. In the case of Dunsmuir, the open space plan is this General Plan Open Space Element. The open space action plan is **Section 3.4: Goals, Objectives, Policies and Implementation Measures**, which follows.

3.4 GOALS, OBJECTIVES, POLICIES AND IMPLEMENTATION MEASURES

GOAL OC-1: - *A healthy, forested viewshed protected from significant environmental and visual impacts.*

Objective: The forested slopes of the Upper Sacramento River Canyon are highly visible throughout the community and add to the City's value as a place of recreation and tourism. It is the desire of the City to protect this forested vista for current and future generations.

POLICY OC-1.1: The City shall work with public agencies and private landholders to promote forest health and prevent unsightly impacts to Dunsmuir's viewshed.

Implementation Measure OC-1.1.1: The City shall take an active role in promoting forestry practices and other activities within the City's viewshed with the California Department of Forestry and Fire Protection, the U.S. Forest Service and private landholders, such as Roseburg Lumber Company and Sierra Pacific Industries, to ensure that clearcuts do not occur.

Implementation Measure OC-1.1.2: The City should work with the California Department of Forestry and Fire Protection, the U.S. Forest Service and private landholders, such as Roseburg Lumber Company and Sierra Pacific Industries, to promote periodic thinning and prescribed burns within the City's viewshed in order to reduce the potential for a catastrophic wildfire.

Implementation Measure OC-1.1.3: The City shall develop and adopt a tree preservation ordinance in order to safeguard that portion of the viewshed located within City limits. Typically tree ordinances apply to native trees with a diameter at breast height of greater than six inches.

POLICY OC-1.2: The City shall protect natural resources and regulate land uses on steep hillsides by designating commercial timberlands and areas with slopes having grades of 30 percent or greater as Resource Lands or Open Space, and by adopting related development standards.

Implementation Measure B OC-1.2.1: The City shall establish zone districts to correspond with the Open Space and Resource Land land use categories. These zone districts shall provide for resource management and conservation and will restrict development and ground-disturbing uses.

GOAL OC-2: - *Ample and accessible open space resources within the City and its sphere of influence.*

Objective: Accessibility to public open spaces should be improved to increase use and the ability of citizens to enjoy and appreciate the resource. Additionally, adding more open space within the community, usually in the form of small parks, will aid in maintaining the open feeling of the City and at the same time provide space for added recreation.

POLICY OC-2.1: The City, in cooperation with other agencies and non-profit organizations, shall continue to enhance and increase open space resources in the City, as well as improve accessibility to existing resources.

Implementation Measure OC-2.1.1: Where practical, the City shall acquire additional lands to expand the City Park, as well as develop a wooded park in the downtown area.

Implementation Measure OC-2.1.2: Where practical, the City shall improve City-owned open space with designated access points, parking, picnic areas and trails.

Implementation Measure OC-2.1.3: The City will explore the possibility of supporting construction of a hillside trail system, overlooking and paralleling the City on either side of the canyon.

Implementation Measure OC-2.1.4: Maintain a ratio of not less than five acres of community park land per one thousand City population.

Implementation Measure OC-2.1.5: The City shall adopt an ordinance to collect park capital improvement and acquisition fees from new residential development pursuant to the Quimby Act.

Implementation Measure OC-2.1.6: Utilize the provisions of the Subdivision Map Act and the City Municipal Code to collect park capital improvement and acquisition fees from new residential development pursuant to the Quimby Act.

Implementation Measure OC-2.1.7: The City shall encourage the County to require that new residential development projects outside the city limits but within the Dunsmuir Recreation and Parks District provide a “fair share” contribution (similar to the City’s Quimby Act requirements) to help support the provision of district recreation facilities.

GOAL OC-3: - Protection of the City’s water resources.

Objective: The City’s water supply and the Sacramento River running through the City are vital to the community. The City must protect the watershed in order to maintain the quality and quantity of the municipal water supply, as well as sustain fishing, recreation and scenic benefits related to water resources.

POLICY OC-3.1: Work with public agencies and private landholders to protect the watershed and the City’s municipal water supply.

Implementation Measure 3.1.1: The City shall continue to monitor the quality of water at Mossbrae Springs and will monitor all future sources of water in the City’s system.

Implementation Measure 3.1.2: The City shall work with property owners and Siskiyou County to control uses of land in the watershed that may threaten the quality of the City’s water resources.

Implementation Measure 3.1.3: The City shall help protect the quality of water in the Sacramento River and tributary streams by applying “best management practices” on all projects in and around water bodies in the City, such as storm drainage maintenance, thereby reducing erosion and sediment into the river.

Implementation Measure 3.1.4: The City shall work with state and federal agencies and private landholders involved in forestry-related activities within its watershed to encourage management practices that will protect water quality.

Implementation Measure 3.1.5: To encourage protection of water resources, the City shall work with the owners of the railroad (currently Union Pacific), non-profit organizations (such as the River Exchange and California Trout) and state and federal governments to improve rail safety in the Upper Sacramento River Canyon.

4.1 INTRODUCTION

California Government Code §65302(d) states that the circulation element of a general plan shall consist of “the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public utilities and facilities, all correlated with the land use element of the plan.”

The Circulation Element of the Dunsmuir General Plan is based upon an assessment of the existing street and highway system, projected land use and the estimated future population and its distribution, local transportation trends, and topographic features within the planning area.

The 1985 Dunsmuir General Plan included a “Scenic Highway Element”. In the 2006 update of the general plan, issues concerning scenic highways are incorporated into the Circulation Element.

4.2 BACKGROUND

Existing Street and Highway System

Dunsmuir’s street system historically developed adjacent to the railroad and the Sacramento River with the need and intent to utilize the flatter areas of the canyon along the river for development. Growth of the town then progressed uphill on the west side of the river where development was possible adjacent to Old Highway 99, which became Dunsmuir Avenue after Interstate 5 was developed. Development of Dunsmuir continued up the slopes of the canyon, following the contours lines to the extent possible on north-south streets, with steeper grades occurring in an east-west direction. Grades on these streets reach 15 to 17 percent in some areas. In the North Dunsmuir area on the west side of the freeway, slopes range from 5 to 16 percent with most of the steeper grades running in a north-south direction. The development of Interstate 5 removed most of the regional traffic off of Dunsmuir Avenue, but it also created a significant barrier dividing the east and west sides of North Dunsmuir and blocked or otherwise affected some of the local streets in South Dunsmuir.

U.S. Interstate 5 (I-5) is the main highway providing regional access to Dunsmuir. I-5 runs generally north-south, paralleling the Sacramento River and what are now the tracks of the Union Pacific Railroad. According to Caltrans information, the annual average daily traffic volume on I-5 at the Central Dunsmuir interchange (for northbound traffic) is approximately 19,600 vehicles per day.

Dunsmuir Avenue serves as an arterial and a secondary route for north-south traffic. There are several collector streets that connect the local streets with the arterial system; some of which provide access across the Sacramento River. These are: Scherrer Avenue, Sacramento Avenue, Siskiyou Avenue, Oak Street, Wells Street and Shasta Avenue. Numerous other important local streets provide access to the arterial and collector streets but are not expected to carry the volume of traffic that a collector street carries.

Other than Interstate 5, which is generally four-lanes and, in some sections, five-lanes wide through Dunsmuir, all streets are typically two-lane routes. Dunsmuir Avenue, the only arterial street in Dunsmuir, is also two-lanes wide even though, in many areas, arterials are typically four lanes. However, with the narrowness of the valley and limited vacant land, Dunsmuir Avenue as a two-lane arterial adequately serves existing traffic and the amount of traffic expected in the future.

As development of Dunsmuir proceeds north of the north Dunsmuir Avenue/I-5 Interchange uphill toward the Mott Road Interchange, an arterial or collector street will likely be needed on either side of the freeway, depending on the intensity of development.

Following are typical standards for new arterials, collectors and local streets:

Arterial	80 to 100 feet	2-4 lanes	Right and left turn lanes
Collector	64 to 80 feet	2 lanes	Possible right and left turn lanes
Local	56 to 60 feet	2 lanes	

On-street parking is allowed on Dunsmuir Avenue and on most collector streets. Due to the narrowness of some streets, parking is sometimes restricted to only one side or, in a few instances, the narrowness prohibits parking on either side of the street.

Rail Facilities

The development of Dunsmuir, both historically and physically, has been shaped by the development of the railroad beginning in the 1880s. Indeed, the City’s former name of Pusher referred to the helper engines based in town that would assist trains up and out of the canyon. The railroad was at one time also a major employer in the area.

The trains are still an important part of life in Dunsmuir with the Union Pacific Railroad Company providing transcontinental freight services through Dunsmuir (on average about 16 trains a day) and rail passenger service provided to destinations north and south by Amtrak. Switching and maintenance yards are also located in Dunsmuir for railroad freight services.

Bus Services

Dunsmuir is served by a local bus service, Siskiyou Transit and General Express (STAGE), which makes several daily stops along Dunsmuir Avenue. The STAGE mainly serves southern and central Siskiyou County. Greyhound bus service is no longer available in Dunsmuir but is available in the City of Weed approximately 15 miles north of Dunsmuir.

Trucking Services

Freight movement to the Dunsmuir area is provided by inter- and intrastate firms. However, there are no local terminal facilities in Dunsmuir. Being located on I-5, which is the main north-south truck route in California, Oregon and Washington, thousands of trucks pass by Dunsmuir daily.

Aviation

The City of Dunsmuir owns and maintains the Dunsmuir Municipal Airport, also known as “Mott Airport”. The airport is located in the far north area of the City. As described in the *Dunsmuir Municipal Airport Master Plan: 1990-2010* (1990), the airfield is a utility airport serving general aviation aircraft (Basic Utility-Stage 1). It consists of one runway (designated Runway 14-32) with a northwest-southeast orientation. The runway is 2,700 feet long and 60 feet wide. The airport is located on 126 acres of land, of which only 46.2 acres are used for aviation purposes. The nearest commercial airport is located 50 miles to the south in Redding.

Parking

Private parking for residential and commercial areas is addressed in Section 17.12.020 to 17.12.120 of the Dunsmuir Municipal Code. The minimum off-street parking space requirement for single-family and multi-family units is at least one garage or carport per dwelling. The City's Industrial District (M) requires one off-street parking space for each three employees or no less than one parking space for each 2,000 square feet of gross floor and ground area. The three commercial districts, C-1, C-2 and C-3 have varying degrees of off-street parking requirements. The C-1 commercial district provides for off-street parking by requiring one off-street parking space for each 200 square feet of gross floor area. The C-2 commercial district (located in the downtown area and South Dunsmuir) has no off-street parking requirements. Parking is available on street with a three-hour maximum parking limit. The CM commercial district requires one off-street parking space for every three employees, or a minimum of one parking space for every 1,000 square feet of gross floor area.

Two public parking lots at the south end of the downtown area are located on the north and south sides of City Hall. These lots provide a total of 38 parking spaces. West Pine Street provides 20 angled parking spaces with a three-hour maximum time limit. The provision of public parking and imposition of time limits on parking along Dunsmuir Avenue has somewhat eased what has been perceived as the need for additional parking. Congestion occurs when the parking capacity is reached or when there is snow present to limit available parking. Due to topography and lack of vacant land in or near downtown, additional parking, if it were needed in that area, would probably require the removal of one or more existing structures.

Electrical Transmission

Pacific Power and Light Company (PP&L) provides electrical service to the City and surrounding areas. Electrical power lines generally follow transportation corridors and are above ground. However, according to current Public Utility Commission regulations, all new facilities for subdivision and commercial developments must be located underground.

An underground utility district exists in downtown Dunsmuir. The district was formed to construct underground utility facilities in the downtown area. PP&L funds available for underground utility projects in Siskiyou County are generally utilized for utility line construction in public right-of-ways. Property owners are generally responsible to install facilities on private property.

Scenic Highways

The 1985 General Plan for the City of Dunsmuir included a "Scenic Highway Element", partly because of an assumption that one was mandated by California planning law. A separate element for scenic highways is not a general plan requirement. While the protection of scenic resources is an important issue, it has been decided that the issue can be adequately and more appropriately addressed in the context of the General Plan Circulation Element and that a separate Scenic Highway Element is not necessary.

Interstate 5 is the only "highway" to pass through the City of Dunsmuir. State Highway 99 became Dunsmuir Avenue after Interstate 5 was developed.

Scenic highways, in general, may be considered to be of four types. The State of California has a scenic highway program. Federally there are two programs including the U.S. Forest Service Scenic Byway Program and the Federal Highway Administration National Scenic Byways Program. The fourth

type of scenic highways are ones that a county or city may designate for their own purposes without applying to be designated by the state or federal programs.

In 1963, the state established the California Scenic Highway Program with the intent that, "The development of scenic highways will not only add to the pleasure of the residents of this State, but will also play an important role in encouraging the growth of the recreation and tourist industries upon which the economy of many areas of this State depend."(Senate Bill 1467) The provisions of the California Scenic Highway Program were added to the Streets and Highways Code.

The following features characterize the program:

- A system that includes a list of highways eligible to become, or to be designated as, official scenic highways.
- A process for the designation of official scenic highways, whereby local jurisdictions can develop and implement a scenic corridor protection program containing land use planning standards.
- A legislatively appointed committee to recommend criteria, review applications, recommend designations and advise concerning revocation.

Segments of Interstate 5 are listed on Caltrans California Scenic Highway System website (with reference to Streets and Highways Code Section 263) as eligible for designation, but the segment passing through Dunsmuir is not listed as eligible. There is a process for adding "eligible" highways to the system. However, even when segments are listed as eligible for the state program, many counties and cities have elected to not pursue designation because of concerns over the program's requirements and expectations for local jurisdictions to adopt restrictive zoning provisions to protect the particular scenic corridor.

Because of the perceived restrictions and imposed standards of the California Scenic Highway Program, rural jurisdictions have typically been more attracted to the federal scenic byway program. The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. The program is an effort to help recognize, preserve and enhance selected roads in the United States. The program recognizes certain roads as All American Roads or National Scenic Byways based on one or more archeological, cultural, historic, natural, recreational and scenic qualities. A few highways in Siskiyou County have been recognized as "Scenic Byways" under a program administered by the U.S. Forest Service.

The closest designated scenic highway to the City of Dunsmuir is the "Volcanic Legacy Scenic Byway All American Road", which was first recognized as a scenic byway by the U.S. Forest Service before it went on to receive designation by the Federal Highway Administration as an All American Road. This 500-mile long route extends between Crater Lake National Park and the area of Lassen Volcanic National Park and Lake Almanor. It includes Highway 97 to Weed, the segment of Interstate 5 from Weed past the City of Mt. Shasta to Highway 89, and Highway 89 east through McCloud toward Lassen Volcanic National Park. Information about this scenic byway/all American road sometimes notes that the "historic town of Dunsmuir" is a recommended side trip of six miles from the Byway on Interstate 5.

Some jurisdictions have designated local "scenic corridors" in their general plans, and they have policies to regulate proposed development in those corridors, but they have done so without the intent

to pursue state or federal scenic highway program status, even when some of the locally recognized scenic corridors are indicated for state and federal highways as well as local roads.

Dunsmuir's 1985 General Plan Scenic Highway Element (which, as will be seen, also addressed scenic pathways) included two goals: A) Identify possible scenic highways and possible scenic paths in Dunsmuir; and B) Determine steps necessary for official designation as scenic highways and bicycle paths. The Element went on to propose a "scenic highway steering committee" that would address the following questions:

- 1) Should a scenic highway/bike path system be developed in Dunsmuir?
- 2) What route(s) should the system follow?
- 3) What ordinance, controls, agreements and expenditures are needed to institute such a system?
- 4) What revenue sources will provide for the system?

The 1985 General Plan included an assessment of possible scenic highways and pathways. The following discussion is based on the 1985 assessment:

A. Scenic Highways:

Dunsmuir Avenue passes through the center of the City and is the main street. For purposes of this element, the Dunsmuir Avenue corridor is considered scenically significant from the Mott Avenue freeway interchange north of Dunsmuir to the freeway interchange south of town. Dunsmuir Avenue was sectioned into three parts for this review.

Mott Avenue to Hedge Creek Falls. This two-mile section, beginning at the Mott freeway interchange, starts with spectacular vistas of Mt. Eddy to the west and Mt. Shasta to the east. The road then descends south through the pine and oak forest to the beginnings of urbanization south of historic and scenic Hedge Creek Falls (which is trail accessible). Dunsmuir Avenue is a County road until this point and any scenic highway designation would need to be coordinated with the County.

Hedge Creek to the Sacramento River Bridge. This one-mile section of Dunsmuir Avenue passes the residential and roadside commercial (stores and motels) section of north Dunsmuir. This area offers two interesting by-passes off Dunsmuir Avenue: a) Past the historic railroad engine and swimming pool into the City Park; and b) Stagecoach Road to Upper Soda Creek down to the Sacramento River, to River Avenue and over the River Avenue Bridge back to Dunsmuir Avenue. Unique views are offered of the Upper Sacramento River and the riparian setting, and there is access for trout fishing.

Sacramento River Bridge to the South I-5 Interchange. This 2.3-mile section of Dunsmuir Avenue features the City's Historic District and numerous "Fin de Siecle" [end of the 19th Century] and Roaring Twenties era homes and businesses in south Dunsmuir. The Dunsmuir Museum and the "Fountain" are also just off Dunsmuir Avenue. Sacramento Avenue is a suggested historic by-pass from River Avenue to Branstetter Street.

B. Possible Scenic Bicycle Path

When the City adopted the 1985 Scenic Highway Element, planning guidelines suggested that the element should include, “related facilities within the scenic corridors, such as bicycle trails”. The Element noted that a bike trail could be constructed along roughly the same Dunsmuir Avenue corridor as discussed above. To the north of the Mott Road-Interstate 5 interchange, a bike path could continue along Old Stage Road. The area to the north is outside the City’s planning area and would need to be coordinated with Siskiyou County.

Just north of the I-5 bridge over the Sacramento River, the prospective bike trail could follow Stagecoach and Upper Soda roads under the I-5 bridge to River Avenue. The bike path could then follow Butterfly, Gillis and First Streets to its end at Cragview Drive just inside Shasta County. Again, bike paths outside the City will need to be coordinated with Siskiyou County and, in this case, possibly Shasta County, too.

4.3 GOALS, OBJECTIVES, POLICIES AND IMPLEMENTATION MEASURES

GOAL C-1: - *Safe and easy access to and from all land uses, existing or projected, in the Land Use Element.*

Objective: An adequate street system is the backbone of the community, permitting safe and convenient transportation from home to schools, work, recreation, shopping, and to all other community services. Adequate and safe walkways, bikeways and trails for non-motorized transportation is also important. It is the objective of the City to ensure that all transportation routes within the City, motorized and non-motorized, are appropriately designed, constructed and maintained.

POLICY C-1.1: **Figure 4-1, Circulation Map**, shall serve as the City’s General Plan Circulation Map.

POLICY C-1.2: The City shall review existing and proposed roadways, bikeways and walkways to ensure that they meet general safety standards. If it is found that any routes are not safe, the City should make the necessary improvements to ensure that the routes are improved to appropriate safety standards.

Implementation Measure C-1.2.1: The City shall work with the Siskiyou County Local Transportation Commission to coordinate, as appropriate, the incorporation of the City’s Circulation Element provisions into the County’s Regional Transportation Plan, and will use the regional planning process to help improve the City’s transportation network.

Implementation Measure C-1.2.2: The City will seek resources to develop a non-motorized circulation plan to provide more specific direction for appropriate bikeway and pathway routes and recommendations to accomplish the development of those routes.

POLICY C-1.3: The City supports the provision and improvement of sidewalks and trails to provide for the safety of pedestrians, bicyclists and other non-motorized transportation.

Implementation Measure C-1.3.1: The City should provide or require sidewalks and/or bike lanes on major streets, when appropriate, as a means to accommodate a variety of transportation modes.

Implementation Measure C-1.3.2: The City should prioritize the provision of sidewalks in the vicinity of schools on major streets that are used by school-bound pedestrian traffic.

Implementation Measure C-1.3.3: The City should work with Caltrans to develop a carpooling lot to encourage and support regional commuting.

Implementation Measure C-1.3.4: The City shall encourage the inclusion of bike and pedestrian paths in subdivision design.

GOAL C-2: - Streets that facilitate evacuation and emergency response in the event of an emergency.

Objective: Some of the streets in Dunsmuir are narrow, steep, and have limited area for vehicles to turn around. Such streets are difficult to access safely with emergency equipment and may make it difficult for residents to escape in the event of an emergency. It is the objective of the City that such streets be improved, when possible, and that future streets will meet adequate standards.

POLICY C-2.1: Within the next 10 years, when practicable, the City shall upgrade streets that do not meet standard fire safe regulations as specified in Title 14 of the California Code of Regulations.

Implementation Measure C-2.1.1: The Fire Department should identify those streets that currently do not meet the fire safe requirements of Title 14 of the California Code of Regulations and create a priority list of needed improvements.

Implementation Measure C-2.1.2: The City should establish a budget to improve all deficient streets as noted above with the goal of bringing such identified streets as near as possible into conformance with Title 14 standards within 10 years.

GOAL C-3: - Adequate off-street parking for residents and businesses.

Objective: Where inadequate off-street parking occurs, the efficiency of the use of the street for moving traffic deteriorates. Narrow streets become narrower and there is no place to store snow plowed from streets and driveways. With many families owning two or more vehicles, streets can become overcrowded with parked vehicles. Lack of adequate parking in commercial and industrial areas frequently moves parking onto residential streets and reduces the parking convenience for customers. It is the City's desire to improve off-street parking for residents and businesses alike.

POLICY C-3.1: Whenever practical, off-street parking shall be provided as a means to minimize the impact on public streets (especially narrow streets), maintain an area for snow removal, and to adequately accommodate the intended land use.

Implementation Measure C-3.1.1: The Zoning Ordinance standards should be evaluated for adequacy. For example, the current standard of one off-street parking space for a single-family residential unit, including units in multifamily dwellings, should be evaluated for adequacy.

Implementation Measure C-3.1.2: In order to provide additional parking in downtown Dunsmuir to serve the commercial, professional, government and tourist needs, the City, in conjunction with downtown businesses, should provide additional parking through a parking district or some other financial partnership.

Implementation Measure C-3.1.3: The Municipal Code should be amended to require the construction of off-street parking, when possible, whenever substantial improvements are made to existing residential or commercial development, when the amount of parking is non-conforming.

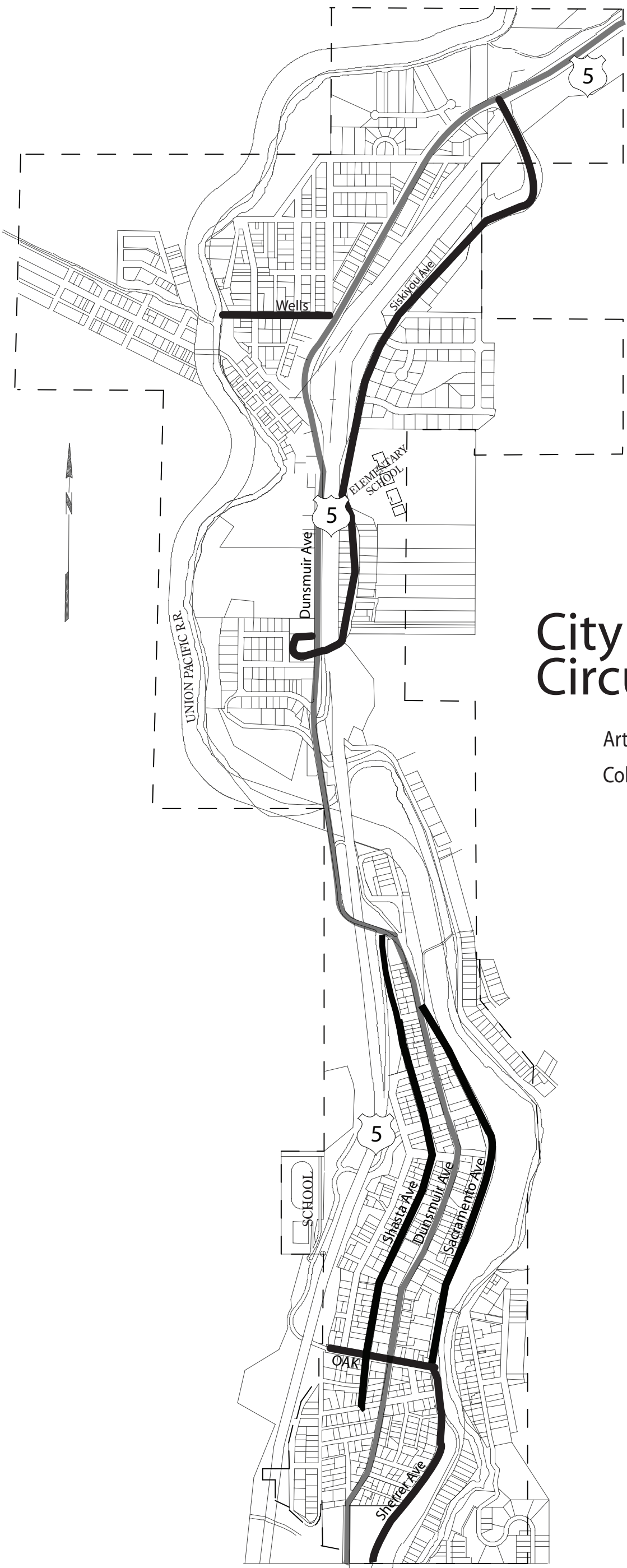
GOAL C-4: - *An attractive view of the City and surrounding environment along primary transportation routes.*

Objective: The landscape and townscape of Dunsmuir includes valuable scenic as well as historic qualities. The City wishes to protect and enhance the scenic qualities of the community in order to sustain its attractiveness as a place in which to live, support efforts to attract new businesses, and expand the community's appeal to visitors and tourists.

POLICY C-4.1: Maintain the attractiveness of Dunsmuir by protecting and, when practicable, enhancing the scenic qualities of the community along primary transportation routes, especially Interstate 5, Dunsmuir Avenue, and designated bikeways.

Implementation Measure C-4.1.1: The City shall review highway and pathway routes that warrant protection of scenic as well as historic qualities and will consider appropriate measures for protection of those resources. Measures may include designation of scenic routes, zoning provisions to require special review of proposed architectural and landscape design, and other administrative actions to support the goal.

Implementation Measure C-4.1.2: In reviewing project proposals, the City will consider potential project impacts on scenic qualities and will determine if conditions of approval or mitigation measures are needed to protect and enhance scenic resources.



City of Dunsmuir Circulation Map

- Arterial Streets
- Collector Streets

5.1 INTRODUCTION

California Government Code Section 65302(g) requires that each city and county develop a Safety Element, "... for the protection of the community from any unreasonable risks associated with the effects of seismic activity, dam failure, slope instability leading to mud or land slides, flooding and wildfires." The purpose of the General Plan Safety Element for the City of Dunsmuir is to promote public safety and the protection of residents and property from fires (both urban and forest in origin), natural and geological hazards, and hazardous materials spills.

In addition to the information contained herein, the City of Dunsmuir participated in the development of a Multi-Jurisdictional Local Hazard Mitigation Plan for Siskiyou County. The Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) for the City of Dunsmuir planning area was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and followed FEMA's Local Hazard Mitigation Plan guidance. The LHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short and long-term strategies, involve planning, policy changes, programs, projects, and other activities. The LHMP is incorporated into the City of Dunsmuir General Plan Safety Element by reference and is available on the City's website.

5.2 BACKGROUND

The City of Dunsmuir is located at an average elevation of 2,289 feet above sea level in the Upper Sacramento River Canyon approximately 12 miles south of Mount Shasta (a dormant volcano with a height of 14,162 feet). The steep canyon walls around the City are heavily forested. Much of these lands are productive timberlands managed by the U.S. Forest Service or owned by private timber companies. Two major surface transportation facilities, Interstate 5 and the Union Pacific Railroad, share a corridor through the canyon and through the City of Dunsmuir. Box Canyon Dam on the Sacramento River (which impounds Lake Siskiyou) is located eight miles north and upstream of Dunsmuir.

Dunsmuir's geographical setting presents several unique public safety concerns:

- Mount Shasta presents potential hazards from possible future volcanic activity.
- Landslides caused by seismic or heavy rainfall events or ground subsidence could cause property damage at certain sites in Dunsmuir.
- Certain areas in Dunsmuir are susceptible to flood damage, especially along the Sacramento River, caused by over-abundant rainfall or snowmelt in the surrounding mountains.
- The collapse of Box Canyon Dam could inundate much of Dunsmuir within 15 minutes of collapse.
- Dunsmuir is in an area that has substantial forest fire risks and hazards. Wildfires close to Dunsmuir could endanger portions of the City.
- A toxic or hazardous chemical accident on either Interstate 5 or the railroad could have serious and immediate implications in Dunsmuir.

Volcanic Hazards

Mount Shasta, located twelve miles northeast of Dunsmuir, is a large and imposing volcano. It is believed to have erupted approximately ten or eleven times during the last 3,400 years, and at least three times in the last 750 years. While it has not erupted at regular intervals, its history suggests that it erupts at an average rate of roughly once every 250 to 300 years. The last eruption was believed to have occurred in 1786. Even though the volcano has not been active for two centuries, Mount Shasta, like Mount St. Helens before 1980, is only dormant and almost certainly will erupt again. (*Volcanic Hazards at Mount Shasta, California*, by Dwight R. Crandell and Donald R. Nichols. U.S. Geological Survey, pamphlet, 1987.)

The 1987 USGS pamphlet, “*Volcanic Hazards at Mount Shasta*” describes the characteristics of volcanic activity which would most likely affect the area near the mountain. Each of these characteristics are discussed below along with the possible effect upon the City of Dunsmuir. For a visual representation of potential impacts, please refer to **Figure 5-1** through **5-3** at the end of this element.

Pyroclastic Flows: Pyroclastic flows are streams of hot ash and rock fragments, mixed with hot air and other gases, that move rapidly along the ground surface during an eruption. These flows are especially dangerous due to their high temperatures and their high speeds which may be more than 100 miles per hour. Due to the speed of pyroclastic flows, escape is nearly impossible. They are best avoided by evacuation of threatened areas before an eruption.

Lateral Blasts: This type of blast is a sideways-directed volcanic explosion that carries large pieces of rock and ash at a very high speed along and above the ground surface. The rock debris carried by the lateral blast of Mount St. Helens in 1980 had an initial speed of more than 250 miles per hour, and it was still moving about 60 miles per hour near its outer limit about 15 miles from the volcano. Lateral blasts may cause fatalities as the result of impact, burial or heat.

Dunsmuir is located in Zone 3 for pyroclastic flows and lateral blasts. This is the outer limit of the area potentially affected by these activities, so the likelihood of the threat is limited.

Lava Flows: Lava flows are rarely life-threatening because they move slowly enough for people to get out of their way and seldom occur at the outset of an eruption. Dunsmuir’s distance from the volcano is sufficient that such flows are not particularly life threatening. However, lava flows can destroy property and ignite wildfires.

Mudflows: A mudflow is a mass of water-saturated rock debris that moves downslope generally as a fluid. Mudflows can form when lava flows, pyroclastic flows or hot lateral blasts melt snow on the side of a volcano. Mudflows tend to follow stream valleys and can travel long distances generally at a rate of 10 to 20 miles per hour, but faster on steep slopes. Due to their slower speed and distance from Dunsmuir, should a mudflow occur, there should be adequate time in Dunsmuir to evacuate to higher ground. However, before a mudflow would reach Dunsmuir, it would pass Lake Siskiyou. A heavy flow into the reservoir could cause the lake to breach the dam or could weaken the dam itself causing a structural failure and flood that would reach Dunsmuir in 15 minutes or less.

Landslides: A volcanic explosion, severe earthquake or heavy rains could start landslides of rock debris from the side of the volcano. A landslide triggered by an earthquake at Mount St. Helens on May 18, 1980, traveled about 14 miles beyond the volcano. Mount Shasta has also

been subject to mudflows that have been triggered by heavy rains on top of snow, although this type of mudflow is not considered to be a threat to Dunsmuir.

Volcanic Ash: Ash resulting from an eruption could cover a large area and could reach a depth of two inches or greater, depending on the amount of ash released into the atmosphere and the direction of wind at the time. Given that the prevailing winds generally blow in an area between the northeast and southeast, the probability is high that most ash would fall east of the volcano and away from Dunsmuir. However, the area does experience periodic winds from the north.

Experience with Cascade Range volcanoes including Mount St. Helens (1980 to present) and Mt. Lassen (1911-1920), demonstrates that eruptive episodes can and do occur in present time involving volcanoes that are generally considered inactive.

Seismic Hazards

There are numerous faults near the City that present potential dangers in the form of ground shaking, landslides and subsidence, and possible collapse of the Box Canyon Dam eight miles north of Dunsmuir on the Sacramento River. An unnamed fault runs southwest from Cedar Lake and ends near the Box Canyon Dam. Another north-south fault runs beneath Mount Shasta. Other faults run north-south on Soda Creek Ridge to the east of Dunsmuir. While none of these faults are known to be active, an earthquake with a 3.1 local magnitude occurred 3 miles southeast of Dunsmuir on November 29, 2005. Earthquake activity in Siskiyou County, as reported by the Siskiyou County General Plan Seismic Element, has been very limited. There has been limited structural damage in the past and there have been no known deaths.

Flooding

The Sacramento River and its local tributaries are subject to flooding caused by unusually heavy rains, snowmelt or both. Flooding at varying levels of intensity occurs frequently and occasionally presents a significant hazard to life, property and infrastructure. The “Big Flood” of 1974 floated houses down the river. The flood of January 1997 also caused major property and infrastructure damage.

The Federal Emergency Management Agency (FEMA) has developed a Flood Insurance Rate Map for Dunsmuir to identify flood prone areas. Flood hazard areas affecting Dunsmuir are indicated in **Figure 5-4** at the end of this element. Zone A as identified on the map represents the area of greatest flood hazard as might be expected to occur once every 100 years (or a 1 percent chance in any given year). Zone B is an area expected to have lesser impacts due to the shallower flood depth anticipated. Within these areas properties are required to carry flood insurance. The rates for insurance are dependant on the floodwater depth on the affected parcel. New construction is required to meet the City’s Flood Protection ordinance. Typically, placement of the ground-level floor is required to be at least one foot above the 100-year flood level. The key areas subject to flooding located in the A Zone are:

Gill Avenue	Approx. 6 lots
Cave Avenue	Approx. 22 lots
Butterfly Avenue	Approx. 39 lots
Scherrer Avenue	Approx. 12 lots
Gillis Street	Approx. 3 lots

Additionally, a large area north of Grover Street to a point approximately 200 plus feet north of Oak Street is subject to shallow flooding from Alder Creek. Continued implementation of the

Flood Ordinance will protect new construction from serious flooding and will help correct the current flood hazard over a long period of time as remodeling activities in the area bring additional structures into compliance with the Ordinance as a means to reduce flood impact and insurance rates.

Dam Failure

Box Canyon Dam, which impounds Lake Siskiyou, is located approximately eight miles north and upstream of Dunsmuir on the Sacramento River. While it is certainly not expected to occur, dams can and do occasionally fail. The Box Canyon Dam lies in the path of potential mudflows from Mount Shasta, should there be that type of volcanic activity, and near an unnamed fault running southwest-northeast from Cedar Lake to a point near the Dam. Significant events in either one of these areas could result in water breaching the dam or actual dam failure. Aging or other geologic effects could also affect the stability of the structure.

Dam failures, when they do occur, have resulted in significant damage and some deaths since they can fail unexpectedly with little or no warning. A study prepared in 1983 by the Siskiyou County Public Works Department (*Emergency Action Plan-Box Canyon Dam*), identified areas subject to flooding and the approximate time floodwater would reach Dunsmuir (see **Figure 5-5**). North Dunsmuir would, of course, be hit first after about eight minutes of failure. Central Dunsmuir would be hit in about 13 minutes and the southerly City limits in about 16 minutes. The water depth would be significant, approaching Dunsmuir Avenue as it passes near the downtown area. Actual depth of the water would depend on the magnitude of the failure and the size and location of temporary debris dams that occur as the flood clears the river canyon of nearly everything in its path. With early warning, residents within the flood area may have time to reach higher ground. Significant damage would occur, wiping out bridges, power and other infrastructure. Residents could be stranded across the river without a means to cross and emergency services would be severely hampered.

Landslides

The 1985 General Plan identified eleven sites where landslide activity has either occurred or is believed to have the potential to occur. The source for this information has not been identified, nor has a recent survey of landslide prone areas in and around Dunsmuir been conducted. The 1985 General Plan did, however, identify each of these sites on a rough map. These areas have not been identified in this document due to the uncertainty of the past data and the lack of more current studies. Caution must be taken whenever new construction is proposed on steep slopes in order to ensure the safety of future occupants.

Wildfires

The City of Dunsmuir is rated as being in a “Very High Fire Hazard Severity Zone” pursuant to California Government Code Section 51179. Being located in a heavily forested canyon with steep hillside slopes, the potential for a wildfire is very high. Fires in this type of situation are particularly dangerous since they are not readily accessible by most fire equipment due to the steepness of the terrain. Depending on the wind direction, the impacts to Dunsmuir structures from a major fire in the canyon could vary from relatively little damage to major destruction. A fire with limited wind assistance may simply burn up the side of the canyon and away from the City, while a wind blowing from the south could push a fire north through the City in addition to going up the side of the canyon. In this latter scenario, major structural damage in the City is likely. While these scenarios are bad enough, potential mudflows from heavy winter rains on fire-denuded slopes could result in significant damage to property below.

In the past, residential development adjacent to the City has occurred on the fringe of the canyon where steep grades and heavy vegetation cover exist. In some of these situations roads are very narrow, steep and dead-end with only one way in and out. These roads also usually lack adequate turnarounds for fire vehicles. Many of these areas lack fire hydrants as well. Some of the problems mentioned above regarding development outside of City limits also apply to isolated areas within the City. Numerous streets on the west side of the City, especially near Interstate 5, are steep, narrow, lack adequate turnarounds and, in some instances, have heavy vegetation. These characteristics slow the response and effectiveness of fire fighters and could result in a fire quickly getting out of control.

While the airport property and lands north of the north Dunsmuir Avenue/I-5 Interchange have received little development pressure at present, this area of the City poses a challenge for timely response by fire equipment due to distance and grade. The airport is over three miles from the Fire Station and requires the equipment to climb over 900 vertical feet on Interstate 5 in that distance. It is anticipated that, as this area of north Dunsmuir develops, a satellite fire station would be needed.

The Dunsmuir-Castella Fire Department provides fire and emergency medical services to the City of Dunsmuir and is comprised of three different governmental entities: the City of Dunsmuir, the Dunsmuir Fire Protection District, and the Castella Fire Protection District. The Department has a response area of over 30 square miles, with responders travelling as far north as Mott Road and as far south as Slate Creek. In addition, the Department maintains an automatic mutual aid agreement with the Mt. Shasta City Fire Department.

Hazardous Materials

With two major transportation routes passing through the City, Interstate 5 and the Union Pacific Railroad, and after the experience of the 1991 “Cantara Spill”, it is very possible that a toxic material spill may again affect the City at some point in its future. Winter road conditions and local topography increase the possibility of an accident involving toxic materials. Concerning the transport of materials on Interstate 5, the California Vehicle Code assigns the California Highway Patrol the responsibility for serving as statewide information, assistance and notification coordinator on all hazardous material spill incidents occurring on highways. The County Health Department and state and federal agencies would be actively involved on a similar incident with the railroad.

The Cantara Spill of 1991, which is sometimes regarded as California’s largest inland ecological disaster, dramatized the risk of hazards in the Dunsmuir area related to the transport of toxic materials and the potential effects of toxic spills. On July 14, 1991, railcars of a Southern Pacific train derailed at the hairpin turn of the Cantara Loop at one of the crossings of the Sacramento River. One railcar was ruptured by the fall and spilled approximately 19,000 gallons of the herbicide metam sodium into the river. As the metam sodium mixed with the water, highly toxic compounds were created. Virtually all aquatic life in the river between the Cantara Loop, through Dunsmuir and down to Shasta Lake was destroyed.

The river ecosystem has slowly recovered, but the spill had a significant impact on the river as well as the community. During the first six days after the spill, an estimated 480 residents left their homes and went to evacuation centers. While the stay of some residents in the centers were short, others were there for several weeks. Some residents were forced to temporarily

leave the area to stay with friends or relatives in unaffected communities. There were many and various health-related complaints as a result of the spill.

In spite of corrective measures taken by the railroad, continued incidences demonstrate that the City is still at risk from railroad-related hazardous material spills. In July 2003, five railcars from a Union Pacific train plunged into the Sacramento River just two miles from the site of the 1991 toxic spill. In January 2005, another Union Pacific train derailment occurred in the canyon just south of Dunsmuir, this time spilling approximately 30 gallons of diesel fuel into the river. Fortunately, neither these or other recent accidents have had a significant effect on the environment or the City, but they demonstrate the continuing vulnerability of the Dunsmuir area to accidents of this kind.

5.3 GOALS, OBJECTIVES, POLICIES AND IMPLEMENTATION MEASURES

GOAL S-1: - A city prepared for necessary action, including evacuation if needed, due to disasters including volcanic or seismic action, wildfires, or failure of Box Canyon Dam.

Objective: Major disasters are usually beyond the ability of the City to prevent, yet it is important to be prepared to respond when emergencies occur. It is the City's objective to be well prepared for emergencies and, where possible, control the exposure of people to hazards in known hazardous areas.

Policy S-1.1: The City shall take measures to minimize impacts to the City and its citizens should a natural disaster strike.

Implementation Measure S-1.1.1: The City shall periodically review, and update as necessary, emergency plans that advise City staff, emergency services and residents on actions that should be taken in response to an emergency. These plans should be readily available for public distribution. Where practical, these plans should also be written to satisfy the requirements of a Local Hazard Mitigation Plan as mandated by the Governor's Office of Emergency Services.

Implementation Measure S-1.1.2: If located within an area identified as subject to a specific hazard, the City shall not approve applications for uses that will house infirmed, non-ambulatory persons, seniors or children without adequate provisions to mitigate known hazards.

GOAL S-2: - A city that has minimized, to the maximum extent feasible, potential impacts to structures as a result of flooding.

Objective: Flooding occurs on a fairly regular basis on the Sacramento River and local tributary streams. It is the City's objective to ensure that all development in flood prone areas is done in a manner that minimizes the potential for damage as a result of flooding.

Policy S-2.1: Development within identified floodplains shall be controlled to reduce potential damage from floods.

Implementation Measure S-2.1.1: When relevant, the City shall deny proposed development that would have unacceptable exposure to flood hazards.

Implementation Measure S-2.1.2: The City will continue to apply the City's Floodplain Management Ordinance to development of properties within the FEMA identified flood plain.

Implementation Measure S-2.1.3: The City will encourage residents within the floodplain to take all practical steps to flood-proof their dwellings, including the use of low interest loans and grants if such are available for this purpose.

GOAL S-3: - A community protected from landslides.

Objective: Due to steep hillsides and soil types in the Dunsmuir area, the potential for landslides exists. It is the City's objective to protect its citizens from the potential impacts of landslides.

Policy S-3.1: Areas known to have slopes or soils that are prone to sliding should only be developed when all necessary steps are taken to protect life and property.

Implementation Measure S-3.1.1: Large hillside areas known to have soils prone to sliding should be protected with an open space or resource zone district having a development density of not greater than one dwelling unit per 20 acres.

Implementation Measure S-3.1.2: The City should review landslide prone areas in and around the City in order to update the landslide information that was referenced in the 1985 General Plan.

Implementation Measure S-3.1.3: The City should review the sites referenced in the 1985 General Plan, as well as any recently noted landslide-prone areas, and determine if these areas should and can be stabilized through plantings or other soil stabilization techniques.

GOAL S-4: - A community protected from the hazards of wildfire.

Objective: Areas within and adjacent to Dunsmuir are identified as wildfire hazard areas and are subject to potentially devastating fires. It is the City's objective to reduce both the likelihood of wildfires and the impact of fires on the community should they occur.

Policy S-4.1: The City shall support programs to prevent and prepare for wildfires and will consider fire-related hazards in review of all project proposals.

Implementation Measure S-4.1.1: The City shall adopt and enforce standards similar to the "Fire Safe Regulations" outlined in Title 14 of the California Code of Regulations for all new development within the City.

Implementation Measure S-4.1.2: Where practical, emergency access to dwellings that are isolated due to steep, narrow dead-end roads should be improved. Development on vacant lots in such areas should be limited until basic safety standards have been satisfied.

Implementation Measure S-4.1.3: The City shall not approve development proposals without ensuring adequate water storage and capacity for fire protection.

Implementation Measure S-4.1.4: When appropriate, steps should be taken to provide a secondary fire station with basic equipment at or near the airport to serve both the airport and this most-northern area of the City.

Implementation Measure S-4.1.5: The City shall take appropriate measures to support a well-trained, equipped and staffed volunteer fire department.

GOAL S-5: - A city protected from potential hazardous material spills.

Objective: With two major transportation routes and the daily transport of hazardous materials through the City, it is likely that a hazardous material spill will affect the City at some point in its future. It is the City's objective to minimize both the potential for a hazardous materials spill and the resulting impacts should one occur.

Policy S-5.1: In order to diminish the likelihood of future hazardous materials spills in the Upper Sacramento River Canyon, the City shall advocate its concerns with regard to rail and highway safety.

Implementation Measure S-5.1.1: The City shall advocate for stricter laws governing rail safety in the Upper Sacramento River Canyon, especially in the Cantara Loop area. This may entail maintaining lines of communication with appropriate members of Congress and with regulatory agencies in an effort to amend the Federal Railroad Safety Act.

Implementation Measure S-5.1.2: The City shall maintain an open dialogue with Caltrans and the California Highway Patrol to ensure that the City's concerns with regard to the transport of hazardous materials along Interstate 5 are adequately addressed by those agencies.

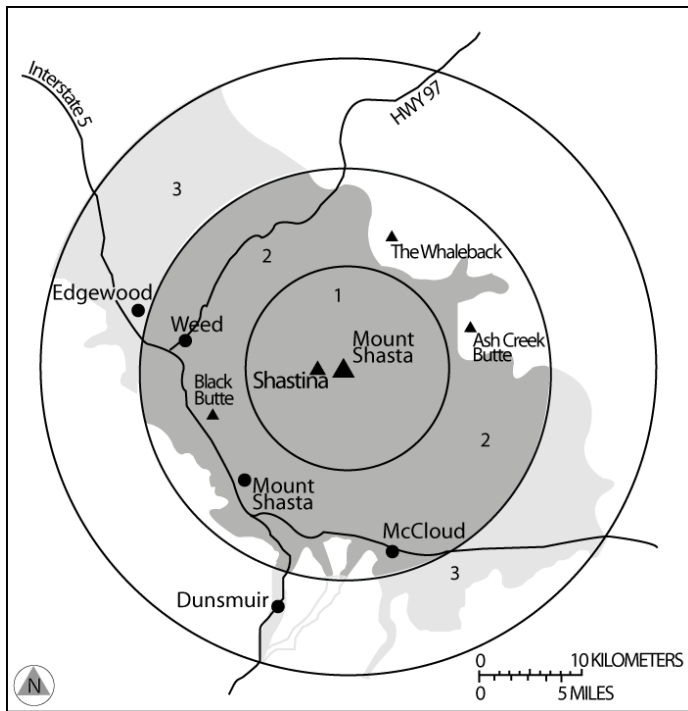
Policy S-5.2: The City shall take all necessary steps to prepare for a hazardous materials spill, as well as protect its residents should one occur.

Implementation Measure S-5.2.1: The City will identify the proper emergency contacts to notify in the case of hazardous materials spill and make this information readily available to City staff and emergency services personnel in order to facilitate a rapid response should the need arise.

Implementation Measure S-5.2.2: The City will identify necessary steps to be taken in order to protect residents in the case of a hazardous materials spill, as well as be prepared to quickly implement these measures in the event of an accident.

Implementation Measure S-5.2.3: The City shall work with the owner of the railroad, currently Union Pacific, and the California Highway Patrol to ensure that rapid notification of residents occurs in the event of a spill.

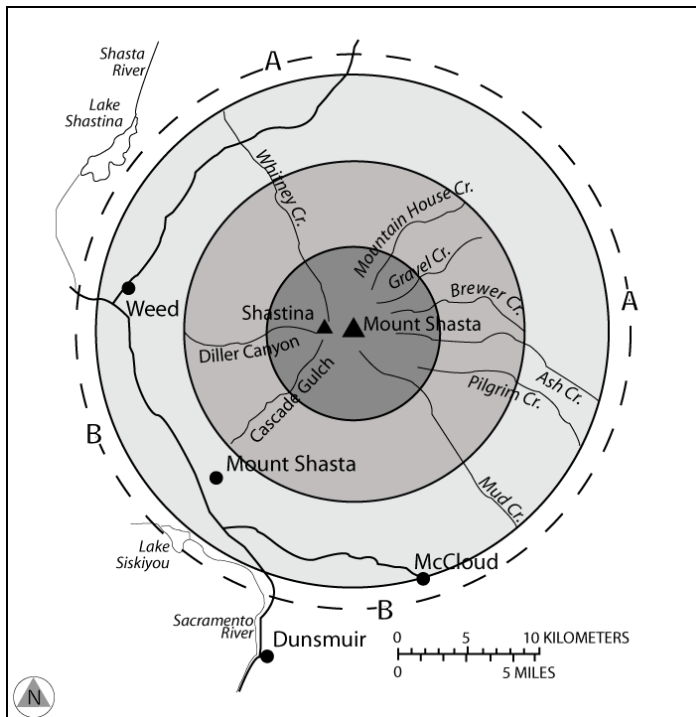
Implementation Measure S-5.2.4: The City will continue to promote the training of, and the provision of appropriate protection gear for, local "first responders" who would respond to hazardous material spills in the Dunsmuir area.



Crandell and Nichols, 1987.

Figure 5-1: Map of hazard zones for pyroclastic flows and surges from future eruptions at or near the summit of Mount Shasta.

Sites in zone 1 are most likely to be overrun by future flows, whereas those in zone 3 are only likely to be affected by pyroclastic flows longer than any that have occurred during the past 10,000 years. Sites in zone 3 may, however, be affected by pyroclastic surges sweeping out ahead of pyroclastic flows from the inner zones.



Crandell and Nichols, 1987.

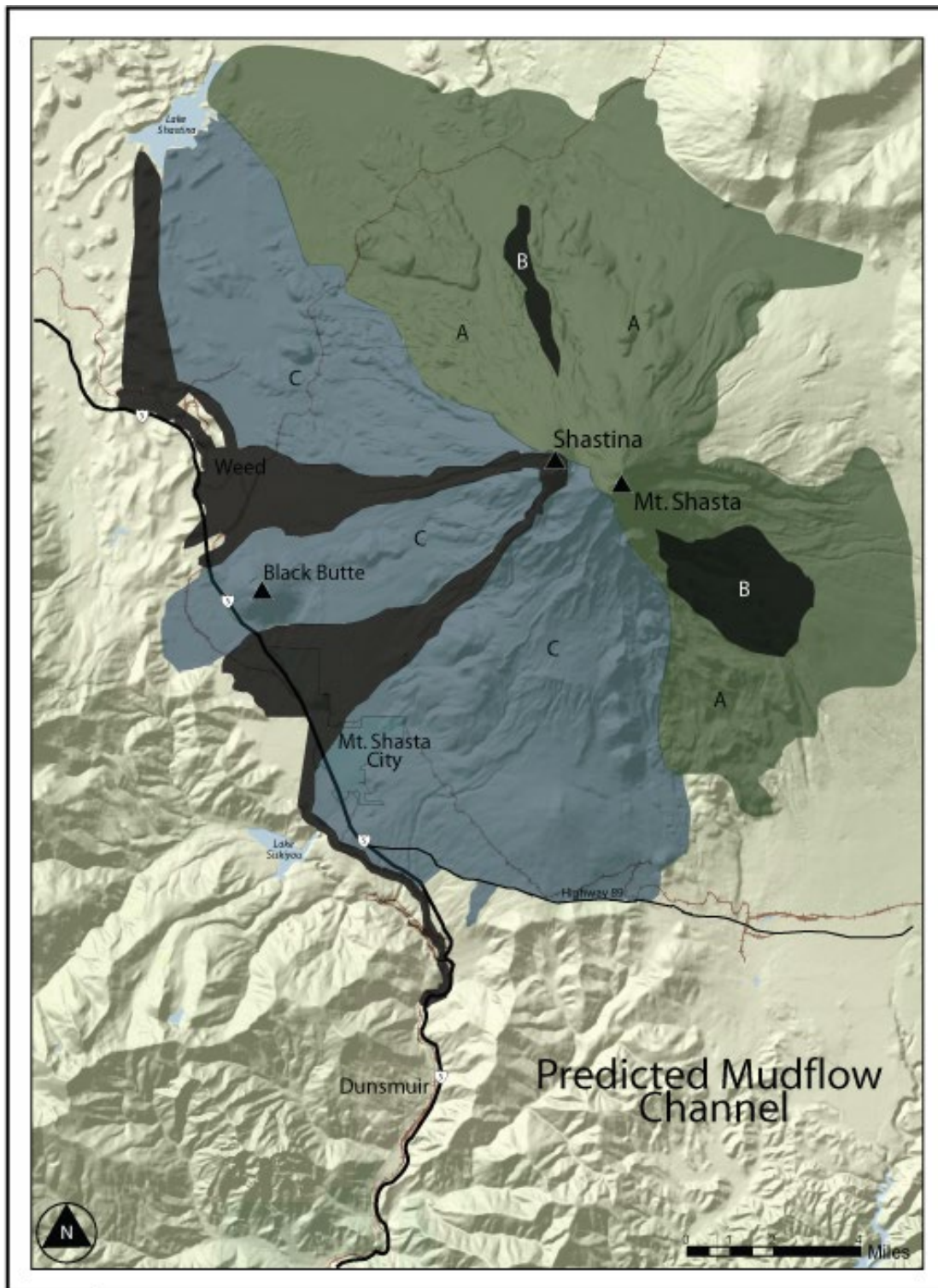
Figure 5-2: Map of hazard zones for lava flows from future eruptions at or near the summit of Mount Shasta.

Concentric zones show possible hazard from lava flows with respect to distance from the top of the volcano. The recent history of Mount Shasta suggests that most future lava flows will originate at the summit or on the northeastern flank of the volcano in sector A. Sector B is less likely to receive lava flows.

Zone 1: areas likely to be affected most frequently. Most future flows from summit eruptions probably would stay within this zone.

Zone 2: areas likely to be affected by lava flows erupted from vents on the flank of the volcano or that move into zone 2 from zone 1.

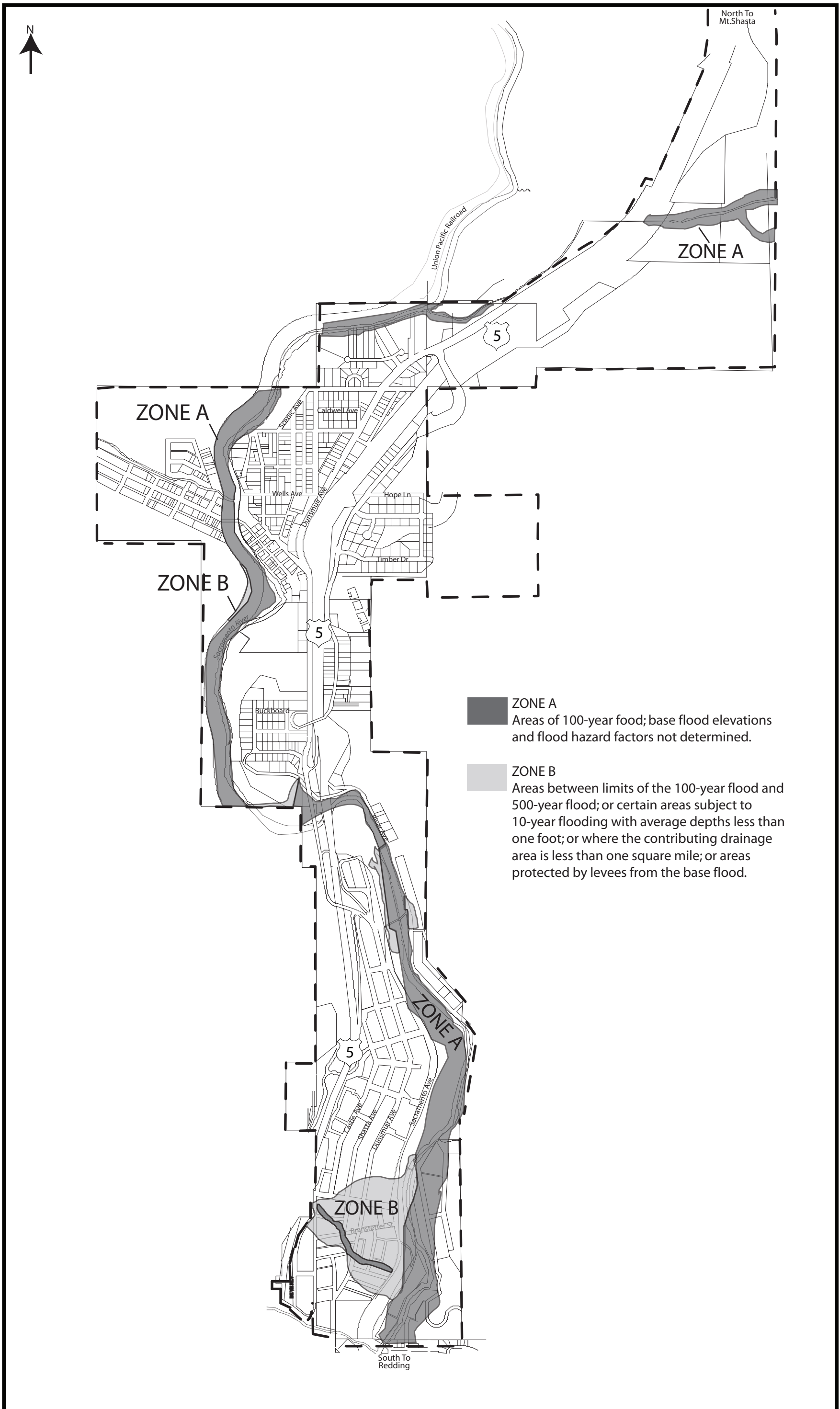
Zone 3: areas likely to be affected infrequently and then only by long lava flows that originate at vents in zones 1 and 2.



Source: Crandall and Nichols, 1987

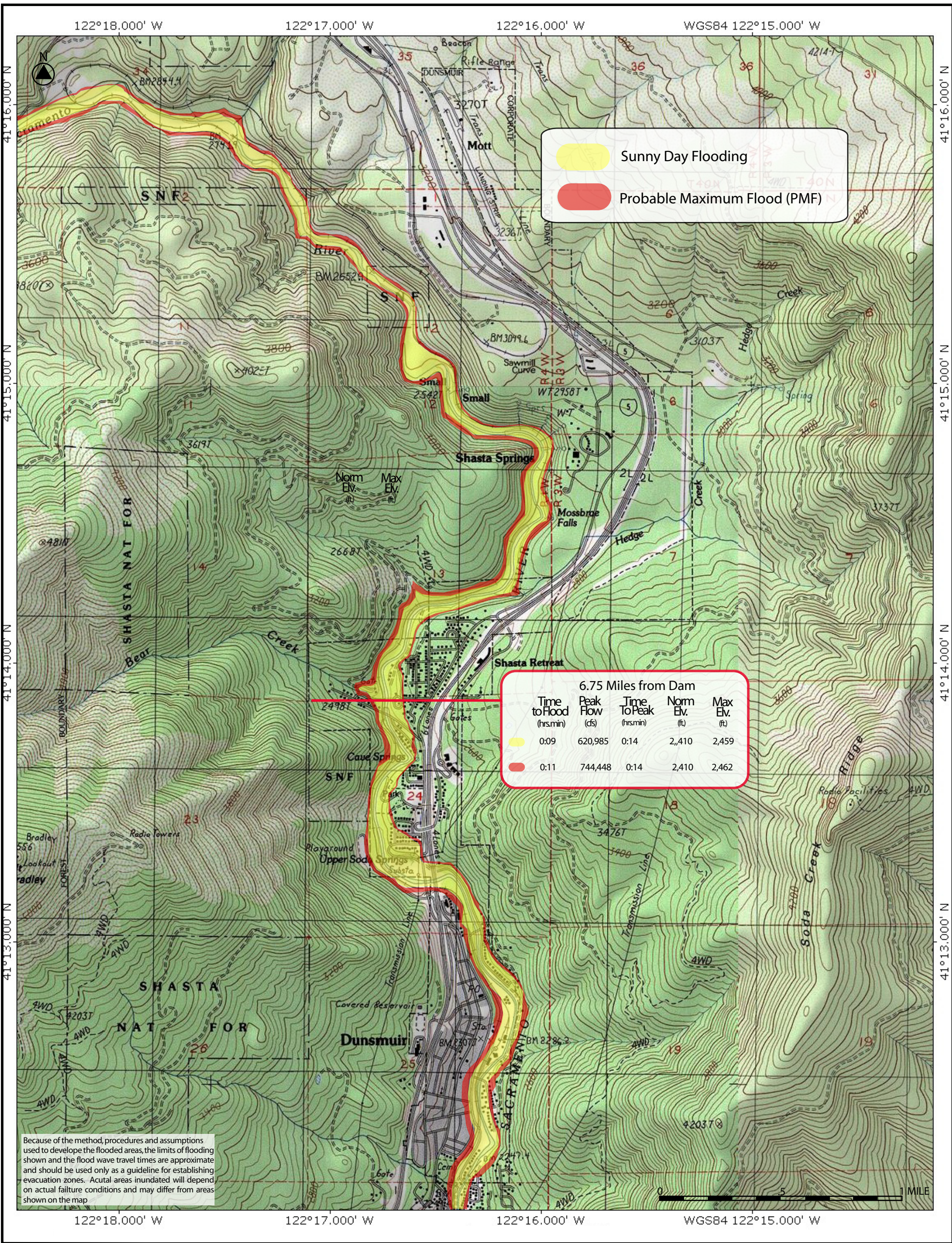
**FIGURE 5-3
Mudflow**

Zones designated by letters A-C show relative likelihood of being affected by future mudflows. Zone A is most likely and zone C is least likely to be affected. No mudflow hazard exists on high areas within or beyond the zones. Hazard decreases within the zones with greater height above stream channels and greater distance from Mount Shasta.



Source: FEMA FIRM Panel # 060363 0001 B

FIGURE 5-4
FLOOD HAZARD MAP
 PMC

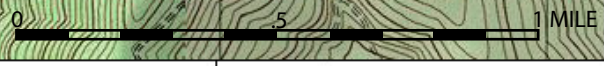


Sunny Day Flooding
 Probable Maximum Flood (PMF)

6.75 Miles from Dam

	Time to Flood (hrs:min)	Peak Flow (cfs)	Time to Peak (hrs:min)	Norm. Elev. (ft)	Max. Elev. (ft)
	0:09	620,985	0:14	2,410	2,459
	0:11	744,448	0:14	2,410	2,462

Because of the method, procedures and assumptions used to develop the flooded areas, the limits of flooding shown and the flood wave travel times are approximate and should be used only as a guideline for establishing evacuation zones. Actual areas inundated will depend on actual failure conditions and may differ from areas shown on the map.



SOURCE: Siskiyou County Public Works Department, TOPO!

FIGURE 5-5
BOX CANYON
DAM BREAK FLOODING
PMC

6.1 INTRODUCTION

The basic purpose of a general plan noise element is:

1. To provide sufficient information concerning the community noise environment so that noise may be seriously considered in the land use planning process. Noise level criteria are to be developed which would be usable in future planning, zoning and building inspection processes that promote the maximum compatibility of land uses and generated noise; and
2. To protect existing areas whose noise environments are determined to be acceptable, to predict the noise climate, and to determine the level of future monitoring and review.

Note: **Table 6-3** at the end of this Noise Element provides definitions of technical terms used herein.

California Government Code Section 65302(f) defines the requirements of a general plan noise element as follows:

A noise element which shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for all of the following sources:

- (1) Highways and freeways.*
- (2) Primary arterials and major local streets.*
- (3) Passenger and freight on-line railroad operations and ground rapid transit systems.*
- (4) Commercial, general aviation, heliport helistop, and military airport operations, aircraft overflights, jet engines test stands, and all other ground facilities and maintenance functions related to airport operation.*
- (5) Local industrial plants, including but not limited to, railroad classification yards.*
- (6) Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment.*

Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6), inclusive.

The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise.

The noise element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards.

A general plan noise element, as described above, would include topics that are not applicable to a smaller community like Dunsmuir. For example, there are no significant noise producing industries in Dunsmuir. Furthermore, due to the long narrow shape of the community and the presence of two major noise sources (i.e., Interstate 5 and the Union Pacific Railroad) that extend almost the entire

length of the community, standard noise contours do not readily apply. Consequently, the City has determined that little would be gained through the presentation of noise information beyond the information provided herein.

With one main noise source (Interstate 5) lying above the City and another (the railroad) below, maintaining a noise level at or below the 60 dB Ldn (a typical standard) is virtually impossible, especially when most of the community is already exposed to noise levels of 65 dB Ldn or greater. This does not mean, however, that some areas of the community, due to topography or building location, do not enjoy slightly lower levels. However, for these reasons, the City has determined there is no need, on a community-wide basis, to take additional noise samples or provide more specific noise contours for the Noise Element. Sufficient information is available to identify affected areas, apply standards, and/or require project related noise analysis and mitigation as a means to minimize the impact of noise, especially for new development.

6.2 BACKGROUND

Dunsmuir is a small, rural community in a mountainous setting that would normally not be associated with the types and levels of noise typically found in urban environments. The City is known for fishing on the Upper Sacramento River, the surrounding forests and outdoor activities that are normally enjoyed in quiet and relative solitude. Open spaces are somewhat synonymous with an absence of noise in order to be fully appreciated. Many residents and visitors come to escape the effects of urbanism, which includes distractions such as noise.

However, the community's location in a long narrow canyon containing a main line of the Union Pacific Railroad and Interstate 5, the main north-south freeway on the west coast, affects and changes a potentially tranquil environment into one substantially impacted by transportation noise. This situation is not entirely new since the railroad and related noise have been factors in Dunsmuir since the town began. As regional vehicular travel increased, Highway 99 (which came through town on what is now Dunsmuir Avenue) became a major thoroughfare. With the advent of more trucks and increased population mobility, Interstate 5 was developed and a major amount of traffic volume was shifted to the freeway. Heavy truck traffic and the grades on the Interstate now make the freeway the main source of noise in Dunsmuir. The magnitude of train noise is still about the same, even if there is less railroad activity than in earlier days.

Noise has been defined as unwanted and unhealthy sound. There is a certain amount of background noise that is tolerable within the community. This is the result of human activities (e.g. traffic, other people's conversations, air conditioning, other machinery and other activities). This average background noise becomes intrusive somewhere in the upper 50 decibel range. It is the intrusive noise with which the Noise Element is particularly concerned, although gradual increases in ambient noise resulting from urban development is also of concern. In recent years it has been increasingly recognized that excessive noise levels can have adverse health effects on people, both in terms of their environment at work or leisure. Some of these effects are difficult to measure, in part because individuals vary so widely in their sensitivity to noise. Nonetheless, these effects are believed to be real and significant.

Railroad Noise Issues

The railroad was the catalyst for Dunsmuir's existence and is still one of the major industries in Dunsmuir. The railroad (now the Union Pacific Railroad) traverses a steep gradient in the Upper

Sacramento River Canyon frequently requiring helper engines to ascend the grade to Weed. The added engines produce increased noise. A factor in the noise effect of train operations is the necessary continuance of daily operations into the evening and nighttime hours, especially during the winter when idling diesel engines may not be shut down due to cold temperatures. Train whistles used when trains approach railroad crossings are quite loud and, even though they only last for a few moments, have a pronounced effect on the local noise environment.

It is extremely difficult to forecast the future of railroad noise impacts since forecasts from private operations are difficult to determine. It is noted that railroad operations are not expanding significantly. Railroad noise at the equivalent daily operational level (average throughout the 24-hour day) of 60 dB (A) (L_{dn}) or greater exposes virtually the entire population of Dunsmuir to substantial amounts of noise. (Source: 1985 General Plan) Some areas are affected by railroad noise considerably more than others. The south Dunsmuir area, for example, is very much subjected to high amounts of railroad noise due to the greater amount of activity that occurs in that area due to storage and switching activities and a greater number of railroad crossings.

One possibility for the reduction of noise associated with train whistles is a new Federal Railroad Administration Rule (49 CFR Parts 222 and 229) effective June 24, 2005. This rule provides an opportunity for localities nationwide to establish quiet zones. To qualify, communities wishing to establish quiet zones must equip proposed grade crossings with adequate safety measures to overcome the decrease in safety created by silencing the train horns. The additional safety measures must be constructed at the community's own expense and must meet federal specifications. The rule also contains language which, for the first time, restricts the volume of train horns.

Interstate 5 Noise Issues

The Interstate 5 (I-5) freeway is the major north-south arterial on the west coast. In 2005, Caltrans reported an annual average daily traffic volume of approximately 19,950 vehicles per day on I-5. Dunsmuir is at the base of a 1,200-foot grade in a nine-mile stretch south from Mt. Shasta City. The final two miles of the incline are especially steep. The highway is elevated approximately 40 feet above the town in southern Dunsmuir. Interstate 5 is at grade with the City at the Sacramento River Bridge and northerly to the north Dunsmuir Avenue interchange. From there the town is generally situated above the highway to the east and generally below the highway to the west.

Some consequences of this topographical environment are:

- (1) Where Interstate 5 is at the same grade as Dunsmuir (near and north of the Sacramento River Bridge), the dB levels are consistently higher than elsewhere in the City. (71.2 60s Leq vs. city-wide average of 61.7). (Source: Dunsmuir General Plan, 1985)
- (2) The fact that Dunsmuir is in a canyon leads to the perception that noise is amplified in specific areas. This perception (amplification) is not reflected in the noise readings. A control reading at Interstate 5 in Mt. Shasta, out of the canyon, showed the same dB readings as the Dunsmuir downgrade. (Source: Dunsmuir General Plan, 1985)

The noise problems are particularly evident for the housing units located between Interstate 5 and the railroad. The population in that area (i.e. most of the City) is subject to both of these noise sources at 60 dB(A) or greater. An estimated 70 percent of the City lies within the 65 dB Ldn contour. If the City expanded into its sphere of influence, most of the developable land in the sphere would also lie within

the 60 dB Ldn contour. Consequently, noise levels for existing and future residents will always be higher than expected for a small community.

Airport Noise Issues

Aircraft operations generally do not cause noise problems in Dunsmuir. The Mott Airport, owned and operated by the City of Dunsmuir, is located at the northern extremity of the City. While it is located in a potential urban area, the existing and projected 65 dB (CNEL) noise contours do not affect existing residences since the contours are primarily located within City-owned airport land. Projected 2010 contours would have minimal noise impact unless regular landing touchdowns occurred at or near the end of the extended runway.

Total airport usage may increase at a rate of up to five times the normal population growth. This will be reflected partly in the use of single-engine private aircraft by local and area residents. This assumes an increased income and professional level as a significant component of the growth factor. More people will also be more likely to use airplanes for access to Siskiyou County's recreational resources.

The Siskiyou County Airport Land Use Commission (ALUC) adopted the *Siskiyou County Airport Land Use Compatibility Plan* (ALUCP) in July 2001. The basic function of the ALUCP is to promote the compatibility between the airports in the county (including the Dunsmuir Municipal-Mott Airport) and the land uses that surround them. The duty of the ALUC is "... to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses." (California Public Utilities Code Sections 21670 et seq.). Therefore, noise impacts involving airports is a concern of the ALUC and is addressed in the Airport Land Use Compatibility Plan.

The evaluation of airport/land use compatibility in the ALUCP considers the future Community Noise Equivalent Level (CNEL) contours of the airport. These contours are calculated based on aircraft activity forecasts. The CNEL contours are one of the factors used to define compatibility zone boundaries and criteria.

The ALUCP includes Table 2B, Noise Compatibility Criteria, which indicates examples of acceptable noise levels for land uses in the vicinity of an airport. The maximum CNEL considered normally acceptable for residential uses in the vicinity of the airports is 60 dB.

The Land Use Element of the Dunsmuir General Plan includes consideration of airport area land use, including noise as a factor in land use compatibility criteria.

Non-vehicular Noise

Typically, many communities have businesses or industries that generate noise at levels significant enough to have an effect on sensitive receptors near such uses. There are no uses of this nature in Dunsmuir. Should a noise producing activity desire to locate in the City, action should be taken in the review process to ensure noise levels greater than 60 dB will not be present beyond the boundaries of the project sites, especially if neighbors are sensitive receptors such as residential uses, schools, hospitals and similar uses.

Community Noise Survey

During the 1985 General Plan update, numerous points in the community were surveyed to determine the noise levels that were present at that time. This data was gathered with the use of a sound level meter provided by the State of California for this survey. Due to the time-lapse between 1985 and present, and the belief that the noise samples were not done by a professional in this field, the accuracy of the data cannot be verified. Further, some of the noise samples do not identify their distance from the noise source. Regardless, the samples do provide a relative comparison of noise concerning eleven locations in the community. The following notes summarize the survey sites and the results of the 1985 survey:

- The Abner Weed gravesite in the cemetery at the south end of town (Vernie Street). This site was chosen as representative of a quiet area with which to compare readings at other sites. The average noise level at this location was 54.7 Ldn.
- The north end of what was formerly McLaughlin's Grocery store on the sidewalk (Dunsmuir and Wood). The average day-night readings were 64.6 Ldn.
- The sidewalk in front of the fountain in the downtown area (Dunsmuir and Cedar). The noise level averaged 62.1 Ldn.
- The second step of the Catholic church facing the intersection (Spruce and Shasta). The level of sound there averaged 55.9 Ldn.
- North Dunsmuir at the front of the steam engine, facing the freeway (Dunsmuir and Buckboard). The readings averaged 66.3 Ldn.
- The City Park at the south west corner of the playground area (Dunsmuir and Buckboard). The average sound level was 57.2 Ldn.
- On Isgrigg under the telephone pole with the fire siren on it. The test included one siren blown at noontime. The readings came to an average of 61.1 Ldn.
- The House of Glass Motel at the swimming pool facing the freeway (Siskiyou Avenue). The average noise level was 71.2 Ldn.
- A private residence on Gill Street, just above both the railroad (base of hill) and the river. The noise level at this point was 69.5 Ldn.
- Siskiyou Avenue below the Elementary School, ten feet above Interstate 5. The average noise level was 75 Ldn.
- Willow Street below the High School, fifteen feet above Interstate 5. The average noise level was 76 Ldn.

The average of the survey samples and the representative noise level in the City of Dunsmuir in 1985 was 64.8 Ldn. There is no evidence to suggest that, in 2006, this noise level has changed significantly, either higher or lower. While the change in the number of daily trains through town is unknown, the volume of traffic on the freeway has increased.

A few other examples of local noise occurrences follow:

- A train blowing a whistle at a railroad crossing at street level produces a sound level averaging 100. The sound of the fire siren at the corner of Isgrigg and Holly streets has the same sound level of 100 Ldn.
- A police siren test at 25 feet with a police car produced a sound level of 90 Ldn, and at 100 yards a sound level of 80 Ldn.
- At the train depot, a train coming downhill from Mt. Shasta stopping at the depot came in at a sound level of 84 Ldn.
- The sound produced by five idling train units and a separate incident of a single unit traveling downhill without a load came to a reading of 75 Ldn.

6.3 GOALS, OBJECTIVES AND IMPLEMENTATION MEASURES

GOAL N-1: - Citizens protected from unhealthy noise levels.

Objective: Based on available data, most of Dunsmuir is affected by noise levels that exceed 65 dB. Noise at this level is considered to be unhealthy. It is the City's desire to limit noise within existing developed areas as well as in areas that may accommodate future development.

Policy N-1.1: The City shall take measures within its authority to protect residents and noise-sensitive land uses from high noise levels that would be detrimental to public health and comfort.

Implementation Measure N-1.1.1: To the extent practical, new residential development and development of structures housing other sensitive receptors should take necessary steps to reduce the impact of existing and projected vehicular noise upon future occupants. This action should occur during City review of parcel maps, subdivisions, conditional use permits and other discretionary actions. Such development should meet the standards of **Table 6-1**.

Implementation Measure N-1.1.2: The City shall adopt an ordinance that requires the implementation of noise reduction techniques on ministerial permits adjacent to sensitive receptors. The techniques used to reduce noise levels to 60 dB could include dual pane windows, air conditioning, increased insulation, solid fencing, earth berms, etc. The standards of **Table 6-2** should apply.

Implementation Measure N-1.1.3: The City should develop a noise monitoring program to identify areas in the community having the greatest noise impacts from Interstate 5, and to monitor changes in noise levels over a period of time.

Implementation Measure N-1.1.4: The City should work with Caltrans to construct noise reduction barriers along Interstate 5 where traffic noise levels have the greatest impacts on residents of the City.

Implementation Measure N-1.1.5: During project review of non-vehicular noise generating uses, the City shall require a reduction of noise to standards noted in **Table 6-2** at the property line when adjacent uses may be sensitive receptors.

Implementation Measure N-1.1.6: The City shall consider the potential effects of noise in consideration of all proposed general plan amendments or rezoning actions, with the intent to allow only those uses, when practical, that can meet the standards noted in **Table 6-1** and **Table 6-2**.

Implementation Measure N-1.1.7: All housing receiving CDBG grants for rehabilitation should include improvements to reduce noise to acceptable levels.

Implementation Measure N-1.1.8: The City will continue to work with the Union Pacific Railroad to seek development of mitigation measures to reduce noise impacts through operational modifications or other measures, where possible.

Implementation Measure N-1.1.9: Land use proposals in the vicinity of Mott Airport shall include consideration of noise impacts from the airport. Residential and other sensitive uses shall not be located in areas where noise levels exceed 60 dB.

**TABLE 6-1:
MAXIMUM ALLOWABLE NOISE EXPOSURE
FOR TRANSPORTATION NOISE SOURCES**

Land Use	Outdoor Activity Areas ¹ L _{dn} /CNEL, dB	Interior Spaces	
		L _{dn} /CNEL, dB	L _{eq} , dB ²
Residential	60 ³	45	--
Transient Lodging ⁴	60 ³	45	--
Hospitals, Nursing Homes	60 ³	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60 ³	--	40
Office Buildings	--	--	45
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

- (1) The exterior noise-level standard shall be applied to the outdoor activity area of the receiving land use. Outdoor activity areas are normally located near or adjacent to the main structure and often occupied by porches, patios, balconies, etc. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB Ldn shall be applied at the building facade, in addition to a 60 dB Ldn criterion at the outdoor activity area.
- (2) As determined for a typical worst-case hour during periods of use.
- (3) Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, higher noise levels may be allowed provided that practical exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.
- (4) In the case of hotel/motel facilities or other transient lodging outdoor activity areas, such as pool areas, may not be included in project design. In these cases, only the interior noise-level criterion will apply.

**TABLE 6-2:
NOISE LEVEL PERFORMANCE PROTECTION STANDARDS
FOR NOISE SENSITIVE LAND USES
AFFECTED BY NON-TRANSPORTATION* SOURCES**

Noise Level Descriptor	Daytime 7 a.m. - 7 p.m.	Evening 7 p.m. - 10 p.m.	Night 10 p.m. - 7 a.m.
Hourly L_{eq} , dB	55	50	45
Maximum level, dB	70	60	55

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The City can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

The exterior noise level standard shall be applied to the property line of the receiving property. The above standards shall be measured only on property containing a noise sensitive land use.

*Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

**TABLE 6-3:
NOISE ELEMENT DEFINITIONS**

The noise exposure information is presented in terms of noise contours expressed in Community Noise Equivalent Level (CNEL) of Day-Night Average (L_{dn}). CNEL means the average equivalent a-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 p.m. to 10 p.m. L_{dn} means the average equivalent a-weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

Decibel, dB	A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
A-Weighted Sound Level	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response to the human ear and give good correlation with subjective reactions to noise.
L_{10}	The A-weighted sound level exceeded 10 percent of the sample time. Similarly, L_{50} , L_{90} , etc.
Equivalent Energy Level, L_{eq}	The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. L_{eq} is typically computed over 1, 8- and 24-hour sample periods.
CNEL:	Community Noise Equivalent Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.
L_{dn}	Day-Night Average Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m. (Note: CNEL and L_{dn} represent daily levels of noise exposure averaged on an annual basis, while L_{eq} represents the equivalent energy noise exposure for a shorter time period, typically one hour.)
Noise Exposure Contours	Lines drawn about a noise source indicating constant energy levels of noise exposure. CNEL and L_{dn} are the metrics utilized herein to describe annoyance due to the noise and to establish land use planning criteria for noise.
Ambient Noise Level	The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
Intrusive Noise	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, and frequency and time of occurrence, and tonal or informational content as well as the prevailing ambient noise level.
Noisiness Zones	Defined areas or regions of a community wherein the ambient noise levels are generally similar (within a range of 5 dB for example). Typically, all other things being equal, all sites within any given noise source will be of comparable proximity to major noise sources. Noise contours define different noisiness zones.

7.1 INTRODUCTION

The Historic Preservation Element is included in the City of Dunsmuir's General Plan to encourage the identification and protection of important historical features in the City and its sphere of influence. This includes some historic sites and structures that are currently in Dunsmuir's Historic Commercial District and others that are outside the district that should be considered for preservation.

California planning law offers flexibility for jurisdictions to include optional elements in their general plans in addition to the mandatory elements. Government Code Section 65303 enables a county or city to adopt "any other elements or address any other subjects which, in the judgment of the legislative body, relate to the physical development of the county or city." At one time the California General Plan Guidelines specifically cited historical preservation elements as an optional element "for the identification, establishment and protection of sites and structures of architectural, historical, archeological or cultural significance". The historical element would be expected to include a program to develop actions to be taken to accomplish the policies set forth in the element.

An optional element, once adopted, carries the same legal weight as any of the seven mandatory elements and must be consistent with all other elements of the general plan.

Due to the abundance of heritage resources located in Dunsmuir and the interest of city residents in the preservation of these resources, the City's general plan includes an Historic Preservation Element. This element has been revised from the Historic Preservation Element that was included in the 1985 General Plan.

7.2 BACKGROUND

Historic preservation policies and programs are tools for preserving the historic features of a community. They are also tools that support economic development and other objectives for enhancing a community in relation to the community's historic character. "Heritage tourism" is a component of economic development that can be used to attract visitors to a community based on the unique aspects of the locality's history, culture and landscape. In this context, historic preservation is a means to preserve historic features, attract visitors to the city, revitalize the downtown, incubate related small businesses and generate local jobs.

The City of Dunsmuir was established in the late 1880s as a railroad line was constructed up the canyon of the Sacramento River. The community was originally named "Pusher" because of the railroad engines that operated out of the city to help push trains up the canyon. In 1886, a man by the name of Alexander Dunsmuir promised to give the community a water fountain if it would name the town after his family. The town accepted his offer and changed its name to "Dunsmuir". The fountain is now located at the city park.

Along with being a vibrant railroad town at the turn of the century, the scenic surroundings and excellent water quality attracted many visitors to the area and resulted in development of local resorts such as Shasta Springs and Shasta Retreat.

Over the years Dunsmuir has survived numerous calamities that took a toll on the historic resources of the town. In 1902 an avalanche crashed down on the town. A large part of the town burned to the ground in 1903. In 1924, a fire on Sacramento Street destroyed two old churches and other

buildings. Other fires have destroyed old hotels. Flooding, including the “big flood” of 1974, has also taken a toll.

In spite of the loss of many old buildings over time, Dunsmuir still has many historic structures and is still rich with historic character and charm. The City has taken a number of significant steps to recognize and protect its historic resources. The Dunsmuir Historic Commercial District was listed in the National Register in 1982. This district is roughly bounded by Sacramento and Shasta Avenues and Spruce and Cedar Streets (on both sides). Refer to **Figure 7-1** for an illustration of the Dunsmuir Historic Commercial District.

The City maintains Municipal Code Chapter 17.28, Historic Preservation, as part of the Dunsmuir Municipal Code. This chapter (most recently amended by Ordinance 517 in July 2004) includes the following statements concerning the purpose of its provisions:

It is found that the protection, enhancement, perpetual care and use of structures, districts and neighborhoods of historic, architectural and engineering significance, located within the city, are of cultural and aesthetic and economic benefit to the community. It is further found that the economic, cultural and aesthetic standing of this city will be enhanced by respecting the heritage of the city.

Municipal Code Chapter 17.28 addresses provisions for Planning Commission involvement with the Historic District, designation of landmarks, review of projects affecting landmarks and structures within the Historic District, regulation of signs in the district, maintenance of historic structures, and other provisions. Chapter 17.28 also recognizes and defines a “buffer zone” around the historic district. The buffer zone includes properties extending 300 feet beyond the boundaries of the historic district. Changes to a structure within this buffer zone may require review by the Planning Commission “as if it were within the district”.

Chapter 17.28 also establishes a “Historic Combining District” as an overlay zoning district. The purpose of this “H” Combining District is to “provide a means to preserve and enhance areas of historic, architectural and engineering significance located within the city. The combining district shall be used in general accord with the policies and principles of the General Plan, as specified in the historic preservation ordinance.”

The Historic Combining District may be combined with any other zoning district in the City. For example, when combined with the Central Commercial (C-2) District, the affected property would be zoned C-2-H. Once designated as such, development and use of that property would be subject to the provisions of the Zoning Code for both the Central Commercial (C-2) District and the Historic (H) Combining District.

The 1985 General Plan included comments about the potential for recognizing the historic status of various sites in Dunsmuir. The following list was extracted from the 1985 General Plan:

- A. Historic District: Described in National Register of Historic Places Inventory Nomination Form.
- B. Possible Additions:
 - 1) Dunsmuir City Ballpark Grandstand
 - 2) Hedge Creek Falls
 - 3) Methodist Church Sunday School

- 4) Young Mortuary Building
- 5) Qualifying residences

Map #2 in the 1985 General Plan noted that possible qualifying residences will likely be located in the downtown area of Dunsmuir, especially off of Cedar, Dunsmuir, Branstetter, Elinore and Wood Streets.

The 1985 General Plan also recognized several aspects of tourism that are related to historic preservation. The following notes are from the 1985 General Plan:

- 1) Tourism is the fastest growing industry in the state – second only to agriculture (which includes lumber) – and Dunsmuir is located on a major highway (I-5).
- 2) Having a unique town to attract area visitors is also important due to the return of skiing on Mt. Shasta (as Truckee and other historic Sierra towns have proven).
- 3) Restoration will improve the aesthetic and economic character of the downtown business district (as in Yreka).
- 4) Repairing existing buildings is cheaper than new construction.
- 5) An authentic Historic Railroad Town would also be a major attraction as a destination for regional residents within at least a 200-mile radius.

The 2006 update of the Dunsmuir General Plan is intended to continue the City's commitment to support preservation of its historic features.

7.3 GOALS, OBJECTIVES, POLICIES AND IMPLEMENTATION MEASURES

GOAL HP-1: - A city rich with historic character and charm.

Objective: It is the City's desire to preserve and enhance the historic character of Dunsmuir.

Policy HP-1.1: The City shall designate, protect and enhance those historic structures, districts, neighborhoods and features that contribute most to the cultural heritage and architectural charm of Dunsmuir.

Implementation Measure HP-1.1.1: The City will continue to enforce the general provisions of Municipal Code Chapter 17.28, Historic Preservation.

Implementation Measure HP-1.1.2: The City shall consider the nomination and designation of additional buildings, sites and features for historic status.

Implementation Measure HP-1.1.3: The City shall, when possible, utilize returns on Housing Rehabilitation loans to restore facades of buildings in the Historic District.

Policy HP-1.2: In order to protect the historic character of the community, the City shall encourage the design of new structures in the vicinity of historic structures to have architectural features that compliment those of historic structures.

Implementation Measure HP-1.2.1: The City will develop design guidelines for the exterior of new buildings in the vicinity of the Historic District to encourage respect for and architectural compatibility with the historic character of the community.

Policy HP-1.3: The City shall develop strategic plans and seek funding opportunities to expand resources for the support of historic preservation.

Implementation Measure HP-1.3.1: The City shall pursue grant funding to support its goals and policies for historic preservation.

Implementation Measure HP-1.3.2: As funding becomes available, the City shall prepare historic preservation plans and design guidelines.

Implementation Measure HP-1.3.3: To the extent that it is feasible, the City should develop incentives for private preservation activities, especially the restoration of historic building facades.



SOURCE: Dunsmuir Municipal Code, 17.28

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